1974

University of Maine at Portland-Gorham Catalog 1974-1975

University of Maine at Portland - Gorham

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GENERAL REQUIREMENTS
FOR ALL BACCALAUREATE DEGREE CANDIDATES

All baccalaureate degree candidates at UMPG must fulfill the General Education Requirement in order to graduate. This requirement consists of 30 credit hours, comprising 6 credits from each of the following five areas, with course selections restricted to the prefix-code designations listed. Except for K-P or GE majors, department courses in the student's major area may not be applied toward fulfillment of the General Education Requirement. In addition, students in the School of Business Administration, the School of Education, or the School of Nursing may be further restricted in course selections from one or more of the five areas because of the specific requirements of the program in which they are enrolled.

AREA 1: HUMANITIES — 6 credits from:

<table>
<thead>
<tr>
<th>Prefix Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLS</td>
<td>(Classics)</td>
</tr>
<tr>
<td>CPEN</td>
<td>(Comparative Literature)</td>
</tr>
<tr>
<td>ENG</td>
<td>(English)</td>
</tr>
<tr>
<td>FRE</td>
<td>(French)</td>
</tr>
<tr>
<td>GMN</td>
<td>(German)</td>
</tr>
<tr>
<td>GRK</td>
<td>(Greek)</td>
</tr>
<tr>
<td>LAT</td>
<td>(Latin)</td>
</tr>
<tr>
<td>PLY</td>
<td>(Philosophy)</td>
</tr>
<tr>
<td>SPN</td>
<td>(Spanish)</td>
</tr>
</tbody>
</table>

AREA 2: FINE AND APPLIED ARTS — 6 credits from:

<table>
<thead>
<tr>
<th>Prefix Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH</td>
<td>(Art History and Appreciation)</td>
</tr>
<tr>
<td>ARTS</td>
<td>(Art Studio Coruses)</td>
</tr>
<tr>
<td>DNCE</td>
<td>(Dance)</td>
</tr>
<tr>
<td>MUS</td>
<td>(Music)</td>
</tr>
<tr>
<td>THE</td>
<td>(Theatre)</td>
</tr>
</tbody>
</table>

AREA 3: SCIENCE AND MATHEMATICS — 6 credits from:

<table>
<thead>
<tr>
<th>Prefix Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR</td>
<td>(Astronomy)</td>
</tr>
<tr>
<td>BIO</td>
<td>(Biology)</td>
</tr>
<tr>
<td>CHEM</td>
<td>(Chemistry)</td>
</tr>
<tr>
<td>CS</td>
<td>(Computer Science)</td>
</tr>
<tr>
<td>ESCI</td>
<td>(Earth Science)</td>
</tr>
<tr>
<td>GEOL</td>
<td>(Geology)</td>
</tr>
<tr>
<td>GSCI</td>
<td>(General Science)</td>
</tr>
<tr>
<td>MET</td>
<td>(Meteorology)</td>
</tr>
<tr>
<td>MS</td>
<td>(Mathematics)</td>
</tr>
<tr>
<td>OCN</td>
<td>(Oceanography)</td>
</tr>
<tr>
<td>PHYS</td>
<td>(Physics)</td>
</tr>
<tr>
<td>PSCI</td>
<td>(Physical Science)</td>
</tr>
</tbody>
</table>

AREA 4: SOCIAL SCIENCES — 6 credits from:

<table>
<thead>
<tr>
<th>Prefix Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANY</td>
<td>(Anthropology)</td>
</tr>
<tr>
<td>COM</td>
<td>(Communication)</td>
</tr>
<tr>
<td>CJ</td>
<td>(Criminal Justice)</td>
</tr>
<tr>
<td>ECON</td>
<td>(Economics)</td>
</tr>
<tr>
<td>GEOG</td>
<td>(Geography)</td>
</tr>
<tr>
<td>HIST</td>
<td>(History)</td>
</tr>
<tr>
<td>POL</td>
<td>(Political Science)</td>
</tr>
<tr>
<td>PSY</td>
<td>(Psychology)</td>
</tr>
<tr>
<td>SOC</td>
<td>(Sociology)</td>
</tr>
<tr>
<td>SWE</td>
<td>(Social Welfare)</td>
</tr>
</tbody>
</table>

AREA 5: GENERAL — 6 credits from:

Any courses from the above academic groupings
College of Arts and Sciences (CAS) courses
*SCOGIS courses (SCO)
*Physical Education courses (PE)

*The College of Arts and Sciences requires no Physical Education courses but accepts optional PE credits in Area 5. The School of Business and Economics requires no PE courses but accepts optional PE credits in Area 5 for 4-year Business Administration and Accounting majors only. The School of Nursing requires 2 credits of Physical Education and accepts in Area 5 no more than 2 added optional PE credits. The School of Education requires a year of Physical Education but accepts no PE credits as applicable to Area 5. (Certain students in the Schools of Nursing or Education may be exempted from all PE requirements under criteria described in the sections of this catalog having to do with the School of Education or School of Nursing.)

A student who has matriculated before September 1971 may continue the program under the requirements in force at the time of matriculation or the student may elect to complete the General Requirements under the provisions stated above.

UMPG SYSTEM OF COURSE CODING

<table>
<thead>
<tr>
<th>Code Range</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>000-099</td>
<td>No degree credit</td>
</tr>
<tr>
<td>10-99</td>
<td>Two digits indicate</td>
</tr>
<tr>
<td>100-199</td>
<td>Introductory level</td>
</tr>
<tr>
<td>200-299</td>
<td>Intermediate level</td>
</tr>
<tr>
<td>300-399</td>
<td>Intermediate level</td>
</tr>
<tr>
<td>400-499</td>
<td>Senior level, others by permission</td>
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<tr>
<td>500-599</td>
<td>Graduate level</td>
</tr>
<tr>
<td>600-699</td>
<td>Professional graduate level</td>
</tr>
<tr>
<td></td>
<td>as in the School of Law</td>
</tr>
</tbody>
</table>

The information contained in this catalog covers rules, regulations, curricula, and programs as established by July 31, 1974, for the 1974-75 academic year. The University reserves the right to make changes at any time.

The University of Maine fully supports and complies with Title VI of the Civil Rights Act of 1964 and does not discriminate in any way in any of its policies on the basis of sex, race, color, or national origin.
University of Maine at Portland-Gorham

Academic Calendar

1974-75

<table>
<thead>
<tr>
<th>FALL SEMESTER 1974</th>
<th>SPRING SEMESTER 1975</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 4</td>
<td>January 13</td>
</tr>
<tr>
<td>—First Day of Classes</td>
<td>—First Day of Classes</td>
</tr>
<tr>
<td>Nov. 27-Dec. 1</td>
<td>February 15-23</td>
</tr>
<tr>
<td>—Thanksgiving Recess</td>
<td>—Recess</td>
</tr>
<tr>
<td>December 13</td>
<td>March 29-April 6</td>
</tr>
<tr>
<td>—Last Day of Classes</td>
<td>—Recess</td>
</tr>
<tr>
<td>December 16-21</td>
<td>May 9</td>
</tr>
<tr>
<td>—Final Examinations</td>
<td>—Last Day of Classes</td>
</tr>
<tr>
<td></td>
<td>May 12-17</td>
</tr>
<tr>
<td></td>
<td>—Final Examinations</td>
</tr>
</tbody>
</table>

1975-76

<table>
<thead>
<tr>
<th>FALL SEMESTER 1975</th>
<th>SPRING SEMESTER 1976</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 3</td>
<td>January 12</td>
</tr>
<tr>
<td>—First Day of Classes</td>
<td>—First Day of Classes</td>
</tr>
<tr>
<td>November 26-30</td>
<td>February 14-22</td>
</tr>
<tr>
<td>—Thanksgiving Recess</td>
<td>—Recess</td>
</tr>
<tr>
<td>December 12</td>
<td>March 27-April 4</td>
</tr>
<tr>
<td>—Last Day of Classes</td>
<td>—Recess</td>
</tr>
<tr>
<td>December 15-20</td>
<td>May 7</td>
</tr>
<tr>
<td>—Final Examinations</td>
<td>—Last Day of Classes</td>
</tr>
<tr>
<td></td>
<td>May 10-15</td>
</tr>
<tr>
<td></td>
<td>—Final Examinations</td>
</tr>
</tbody>
</table>
# Table of Contents

A much more detailed alphabetical index is listed on pages 236-240 immediately after the campus maps on pages 234-235.

| General Education Requirements | Academic Calendar | Administrative Structure of UMPG | Description of UMPG | Admission to Undergraduate Programs | Undergraduate Programs Offered | New England Regional Program | Secondary School Preparation | CAS Early Admission Program | Entrance Examinations Required | Application Procedure | Admission Procedures | Department Requirements for Admission | Physically Handicapped Students | Foreign Student Admissions | Transfer Student Admissions | Credit by Examination | Advanced Placement | College Level Examinations | Financial Assistance Application | Readmission | Special Students | Financial Information | Student Expenses | Deposits | Payment of Bills | Uniform Refund Policy | Rules Governing Residence | Financial Assistance | Student Life, Activities, Services | Student Life | Student Activities | Student Services | Campus Regulations | Cultural Activities | Library Facilities | Intercollegiate Athletics | Academic Policies | General Requirements | Attendance Policy | Examination Policy | Absence from a Final Examination | Grade Reports | The Grading System | Grade-Point Averages | Repeating Courses | Add-Drop | Minimum Grade Policy | Suspension and Probation | Withdrawal from the University | Class Membership | Residence Requirement | Graduation Requirements | Graduation with Distinction | Departmental Honors Program | Pass-Fail Option | Independent Study | Independent Study Term | Double Majors | Post-Baccalaureate Study for a Second Degree | Change of Major | Change of School of College | Course Work at Other Institutions | College of Liberal Arts | General Information | Art Department | Biology Department | Communication Department | Criminal Justice Program | Dance | Economics B.A. Degree Program | English Department | Introductory Courses | Writing Courses | Criticism Courses | Linguistics and Related Courses | Non-Required Major Credit Courses | English Literature | American Literature | Modern Literature | Experimental Courses | Foreign Languages and Classics | Department | Courses in English Translation | Greek and Latin Courses |
French Courses ........................................... 73
Foreign Language Education ....................... 75
German Courses ........................................... 75
Spanish Courses .......................................... 76
Geography-Anthropology Department .................. 84
History Department ....................................... 84
Mathematics and Computer Science Department ....... 92
Music Department ......................................... 99
Philosophy Department ................................... 108
Physical Sciences and Engineering Department ..... 111
Astronomy .................................................. 116
Chemistry .................................................. 116
Earth Science ............................................. 119
Engineering ............................................... 120
Geology .................................................... 122
Physical Science ......................................... 123
Physics ..................................................... 124
Political Science Department ........................ 126
Psychology Department .................................. 131
Social Welfare Department ............................. 135
Sociology Department .................................... 138
Theatre Department ...................................... 142
School of Business & Economics ...................... 146
General Information ....................................... 146
Courses in the Associate Degree Program ............. 156
Courses in the Four-Year Program in Business Adminstration ........................................ 158
Courses in the Four-Year Program in Economics .... 161
Courses in the Master of Business Administration .... 163
School of Education .................................... 165
General Information .................................... 165
Kindergarten-Primary and Elementary Majors ......... 167
Secondary Education Programs ....................... 172
Courses in Education .................................... 173
Industrial Arts ............................................ 179
Vocational Technical Education ....................... 186
School of General and Interdisciplinary Studies .... 189
School of Nursing ....................................... 191
Division of Physical Education and Athletics ........ 195
Courses in Physical Education Activities ............. 195
Certificate Program in Athletic Coaching .......... 196
Professional Courses in Physical Education .......... 196
Physical Education Leadership Courses ............... 199
Graduate Studies ........................................ 201
School of Law ............................................. 207
Center for Research and Advanced Study ............ 209
Continuing Education Division ...................... 209
Cooperative Education Program ..................... 213
Associate Degree Studies ................................ 214
Local Offices Representing Statewide University Functions ........................................ 215
Landmark Dates in the Development of UMPC .. 216
Personnel .................................................. 220
Map of the Portland Campus ................................ 234
Map of the Gorham Campus .......................... 235
Index ......................................................... 236
THE UNIVERSITY OF MAINE
AT PORTLAND-GORHAM

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ASSOCIATE DIRECTOR OF CONTINUING EDUCATION AND SUMMER SESSION ............................................ Hollie L. Ingraham
DIRECTOR OF COUNSELING, CONTINUING EDUCATION AND SUMMER SESSION ..................................... John N. Farrar
SHORT COURSE COORDINATOR ..................................................... Raymond P. Kane
ADMINISTRATIVE ASSISTANT ....................................................... Ellen M. Martel
Academic Administrative Structure of Undergraduate College and Schools

COLLEGE OF ARTS AND SCIENCES

DEAN .................................................................................................................................................. Konnilyn G. Feig
ASSOCIATE DEAN ............................................................................................................................... Constance M. Carroll
ASSISTANT DEAN ............................................................................................................................... Waldeck E. Mainville, Jr.

CHAIRMAN, ART DEPARTMENT ................................................. Juris K. Ubans
CHAIRMAN, BIOLOGY DEPARTMENT ................................... Haig H. Najarian
CHAIRMAN, COMMUNICATION DEPARTMENT ..................... Melvin E. Pic'l
CHAIRMAN, ENGLISH DEPARTMENT .................................... William H. Slavick
CHAIRMAN, FOREIGN LANGUAGES AND CLASSICS ............ Frederick B. Rolfe
CHAIRMAN, GEOGRAPHY AND ANTHROPOLOGY ................. Franklin D. Hodges
CHAIRMAN, HISTORY DEPARTMENT ................................. Eugene P. A. Schleh
CHAIRMAN, MATHEMATICS AND COMPUTER SCIENCE
DEPARTMENT ................................................................................................................................. Lincoln T. Fish
CHAIRMAN, MUSIC DEPARTMENT ........................................ Harold F. Brown
CHAIRMAN, PHILOSOPHY DEPARTMENT ............................. William J. Gavin
CHAIRMAN, PHYSICAL SCIENCES AND
ENGINEERING ............................................................................................................................... Charles E. Armentrout
CHAIRMAN, POLITICAL SCIENCE DEPARTMENT .............. John A. Peirce
CHAIRMAN, PSYCHOLOGY DEPARTMENT ............................ Estelita L. Saldanha
CHAIRMAN, SOCIAL WELFARE DEPARTMENT .................... John M. Romanyszyn
CHAIRMAN, SOCIOLOGY DEPARTMENT ............................... Donald F. Anspach
CHAIRMAN, THEATRE DEPARTMENT .................................... William P. Steele
DIRECTOR, ART GALLERY .............................................................. Juris K. Ubans
DIRECTOR, CRIMINAL JUSTICE PROGRAM ....................... To be announced
DIRECTOR, MUSEUM OF MAN .................................................. Robert J. French
DIRECTOR, SOUTHWORTH PLANETARIUM ......................... George H. Ayers

SCHOOL OF BUSINESS AND ECONOMICS

DEAN .................................................................................................................................................... John W. Bay

CHAIRMAN, BACCALAUREATE PROGRAM IN
BUSINESS ADMINISTRATION .......................................................... Robert W. Findlay
CHAIRMAN, ASSOCIATE PROGRAM IN
BUSINESS ADMINISTRATION .................................................. Richard L. McKeil
CHAIRMAN, ECONOMICS DEPARTMENT ............................... Leon J. Bien

SCHOOL OF EDUCATION

DEAN .................................................................................................................................................... Harlan A. Philippi

CHAIRMAN ELEMENTARY EDUCATION
DEPARTMENT ........................................................................... Melissa H. Costello
CHAIRMAN, FOUNDATIONS DEPARTMENT ................. Floyd B. Chronister
CHAIRMAN, SECONDARY EDUCATION
DEPARTMENT ........................................................................... Merrill E. Cobb
CHAIRMAN, INDUSTRIAL ARTS DEPARTMENT ............ John Mitchell
DIRECTOR, VOCATIONAL-TECHNICAL EDUCATION
PROGRAM ............................................................................. Arthur O. Berry
DIVISION OF PHYSICAL EDUCATION AND INTERCOLLEGIATE ATHLETICS
DIRECTOR ................................................................. Richard A. Costello
ASSOCIATE DIRECTOR .................................................... James V. Sullivan

SCHOOL OF GENERAL AND INTERDISCIPLINARY STUDIES
ACTING DIRECTOR .......................................................... James O’Neil

SCHOOL OF NURSING
DEAN ........................................................................ Mary Ann Eells
ASSISTANT DEAN .......................................................... Anna B. Ivanisin
CHAIRMAN, COMMUNITY HEALTH NURSING ............... Marjorie M. Roscoe
CHAIRMAN, PSYCHIATRIC NURSING .......................... Jean Cotton
CHAIRMAN, MEDICAL-SURGICAL NURSING .............. Jeanne G. Talbot
CHAIRMAN, ADVANCED MEDICAL-SURGICAL NURSING .......................... Judith T. Stone
CHAIRMAN, MATERNAL AND CHILD HEALTH NURSING .................. Rosemary V. Bellone
DIRECTOR, BUREAU OF CONTINUING EDUCATION FOR NURSING ........................ Mary Ann Rost

Academic Administrative Structure
of Graduate and Graduate Professional Schools

GRADUATE SCHOOL
DEAN ........................................................................ Robert M. York
ADMINISTRATIVE ASSISTANT ................................... Virginia M. Lewis

SCHOOL OF LAW
DEAN ........................................................................ Bert S. Prunty, Jr.
ASSISTANT DEAN ......................................................... William F. Julavits
REGISTRAR ...................................................................... Doris M. Peters
DIRECTOR, CLINICAL PRACTICE PROGRAM ...................... Judy R. Potter
LIBRARIAN, SCHOOL OF LAW ...................................... Donald L. Garbrecht
The University of Maine at Portland-Gorham

The University of Maine at Portland-Gorham is a regional center of the University of Maine, offering a diversity of courses leading to bachelors' and masters' degrees in a variety of subject areas. It comprises two campuses, both on State Route 25 which crosses the Maine Turnpike one block south of Turnpike Exit 8. The Portland Campus is three miles east of Exit 8, and the Gorham Campus is seven miles to the west of that exit.

Bus transportation between the two campuses is provided for students, Monday through Friday throughout the academic year whenever the regularly scheduled day classes are in session. Parking lots on both campuses are available for students commuting in their own automobiles. Dormitory facilities are provided only at the Gorham Campus, but dormitory students who pay for board and room at the Gorham Campus may obtain lunch without extra charge at the Portland Campus on days when their class schedules require them to be at the Portland Campus at lunch time.

More than 3,800 full-time undergraduate students are enrolled at the University of Maine at Portland-Gorham. In addition to these full-time undergraduates, a number of full-time graduate students are enrolled at the University of Maine School of Law, a unit of the University of Maine at Portland-Gorham.

In addition to the full-time students, approximately 6,000 part-time students are enrolled in late-afternoon, evening, and Saturday courses offered by the Continuing Education Division of the University of Maine at Portland-Gorham. About 500 CED courses are offered during the academic year, making it possible for part-time students to earn undergraduate degrees in business administration, education, and various arts and sciences. Graduate programs are available in business, library service, and education.

The Continuing Education Division is also responsible for the Summer Session, meeting the needs of an additional 3,000 students taking 280 or more day and evening summer courses. Many summer session courses are offered in three-week units of intensive study, some starting in June, some in July, and some in August. Other daytime summer courses are offered in six-week sessions, and a few are scheduled in five-week or two-week sessions. Summer evening courses are normally offered in an eight-week session, with classes meeting two evenings a week.

Approximately 700 other part-time students were enrolled last year in late afternoon and evening courses held in public schools, church halls, and private college facilities in York County, under the new associate degree programs of the York County Community College Services, offered by UMPG in cooperation with Southern Maine Vocational Technical Institute. Counseling centers of YCCCS are located in Biddeford and Sanford.
Admission--Undergraduate Studies

The approval of candidates seeking admission to the University is on a selective basis. Candidates must be graduates of approved secondary schools or hold the high school equivalency diploma. The University seeks candidates whose preparatory program, scholastic achievement, interest, motivation, and personal recommendations are indicative of success with University studies. Applications are accepted for entering freshman and transfer students in most programs for either the Fall or Spring semesters. The following is a list of Schools and Colleges, with academic majors to which students may apply.

**COLLEGE OF ARTS AND SCIENCES**

The College of Arts and Sciences currently offers four-year programs leading to the degree of Bachelor of Arts, with the following majors:

<table>
<thead>
<tr>
<th>Major</th>
<th>College of Arts and Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>English</td>
</tr>
<tr>
<td>French</td>
<td>French</td>
</tr>
<tr>
<td>Political Science</td>
<td>Political Science</td>
</tr>
<tr>
<td>Psychology</td>
<td>Psychology</td>
</tr>
<tr>
<td>Self-Designed major**</td>
<td>Self-Designed major**</td>
</tr>
<tr>
<td>Social Welfare</td>
<td>Social Welfare</td>
</tr>
<tr>
<td>Sociology</td>
<td>Sociology</td>
</tr>
<tr>
<td>Theatre/Communications</td>
<td>Theatre/Communications</td>
</tr>
</tbody>
</table>

*Liberal Studies: Declaration of this major is normally done at the end of the Sophomore year, with the approval of the Liberal Studies Major Board.

**Self-Designed major: Approval of this program must be made by the Committee on Self-Designed majors after students have enrolled at the University.

**SCHOOL OF BUSINESS AND ECONOMICS**

Business Administration

The School of Business and Economics offers a four-year program leading to the degree of Bachelor of Science in Business Administration with majors available in Business Administration and Accounting. The Bachelor of Science degree with a major in Economics is also available.

In addition to its four-year programs, the School of Business and Economics offers a two-year program leading to the degree of Associate of Science in Business Administration. Students in the Associate Degree Program may pursue a Management-Accounting Option, a Hotel, Motel, and Restaurant Option, or (through Continuing Education Division evening courses) a Real Estate Option.

**SCHOOL OF EDUCATION**

The School of Education currently offers four-year programs leading to the degree of Bachelor of Science.

Secondary Education majors include:

<table>
<thead>
<tr>
<th>Major</th>
<th>College of Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
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</tr>
<tr>
<td>French</td>
<td>French</td>
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<tr>
<td>Earth Science</td>
<td>Earth Science</td>
</tr>
<tr>
<td>History</td>
<td>History</td>
</tr>
<tr>
<td>Economics</td>
<td>Economics</td>
</tr>
<tr>
<td>Mathematics and</td>
<td>Mathematics and</td>
</tr>
<tr>
<td>Sciences Area</td>
<td>Sciences Area</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>Social Sciences</td>
</tr>
<tr>
<td>Theatre/Communications</td>
<td>Theatre/Communications</td>
</tr>
</tbody>
</table>
Other Programs of the School of Education include:

- Elementary Education
- Kindergarten-Primary Ed.
- Art Education
- Music Education
- Language Communications*
- Learning Disabilities*
- Physical Education Leadership*

*See School of Education for details.

**SCHOOL OF NURSING**

The School of Nursing offers a four-year program leading to the degree of Bachelor of Science, with a major in nursing.

In addition to the usual University fees and expenses, nursing students must purchase uniforms (approximately $75.00) during the sophomore year. They must also provide themselves with a car for one semester during the senior year for use in the course in Community Health Nursing.

**NEW ENGLAND REGIONAL PROGRAM**

In cooperation with the New England Board of Higher Education the University offers undergraduate programs of study to qualified candidates from the New England states at in-state tuition rates. The following fields of study are currently available in the New England Regional Student Program.

**PROGRAM**

<table>
<thead>
<tr>
<th>Two-Year Program</th>
<th>OPEN TO STUDENTS FROM:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two-Year Business Administration (Associate Degree Program)</td>
<td>Conn., N.H., R.I., Vt.</td>
</tr>
<tr>
<td><strong>Four-Year Program</strong></td>
<td>Conn., R.I.</td>
</tr>
<tr>
<td>Criminal Justice</td>
<td>Conn., N.H., R.I.</td>
</tr>
<tr>
<td>Industrial Technology</td>
<td>Vt.</td>
</tr>
<tr>
<td>Industrial Arts Education</td>
<td>Conn., Mass., R.I.</td>
</tr>
<tr>
<td>Social Welfare</td>
<td></td>
</tr>
</tbody>
</table>

**SECONDARY SCHOOL PREPARATION**

Requirements for admission to the University are established by each school and college within the University. The requirements indicated below are in keeping with the degree programs currently established.

**COLLEGE OF ARTS AND SCIENCES**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4</td>
</tr>
<tr>
<td>*Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>**Sciences</td>
<td>2 Lab Units</td>
</tr>
<tr>
<td>History/Social Science</td>
<td>2</td>
</tr>
<tr>
<td>**Foreign Language</td>
<td>2</td>
</tr>
<tr>
<td>*Mathematics Majors</td>
<td>4</td>
</tr>
<tr>
<td>**Biology and Premedical Majors</td>
<td>3 Lab Units</td>
</tr>
<tr>
<td>***Foreign Language Majors</td>
<td>3 Units</td>
</tr>
</tbody>
</table>

An Early Admission Program, described on the next page, is available for selected students who have completed their junior year of high school and who display both the intellectual capacity and social maturity to succeed in a university program of the College of Arts and Sciences.
SECONDARY SCHOOL PREPARATION, Continued

SCHOOL OF BUSINESS AND ECONOMICS

Four-Year Baccalaureate Program

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4</td>
</tr>
<tr>
<td>Algebra</td>
<td>2</td>
</tr>
<tr>
<td>Geometry</td>
<td>1</td>
</tr>
<tr>
<td>Elective</td>
<td>9</td>
</tr>
</tbody>
</table>

Two-Year Associate in Business Administration

Candidates applying to this program of study may have either a college preparatory or a commercial business background. It should be noted that candidates with commercial business backgrounds must have records of strong academic achievement to be considered. English and mathematics are the basic prerequisites for this program. All other work in high school would be elective course study.

SCHOOL OF EDUCATION

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4</td>
</tr>
<tr>
<td>*Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>**Sciences</td>
<td>2</td>
</tr>
<tr>
<td>***History/Social Science</td>
<td>2</td>
</tr>
<tr>
<td>***Foreign Language</td>
<td></td>
</tr>
</tbody>
</table>

*Mathematics majors in Secondary Education 4 Units
**Biology and Science Area majors in Secondary Education 3 Lab Units
***Foreign Language majors in Secondary Education 3 Units

SCHOOL OF NURSING

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>Sciences</td>
<td>2</td>
</tr>
<tr>
<td>History/Social Science</td>
<td>2</td>
</tr>
<tr>
<td>Foreign Language</td>
<td></td>
</tr>
</tbody>
</table>

COLLEGE OF ARTS AND SCIENCES

EARLY ADMISSION PROGRAM

The Early Admission Program in the College of Arts and Sciences provides the opportunity for selected students who have completed their junior year of high school to enter the University as full-fledged University freshmen. The Early Admission Program has been designed for students who display both the intellectual capacity and social maturity to succeed in a university program.

Students who are desirous of receiving their high school diploma after the completion of one year in the Early Admission Program must obtain the prior approval of their high school guidance director or principal. Students expecting to receive the high school diploma must arrange with the University Registrar to have an official transcript of grades forwarded to the secondary school at the completion of the academic year.

To be eligible for admission, the applicant should have at least a B average and/or rank in the top twenty percent of his/her high school class at the end of the junior year. Course work normally expected to be completed by the end of the junior year includes: three years of English, two years of Mathematics beginning at the introductory algebra level; one year of social science/history, one year of biology, chemistry, or physics, and one year of a foreign language. In addition, the applicant should register for and take the Scholastic Aptitude Test (SAT) at the earliest possible date and arrange to have the scores forwarded to the Director of Admissions at the University. The American College Test (ACT) may be submitted in lieu of the SAT for admission purposes.

The student should confer with his high school guidance counselor or principal regarding eligibility to participate in the Early Admission Program. The student and the principal/
counselor will complete the Early Admission Application, and along with an official transcript, submit it to the Admissions Office at UMPG.

The CAS Admissions Advisory Board will review each Early Admission Application. Those students approved for this program are assured admission to the University upon completion of the standard University admission form and receipt of the application fee. Students thus admitted under this program are accorded all the rights and privileges of entering freshmen. Special advising will be available through the CAS Dean’s Office prior to and during the first year of the Program.

It is expected that most Early Admission Program applicants will apply for the Fall Semester. Under certain circumstances a student will be considered for other academic semesters. Application forms must be submitted as early as possible. For Fall Semester, all Early Admissions applications should be received by April 15.

Submit completed application forms and address questions to the Director of Admissions, University of Maine at Portland-Gorham, 96 Falmouth St., Portland, Maine 04103.

COLLEGE ENTRANCE EXAMINATION BOARD AND AMERICAN COLLEGE TESTING

1. The University of Maine at Portland-Gorham Admissions Office will accept either Scholastic Aptitude Test & Achievement Test scores, or American College Test scores for candidates seeking admission. All candidates applying for admission must submit test scores from either the Scholastic Aptitude Test & Achievement Test battery or the American College Testing program unless arrangements for testing to be waived have been approved by the Director of Admissions.

2. Applicants should work with the high school guidance office in registering for and counseling in the preparation for the required testing.

3. Candidates submitting Scholastic Aptitude Test & Achievement Test results are required to submit three Achievement Scores in support of their application. One test should be either the English Composition Achievement or the Literature Achievement. When possible, the second test should relate to the student’s field of study, such as history, mathematics, foreign language, a science, etc. A third achievement test, covering some other subject area of the student’s choice, must also be submitted.

4. Veterans or applicants who have been out of school at least three years and students applying to the Associate Degree Program in Business Administration are not required to take the Achievement Tests.

5. High School juniors are encouraged to take achievement tests in non-continuing subjects on the May test date. Guidance Counselors should be consulted for details.

REPORTING TEST RESULTS

For equal consideration candidates are required to submit all test results no later than the February test date of either the SAT/ACH test battery or the ACT testing program. Scores must be submitted directly to the University Admissions Office from the Educational Testing Service, Box 592, Princeton, New Jersey 08540 or Box 1025, Berkeley, California 97401, or The American College Testing Program, P.O. Box 451, Iowa City, Iowa 52240. Dates for the Scholastic Aptitude Test and Achievement Tests 1974-75

<table>
<thead>
<tr>
<th>Date of Test</th>
<th>Test Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 2, 1974</td>
<td>February 1, 1975</td>
</tr>
<tr>
<td>November 23, 1974</td>
<td>April 5, 1975</td>
</tr>
<tr>
<td>December 7, 1974</td>
<td>May 10, 1975</td>
</tr>
<tr>
<td>January 11, 1975</td>
<td>June 28, 1975</td>
</tr>
</tbody>
</table>

Dates for the American College Testing Program 1974-75

<table>
<thead>
<tr>
<th>Date of Test</th>
<th>Test Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 19, 1974</td>
<td>April 26, 1975</td>
</tr>
<tr>
<td>December 14, 1974</td>
<td>June 14, 1975</td>
</tr>
<tr>
<td>February 22, 1975</td>
<td></td>
</tr>
</tbody>
</table>

13
APPLICATION PROCEDURE

1. Obtain a copy of the University brochure and the necessary application form from the Director of Admissions or from the high school principal or guidance counselor.

2. Select the program which promises fulfillment of personal ideals, interests and abilities. Be ready to take specific entrance examinations upon request of the Art and Music Departments, or the Department of Industrial Education and Technology if you are applying to one of these programs.

3. Mail the completed application and application fee of $10.00 (non-refundable) to the Director of Admissions, University of Maine at Portland-Gorham, 96 Falmouth Street, Portland, Maine 04103.

4. The high school should forward to the Admissions Office a transcript of academic work completed along with recommendations.

5. Transfer applicants must have official transcripts sent to the Admissions Office for all post high school work attempted. Student copies cannot be accepted for evaluation.

6. All required test results (SAT's and Achievements or ACT scores) must be sent directly from the testing service to the University Admissions Office.

7. Candidates are urged to contact the Admissions Office to determine if all required materials have been received. This should be done by mid-December for January admission and by mid-May for September admission. The Admissions Office will endeavor to contact students when documents are missing from files. However, the heavy work load often times delays correspondence to individual candidates.

8. To receive equal consideration with other candidates, applications and supporting credentials should be on file with the Admissions Office by December 1st for January admission and by May 1st for September admission.

ADMISSION PROCEDURES

1. After the student's application has been reviewed and evaluated, the Director of Admissions will notify the applicant of the appropriate decision.

2. Upon acceptance, the student will be required to make appropriate deposits. A deposit of $35.00 will be required of each residence hall applicant. A deposit of $25.00 is required of all commuting students. Refund requests will be honored by the University to June 1 for September enrollment and to January 1 for the spring semester if the request is received in writing to the Director of Admissions.

3. Admission to the University is not final until the student has satisfactorily completed all Admissions Office requirements.

4. Physical and mental health are basic considerations in admitting any applicant to the University, but a physical handicap, such as confinement to a wheelchair or blindness is not in itself a necessary barrier to admission. All classroom buildings and two dormitories are equipped with ramps for wheelchair access. Most elevator buttons are coded in braille. An applicant reporting a physical handicap will be scheduled for an interview with the University Coordinator of Handicapped Services, who will in turn submit recommendations to the Director of Admissions. In consultation with other University offices the Admissions Office reserves the right to refuse admission to any candidate it feels that the University cannot adequately assist in the completion of degree work.

5. The University reserves the right to cancel the acceptance of any application it deems necessary for academic or personal reasons.

6. Interview: With the exception of candidates applying to the Art, Music, and Industrial Arts and Vocational-Technical programs, interviews are optional. If students desire an interview, they should arrange for one with the Admissions Office. Students are encouraged to visit the University and acquaint themselves with its facilities.
DEPARTMENTAL REQUIREMENTS FOR ADMISSION

ART Applicants for admission to the Art Program at the University are required to submit to the Art Department at the Gorham campus a portfolio of original art work. This portfolio should consist of 20 works in varying media, including one life-size self-portrait drawn from life in any media of the student's choice, together with a selection which indicates the applicant's current interests and abilities. Prints, drawings, paintings, posters, photographs, films, and slides may be included. Any sculpture or three-dimensional works may be represented by photographs. Students will be notified of the appropriate procedures to follow and the data by which the portfolio must be submitted.

MUSIC All candidates for the Music Major will be asked to appear before the faculty of the Music Department for an instrumental or vocal audition. Written music aptitude and achievement tests will also be administered. Students will be notified by the Music Department of the appropriate procedures to follow and the dates available for on campus visitations.

INDUSTRIAL ARTS Applicants for the Industrial Arts program are required to take special aptitude tests at the University; they should have had a minimum of one unit in either industrial arts or drafting (graphics) in high school. Students will be notified by the Department of Industrial Arts of the appropriate procedures to follow and the dates available for on campus visitations.

VOCATIONAL-TECHNICAL Applicants for the Vocational-Technical Education or Vocational Technology programs are required to submit affidavits of a minimum of three years of occupational experience and appear for a personal interview.

PHYSICALLY HANDICAPPED STUDENTS

Traditionally, the handicapped student has been denied many educational opportunities due to physical barriers and discriminatory attitudes. The University is committed to maximizing the educational potential of handicapped students by providing the opportunity and support to fulfill their aspirations of higher learning.

For detailed information handicapped students should contact the Office of Handicapped Student Services, 108 Corthell Hall, Gorham campus.

FOREIGN STUDENTS (Undergraduates)

Candidates applying for degree status at the University are required to submit official school and college transcripts to the Director of Admissions. Candidates from foreign countries whose native language is not English are required to submit test results of the TOEFL examination (Test of English as a Foreign Language). In addition, candidates must submit test results of the Scholastic Aptitude Test (SAT).

Candidates applying who have completed at least one year of University studies at an English-speaking University with acceptable grades are not required to take the SAT examination. They must, however, take the TOEFL examination if English is not the native language.

Financial assistance for foreign students applying to the University is extremely limited. It is, therefore, regrettable that the University cannot encourage greater numbers of foreign applications. Foreign students who have met academic requirements and require no financial assistance from the University may expect more favorable consideration. Further details are given in the “Foreign Student Handbook” available from the International Student Adviser or the Admissions office.
ADMISSION TO ADVANCED STANDING — TRANSFER STUDENTS

Admission to the University of Maine at Portland-Gorham as a transfer student is on a selective basis and is controlled by classroom, dormitory, and quota space. A student who has attended any institution of learning beyond high school is classified as a transfer student even though the student may in the final analysis not transfer in credits. A student accepted for admission from an accredited institution will receive advanced standing credit when the work is "C" grade or better in courses corresponding to those offered by the University of Maine at Portland-Gorham and if applicable to the student's program of study.

Students applying for admission from any institution which is not accredited by the New England Association of Schools and Colleges or any other regional accrediting agency must have a 2.75 average (on a 4.0 scale) to be considered for advanced standing credit. The Admissions Office, in conjunction with the Dean of a particular School or College within the University may defer for one semester acceptance of credit from a non-accredited institution.

Credits accepted from non-accredited institutions must be "B" grades or better and applicable to the student's program of study.

All applicants for admission to advanced standing must complete the same forms as an incoming freshman and request that official transcripts be mailed to the Director of Admissions from any previous colleges attended. Student copies are not acceptable. Copies of catalogs including course descriptions must accompany all transcripts for evaluation.

Students seeking advanced standing must submit, in addition to the application, a high school transcript, Scholastic Aptitude Test results, and a character recommendation from the Dean of Students Office of the college or colleges previously attended.

CREDIT BY EXAMINATION

Advanced Placement

It shall be the policy of the University of Maine at Portland-Gorham to grant credit for the introductory course in a subject field to an enrolled student who presents evidence of competency in that field by completing the appropriate Advanced Placement Examination of the College Entrance Examination Board with a score of either four (well qualified) or five (very well qualified). A score of three will be examined for credit on an individual basis by the department concerned.

COLLEGE LEVEL EXAMINATION PROGRAM (CLEP)

1. General Examination

The schools and colleges at the University of Maine at Portland-Gorham will grant credit for the general College Level Examination Program (CLEP) examinations as follows:

<table>
<thead>
<tr>
<th>Title of Examination</th>
<th>Credit For</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>ENG 100</td>
<td>3</td>
</tr>
<tr>
<td>Humanities</td>
<td>General Education</td>
<td>6</td>
</tr>
<tr>
<td>Social Science</td>
<td>General Education</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics</td>
<td>General Education</td>
<td>6</td>
</tr>
<tr>
<td>Science</td>
<td>General Education</td>
<td>6</td>
</tr>
</tbody>
</table>

A score of 540 or better will be necessary to receive credit.

The five general examinations are designed and intended primarily for incoming freshmen rather than for typical transfer students.
2. Subject Examination (CLEP)

COLLEGE OF ARTS AND SCIENCES—Certain academic departments within the College of Arts and Sciences have established policies relative to the acceptance of CLEP subject credit. Interested candidates should contact the Dean of the College of Arts and Sciences for detailed information.

SCHOOL OF BUSINESS ECONOMICS—The School of Business and Economics will accept satisfactory completion of CLEP subject examinations and allow credit toward the completion of degree requirements. Interested candidates should discuss their eligibility for taking these examinations with the Dean of the School of Business and Economics.

SCHOOL OF NURSING—Available for advanced placement is credit in subject examinations offered through CLEP. Interested candidates should discuss their eligibility for taking these examinations with the Dean of the School of Nursing. The School of Nursing also offers credit-by-examination in certain courses of the nursing major for advanced placement. For more details, interested students should contact the Department Chairman of the specific courses to be challenged.

FINANCIAL AID

Students seeking admission to the University of Maine at Portland-Gorham who anticipate requesting financial aid must apply through the College Scholarship Service Program, Box 176, Princeton, New Jersey 08540. The Parents’ Confidential Statement may be secured through the local high school guidance office or by writing to the Financial Aid Office at the University of Maine at Portland-Gorham, College Avenue, Gorham, Maine 04038.

Married students applying for financial assistance must fill out The Student's Confidential Statement and return it to the College Scholarship Service, Box 1501, Berkeley, California 94701. This form is available in the Financial Aid office of the University of Maine at Portland-Gorham, College Avenue, Gorham, Maine 04038.

READMISSION

Degree students attending days who withdraw from all course work at the University of Maine at Portland-Gorham during any semester must apply for readmission through the undergraduate Admissions Office, Room 128, Payson Smith Hall, 96 Falmouth Street, Portland, Maine. Applications must be received by December 1 for spring readmission and August 1 for September readmission.

SPECIAL STUDENTS (Non-Degree)

The Admissions Office does not admit special students. At the present time the undergraduate Admissions Office works with full-time degree candidates attending days and degree candidates attending through the Continuing Education Division. Special students are referred to the appropriate dean’s office for assistance in registering as non-degree students.
Financial Information

STUDENT EXPENSES: Academic Year of 1974-75

The financial requirements of the University, changing costs, state and legislative action, and other matters may require an adjustment of these charges and expenses. The University reserves the right to make adjustments to the estimated charges and expenses as may from time to time be necessary in the opinion of the Board of Trustees up to the date of Final Registration for a given academic term. The applicant acknowledges this reservation by the submission of an application for admission or by registration.

APPLICATION FEE — An Application Fee must accompany each application at each campus unless the student has previously matriculated at this campus $10.00

MATRICULATION FEE — A one-time fee for each student that elects to pursue a degree program within the University 15.00

ANNUAL EXPENSES: FULL-TIME UNDERGRADUATE STUDENTS

Undergraduate Tuition for a Resident of Maine 500.00

(Tuition for Non-Residents, as defined below, is $1500.)

Student Activity Fee (required of all full-time undergraduates taking twelve hours or more) 16.00

Books and Supplies — Textbooks, personal laboratory equipment, etc., are not furnished by the University. Annual costs vary from $100 to ....... ....... .......

Personal Expenses — Over and above food and lodging, recent estimates indicate an annual average of at least 350.00

Voluntary Health Insurance — Optional but strongly recommended. Estimated cost 30.00

ADDED EXPENSES FOR DORMITORY RESIDENTS

Board and Room for Dormitory Residents (per academic year) 1,270.00

Note: In the event that special dormitory guards are established, the interested students will be charged a fee adequate to cover the cost of these guards.

OPTIONAL MEALS FOR OFF-CAMPUS RESIDENTS: $644 per academic year.

LATE REGISTRATION

A Late-Registration Fee of $10.00 is charged a student who registers after the prescribed day of registration. Students must register each semester, one semester at a time.

TUITION FOR OTHER CLASSIFICATIONS OF STUDENTS

Registration Fee — A registration fee of $5 per semester is charged each part-time daytime student, each Continuing Education student, and each Summer Session student.

Continuing Education Division and Summer Session — Summer Session students are charged $25 per semester hour for courses carrying degree credit. Continuing Education students are charged $25 per semester hour for courses carrying degree credit, up to a maximum of $250 per semester. The tuition, fees, and related maximums set forth herein do not apply to non-degree credit work. CED bulletins announce the fees for their non-degree courses.

Other Part-time Students — Registration fee of $5 per semester, plus tuition for residents of Maine of $25 per semester-hour up to a maximum of $250 per semester, or tuition for non-residents of Maine of $75 per semester-hour up to a maximum of $750 per semester.

School of Law — Tuition for residents of Maine and non-residents covered by the New England Pact is $600 per year; tuition for other non-residents is $1750 per year. The $10 Application Fee and $15 Matriculation Fee are also charged. For other expenses, see the School of Law catalog.

Auditing of Courses — Tuition and Registration Fees are charged for audited courses at the usual hourly rate, except for a student who is already paying the maximum tuition.

Tuition and Fee Grants — Tuition and fee grants will be restricted to those specifically authorized by the Board of Trustees and will include tuition grants for persons over age sixty-five who wish to register for undergraduate courses on a non-credit basis at any campus of the University of Maine.
DEPOSITS

A deposit of $25 is due when the applicant is notified of acceptance by the Director of Admissions. If a dormitory room is requested, an additional $30 is due. These deposits will be applied toward the student’s account when the student registers. (They should not be confused with the matriculation fee of $15, which is a non-refundable charge.)

The deposits are forfeited in case an applicant withdraws after June 1. If a freshman, transfer, or readmission applicant notifies the Director of Admissions of withdrawal prior to June 1, the deposits will be refunded.

Upperclassmen desiring to live in a dormitory must pay a room deposit of $30 during the spring in order to assure that rooms will be reserved for them in the fall. This deposit will be applied to the fall semester bill. If it is found that dormitory accommodations are not desired, the deposit will be refunded if the Housing Office is notified by June 1. If notice is not given by that date, the deposit will be forfeited.

PAYMENT OF BILLS:

All University bills, including those for room and board in University buildings, are due and payable on or before August 16 for the Fall Semester and on or before January 6, 1975, for the Spring Semester. Bills may be paid at the business offices at either campus by mail or in person. Checks should be made payable to the University of Maine.

UNIFORM REFUND POLICY

I. Degree-Credit Programs (Other than Summer Session)

1. Tuition. Tuition may be refunded in accordance with the scale and provisions set forth below for students withdrawing during the first six weeks of a term.
   a. Scale. Attendance period is counted from first day of class and includes weekends and holidays. The refund will be reckoned from the date on which the student notifies the Registrar.

<table>
<thead>
<tr>
<th>Refund Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st week</td>
</tr>
<tr>
<td>2nd week</td>
</tr>
<tr>
<td>3rd week</td>
</tr>
<tr>
<td>4th week</td>
</tr>
<tr>
<td>5th week</td>
</tr>
<tr>
<td>Over five weeks</td>
</tr>
<tr>
<td>No Refund</td>
</tr>
</tbody>
</table>


   (1) A student enrolled in a full-time program who drops or adds a course and continues to be in a full-time program will have no financial adjustments of tuition.

   (2) In no case will tuition be reduced or refunded because of voluntary absence from classes.

   (3) Tuition adjustments attributable to involuntary absence, for example, extended illness or military service, will be processed by the respective campus of the University of Maine on a case-by-case basis.

2. Fees. University fees are not refunded.

II. Degree-Credit Programs (Summer Session)

1. Tuition. Tuition may be refunded in accordance with the scale and provisions set forth below for students withdrawing.
   a. Scale. Attendance period is counted from first day of class and includes weekends and holidays. The refund will be reckoned from the date on which the student notifies the Registrar.
Refund
Percentage

(1) Six week Courses

<table>
<thead>
<tr>
<th>Week</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st week</td>
<td>75%</td>
</tr>
<tr>
<td>2nd week</td>
<td>50%</td>
</tr>
<tr>
<td>3rd week</td>
<td>25%</td>
</tr>
<tr>
<td>After 3rd week</td>
<td>-0-</td>
</tr>
</tbody>
</table>

(2) Three week Courses

<table>
<thead>
<tr>
<th>Week</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st week</td>
<td>50%</td>
</tr>
<tr>
<td>After 1st week</td>
<td>-0-</td>
</tr>
</tbody>
</table>


(1) In no case will tuition be reduced or refunded because of voluntary absence from classes.

(2) Tuition adjustments attributable to involuntary absence, for example, extended illness or military service, will be processed by the respective campus of the University of Maine on a case-by-case basis.

2. Fees. University fees are not refunded.

III. Dining and Residence Activities. The board and room charges will be refunded in accordance with the following wherein the student is withdrawing from the institution:

1. Scale

a. Board. Board charges for a student leaving the residence halls or withdrawing from the University will be at the full daily rate through the date of clearance and for one-half the daily rate for the remaining full days.

b. Room

(1) Normal Academic Year (Fall & Spring Semesters)

<table>
<thead>
<tr>
<th>Weeks</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st and 2nd weeks</td>
<td>80%</td>
</tr>
<tr>
<td>3rd and 4th weeks</td>
<td>60%</td>
</tr>
<tr>
<td>5th and 6th weeks</td>
<td>40%</td>
</tr>
<tr>
<td>7th, 8th, and 9th weeks</td>
<td>20%</td>
</tr>
<tr>
<td>Over 9 weeks</td>
<td>No Refund</td>
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</table>

(2) Summer Session

<table>
<thead>
<tr>
<th>Weeks</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Six-week Courses</td>
<td></td>
</tr>
<tr>
<td>1st week</td>
<td>75%</td>
</tr>
<tr>
<td>2nd week</td>
<td>50%</td>
</tr>
<tr>
<td>3rd week</td>
<td>25%</td>
</tr>
<tr>
<td>After 3rd week</td>
<td>-0-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weeks</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>(b) Three-week Courses</td>
<td></td>
</tr>
<tr>
<td>1st week</td>
<td>50%</td>
</tr>
<tr>
<td>After 1st week</td>
<td>-0-</td>
</tr>
</tbody>
</table>

2. Exceptions. Exceptions will be made only in cases of illness, extreme hardship, or when an occupant leaves for the convenience of the University. The charges in these cases will be determined by the University according to the circumstances of each case.
RULES GOVERNING RESIDENCE

A student is classified as a resident or a non-resident for tuition purposes at the time of admission to the University. The decision, made by the appropriate campus Business Manager, is based upon information furnished by the student's application and any other relevant information. No student once having registered as an out-of-state student is eligible for resident classification in the University, or in any college thereof, unless the student has been a bona fide domiciliary of the state for at least a year immediately prior to registration for the term for which resident status is claimed. This requirement does not prejudice the right of a student admitted on a non-resident basis to be placed thereafter on a resident basis provided the student has acquired a bona fide domicile of a year's duration within the state. Attendance at the University neither constitutes nor necessarily precludes the acquisition of such a domicile. For University purposes, a student does not acquire a domicile in Maine until the student has been here for at least a year primarily as a permanent resident and not merely as a student; this involves the probability of a student's remaining in Maine beyond the student's completion of school. In general, members of the Armed Forces and their dependents are normally granted in-state tuition rates during the period when they are on active duty within the State of Maine.

Subject to the provisions of the preceding paragraph, the domicile of an unmarried minor follows that of the parents or legally appointed guardian. The bona fide year-round domicile of the father, if living, otherwise that of the mother, is the domicile of such a minor; but if the father and the mother have separate places of residence, the minor takes the domicile of the parent with whom the minor lives or to whom the minor has been assigned by court order. If neither of the parents is living, the unmarried minor takes the domicile of the legally appointed guardian.

Subject to the provisions of the first paragraph above, an adult student, defined for the purposes of these rules as one who is either married or eighteen years of age or older, will be classified as a resident of Maine if the student has completed twelve continuous months of domicile in Maine immediately preceding registration for the term for which resident status is claimed.

Subject to the provisions of the first paragraph above, if a non-resident student has a spouse who has a residence in Maine, the student shall be deemed to have a residence in Maine.

To change resident status, the following procedures are to be followed:

A. Submit “Request for Change of Residence Status” form to the Business Manager. If the Business Manager’s decision is considered incorrect:

B. The student may appeal the Business Manager's decision in the following order:
   1. Vice President for Finance and Administration (where applicable)
   2. President
   3. Vice Chancellor for Business and Financial Affairs, University of Maine, Chancellor’s Office (This decision must be considered final.)

In the event that the campus Business Manager possesses facts or information indicating a change of status from resident to non-resident, the student shall be informed in writing of the change of status and will be given an opportunity to present facts in opposition to the change. The student may appeal the Business Manager's decision as set forth in the preceding paragraph.

No applications will be considered for changes after September 1 for the fall semester and January 15 for the spring semester.

All changes approved during a semester will be effective at the beginning of the next semester; none are retroactive.

In all cases, the University reserves the right to make the final decision as to resident status for tuition purposes.
Financial Assistance

The Office of Student Financial Aid, located on the Gorham campus on the second floor of Corthell Hall, employs various federal, state, and private aid programs to assist students in financing their education. These programs assume that the primary responsibility of meeting the financial obligations of a college education rests with the parents and the student. It is important, therefore, that parents and students work out a financial plan for the period of time during which their sons or daughters will be attending the University. When such a plan indicates that there is need for financial aid, the University may assist with counseling directed toward better management of family resources and, if needed, supplement those resources with some combination of loans, scholarships, and part-time employment.

WHO MAY APPLY

Any undergraduate, graduate, or professional student enrolled in a program leading to a degree or any candidate applying for admission to the University may apply for financial aid.

HOW TO APPLY

Prospective First-Year Students should obtain a College Scholarship Service Parents’ Confidential Statement from their high school guidance counselor or from any student aid office of the University of Maine. This application should be completed and forwarded to the College Scholarship Service as directed on the application. No other application is required.

Students who have already enrolled and have completed a semester or more of academic work at the University should obtain application through the Student Financial Aid Office.

Applications for the Federal Basic Educational Opportunity Grant Program are available at the Financial Aid Office, high schools, post offices and other government agencies. All students who began their post-high school education after April 1, 1973, must apply for aid from this program.

WHEN TO APPLY

Just before the Christmas vacation the University Financial Aid Office usually conducts a series of student aid information meetings at which students may obtain applications. Students applying for admission to the University should submit their Financial Aid applications at the same time they submit their Admission application. Recipients will be notified prior to the time of billing, July 15. All students should remember that in order to be considered for aid applications must be completed each year.

CONDITIONS FOR AWARDS

Students may be granted financial assistance if a definite need is indicated by the Financial Statement and an evaluation made by the Financial Aid Officer.

SOURCES OF FINANCIAL ASSISTANCE

Grants and Scholarships

The University participates in the Supplementary Educational Opportunity Grants Program. Funds are provided by the federal government for grants to students who have exceptional financial need.

Basic Educational Opportunity Grant funds are awarded by the federal government to first and second year students at the University who show the prerequisite financial need.

University Scholarships are granted annually to approximately 300 students who are in good academic standing, show strong academic promise, and have a definite financial need.
The Simmons Foundation, Inc., Grant Program consists of funds awarded annually to approximately 15 students who have demonstrated financial need.

Nursing Scholarships are available for Junior and Senior Nursing Students with the prerequisite financial need.

Loans

The University participates in the National Direct Student Loan Program. Funds are provided by the federal government. Students may borrow funds from the government under this program with interest and payments deferred until after completion of their degree work. Loans average approximately $500 for an academic year. Limited funds require that loans be made on the basis of need.

The University is a participating member in the United Student Aid Fund, Inc., Loan Program. Under this program, students may borrow up to $2,500 annually for a total not to exceed $7,500 for undergraduates, and $10,000 for graduate students. Applications for these loans are to be secured directly from the participating banks and then submitted to the University Aid Office.

There is a revolving short-term emergency loan fund on both the Portland and Gorham campuses. These funds should be applied for through the Educational Services Office on either campus. Normally, short term loans are not made in excess of $50.

Nursing Loans are available to Nursing Students with demonstrated financial need. All interest and principal payments are deferred until the student completes the degree work.

Work Programs

The University participates in the College Work-Study Program. Funds are provided by the federal government and the University to employ students both on and off campus. Student earnings through this program are to be used to help defray educational costs. Special consideration in hiring is given to students with great financial need.

The University operates another work program referred to as Student Employment. This program is funded by the University and operates in the same way as the College Work-Study Program described above.

Further information concerning special aid programs for Nursing Students and Law Enforcement Students can be obtained at the Financial Aid Office.

Law Enforcement Grants and Loans

Under the provisions of the Law Enforcement Education Program (LEEP), the University provides funds sufficient to cover the cost of tuition and fees for eligible full-time employees of the criminal justice system.
Student Life And Activities

STUDENT LIFE

The University supplements its academic curriculum by offering students a wide variety of services and activities ancillary to normal classroom educational experiences. Philosophically, the Student Life Division seeks to assist students toward educational fulfillment through (1) services to aid with personal, social, and vocational needs and (2) co-curricular experiences in the form of programs and assistance to student organizations to help maximize individual student development.

The unique physical arrangement of the University allows students to sample suburban and urban environments on both a predominantly residential and a primarily commuter campus. Students are encouraged to take an active role in the social and professional programs offered, as well as other extra-curricular activities including campus governance.

STUDENT ACTIVITIES

Extra-curricular activities form an important part of the educational experience of students on every university campus. The University encourages students to take advantage of the many opportunities to broaden intellectual horizons and to work together with other students either on university committees or through participation in campus clubs or other organizations. Not only is there value in social learning derived from participation, but many of the recognized functions of student organizations relate to the curriculum and classroom experiences of the students. Typical of the many extra-curricular activities and organizations available to students are the following:

Student Organizations

There are numerous student organizations which reflect a wide spectrum of honoraries, professional associations, university governance committees, and social or religious organizations. Such organizations include:


Musical Organizations — A Cappella Choir, Concert Band, Gorham Chorale, Chamber Singers, Chamber Orchestra, Portland Chorus, Music Educators National Conference.

Religious Organizations — Inter-varsity Christian Fellowship, Campus Ministry Club, Bahai Club.

Social and Service Organizations — Environmental Improvement Club, Modern Dance Club, Portland Union Board.

Special Interest Organizations — Swimming, Orientation Committee, Young Democrats, Young Republicans, Varsity Club, Outing Club, Student International Meditation Society.

Student Publications

The Literary Journal is a Journal of creative art and literature which offers the entire campus community a forum for creative expression and presents the reader with a panorama of campus artistic and writing endeavors. The University Free Press, the weekly student newspaper, is staffed and published by students interested in various aspects of journalism. The Reflection, the UMPG yearbook, is published annually by students and represents a pictorial record of academic and social life.

Radio Station WMPG-FM

The radio voice of UMPG broadcasts at 91.1 on the FM dial and is located in the Student Center on the Gorham campus. WMPG will serve the metropolitan area of Portland and Gorham with noncommercial programs of high quality. Students are encouraged to become part of this communications medium on campus.
Honor Societies

Owls and Eagles is a sophomore service honorary which assists the campus community in many facets. Top-of-the-Tree is an honorary drama organization. Epsilon Pi Tau is an international honor fraternity for industrial arts and industrial-technical education. Kappa Delta Epsilon is a professional sorority for education majors.

Fraternities and Sororities — The Greek system offers an additional aspect of development in social living and communication through objectives of group unity and close friendship. The Greek letter organizations on the Portland-Gorham campuses are Delta Chi, Phi Mu Delta, Tau Kappa Epsilon and a colony of Sigma Nu fraternities, and Alpha Xi Delta, Delta Zeta, and Phi Mu sororities.

The Inter-Fraternity and Panhellenic Councils, governing units of fraternities and sororities respectively, are intended to insure the continuity of high ideals expressed by all fraternities and sororities through self-government.

Student Government

Students have the opportunity to help govern the campus community in close cooperation with the faculty and administration through the Student Senate. There are always openings on one of the major committees.

Students Activities Board — Coordinates concerts, films, special events, travel, major weekends, lectures.

Student Communications Board — Coordinates campus communications.

Appropriations Committee — Receives requests for organizational funding.

Ad-Hoc Committees — Many Ad-Hoc committees are organized to meet specific needs.

Volunteer Services

Interesting volunteer service projects to assist various aspects of the University, as well as local communities, are coordinated by the Educational Services Division. These projects offer students an opportunity to become involved in areas of need in the Portland-Gorham communities. Typical projects include the recording of “talking books” for blind students, work with children at the Cerebral Palsy Center, and activities with children at the Pine Island State Hospital.

Resident Student Government

The governing and coordinating group for the residence halls is officially known as the Resident Student Government, commonly referred to as the RSG. Activities of individual hall councils are often aided and advised by RSG.

STUDENT SERVICES

Student Handbook

The Educational Services Office of the University compiles the official Student Handbook, which explains such matters as campus policies, the governance structure, and the functions of various campus offices. The handbook also contains the Disciplinary Code, which is designed to protect the rights of all individuals in the University. The handbook is distributed to all available students.

Student Union and Student Center

The University maintains a Student Activities office in both the Student Unions at Nos. 92 and 94 Bedford Street in Portland and a Student Center at Gorham, and also provides facilities for out-of-class activities or for leisure moments on campus, including lounge space, game rooms, study areas, snack facilities, and meeting rooms where organizations are able to schedule events.
Student Housing

The Gorham campus provides living accommodations offering a variety of life style options for approximately 970 men and women students. Both Portland and Gorham Residence offices are located in the Educational Services Office to assist students who are either living on or off-campus. Both offices also maintain an up-to-date file of rooms, apartments, and homes which are for rent in the community. Students wishing housing on the Gorham Campus should file an application with the Residence Life Styles.

Before a room is assigned to a student in a residence hall, the student will be required to sign a room contract for the academic year or the remaining part thereof, depending upon the date of admission to the hall. All residence-hall students must also contract for meals.

Students living off campus may contract for all their meals at the cafeteria at the Standard rate, listed under “Financial Information,” or they may make their own arrangements. Individual meals or snacks may be purchased at either the Gorham cafeteria or the Portland cafeteria.

Student Health Services

To provide student health services, the Portland campus maintains a Health Center open 8:00 A.M. to 4:30 P.M., Monday through Friday, with a Family Nurse Associate in attendance who is available for first aid, consultation, and temporary emergency care. A physician is available from 11:00 A.M. to 12:30 P.M. Monday through Friday, for consultation.

On the Gorham campus, an Infirmary is maintained and open 24 hours a day, 7 days a week, with three full-time registered nurses and a Family Nurse Associate, who are also available for consultation, emergency, and in-patient care. A physician is in attendance Monday through Friday from 1:00 P.M. to 2:30 P.M.

Health and Accident Insurance is available at a nominal fee.

Counseling and Testing Services

Students experiencing educational, vocational, emotional, and other personal concerns are offered individual attention by the University counseling specialists. Students may make appointments through the counseling and career development office in Portland although counseling services are provided at both campuses. The service is free of charge. Students are also assisted in whatever testing services they need. For example, they may receive specialized testing through interest inventories, personal preferences, aptitude tests, or tests required for admission to graduate school.

Career Development

This section of the counseling and career development department offers continuous assistance to undergraduates, graduates, and alumni. The office offers services in the area of business and industry, nursing, and education.

The Career Development Program:

- encourages early assessment by the individual of personal capabilities as they relate to vocational objectives;
- provides information on the broad range of careers available;
- offers counsel on specific vocational opportunities;
- assists the student in obtaining part-time employment, as well as full time career employment;
- aids the individual in evaluating graduate study as an element of professional preparation;
- acquaints candidates with the recruiting process to the end that they will make a most effective presentation of their qualifications.

The Career Development Office keeps a complete, up-to-date set of credentials on all students who register with that office. The office sets up campus interviews, as well as duplicating credentials for recruiters. Credentials are also forwarded to graduate schools, government agencies, and prospective employers. Students seeking information about placement services are welcome to contact the Career Development Office.
The Educational Placement section is based in Bailey Hall, Gorham Campus, while business and industry, nursing and other general placement services are based in Payson Smith Hall, Portland campus.

**Handicapped Student Services**

The purpose of the Office of Handicapped Student Services is to enable the University to fulfill its obligations and commitment to educate and serve those students who need and desire additional services.

There are few architectural barriers that exist either at the Portland or Gorham campuses. In addition, residence halls are available for handicapped students.

Physical and mental health are basic considerations in admitting any applicant to the University. Therefore, we suggest that a prospective student make an appointment with the Admissions staff and plan to visit the campus to determine its accessibility and ask questions regarding admissibility, facilities, and services. This is usually done in conjunction with the Handicapped Student Advisor.

In addition to special services such as registration, transportation, parking, and physical education, the University will provide, when needed, special vocational counseling, and reading and attendant services. Also located at the University is a therapeutic recreation and leisure time center for the handicapped.

**International Student Adviser**

The University provides information to assist all students who are not citizens of the United States. An International Student Adviser aids these students in interpreting the administrative regulations of the University; the local, state, and federal laws; the locally accepted standards of conduct; and the expectations and reactions of other persons encountered in the University community.

**Veterans' Services**

The University provides the veteran with supportive services through the Educational Services, the Registrar's, and the Continuing Education Division offices. Professional advice concerning programs, laws, regulations, and educational benefits can be secured from the Veteran Coordinator, while the Registrar's and the C.E.D. offices provide enrollment certification in order that the veteran may receive all educational benefits.

**National Student Exchange**

In 1973 the University became a member of NSE which enables us to provide national educational outlets for up to one year to our undergraduate students. Similar to Junior Year Abroad, this program offers University students a year elsewhere at another member institution in the United States. Member institutions include the University of Hawaii, Morgan State College, University of Oregon, Ohio University, and 25 other similar institutions. The exchange program also allows students from member institutions in other parts of the United States to reciprocally attend the University. Information on this program may be obtained from the University Admissions Office.

**CAMPUS REGULATIONS**

**Disciplinary Code**

The University Disciplinary Officer and the Judiciary Committee enforce the campus rules and regulations as outlined in the Disciplinary Code, which is published in the Student Handbook. All students are expected to read and act in accordance with these campus regulations, which are published in the handbook.

**Motor Vehicles**

In the interest of safety for all students, all vehicles utilizing campus parking must be registered with the Department of Police and Security, and must show a valid parking sticker. Parking stickers may be obtained during regular business hours at the Department of Police and Security on either campus.

Because of limited parking space, freshmen and sophomores classified as resident students are not permitted to have or operate motor vehicles on the Gorham Campus.
The University maintains an Art Gallery (located on the Gorham Campus) which offers exhibitions showing current developments in all areas of the visual arts. Visiting exhibitors often give lectures, workshops, and informal seminars for students, faculty, and the general community. Students participate fully in the many aspects of running the Art Gallery and also operate their own Student Art Gallery. The Gallery exists to enrich the cultural life of the University and is open without charge to the public from 12 to 5 p.m. daily during shows. Exhibition and program schedules may be obtained from Prof. Juris Ubans or from the Office of the Dean of CAS.
SOUTHWORTH PLANETARIUM

The Southworth Planetarium was donated to the University by Mrs. Constant Southworth in memory of her husband. Located in the Science Building on the Portland Campus, the Planetarium is a mechanical-optical-electrical device that projects the night sky for any place on earth at any time: present, past, or future. Students and thousands of people from the Greater Portland Area visit the Planetarium each year. Schedules of showings may be obtained from Prof. George Ayers or the Office of the Dean of CAS. Schedules are also posted on principal bulletin boards and listed in calendars of events distributed on both campuses.

MUSEUM OF MAN

The University has a Museum of Man (located on the Gorham Campus) which provides a unique experience for students and the community. It is designed to tell the story of human culture through the works man has created through the ages. The Museum collection is visited each year by students, faculty, and the surrounding community. Field expeditions, materials and facilities are also available to those interested in Museum activities. Further information about the Museum of Man may be obtained from Prof. Robert French or from the Office of the Dean of CAS.

MUSIC

The Music Department offers opportunities for all students to participate in the experience of music. Every year it sponsors a large number of public concerts and recitals, always open to students at no cost. The Concert Band, the Brass Ensemble, the Gorham Chorale, the A Cappella Choir, and the Gorham Chamber Orchestra present a total of at least six regular concerts each year. In addition, the department presents about twenty student recitals per year and a weekly Recital Class each Friday at 11:00 a.m. Students are welcome to attend any of these events. There are occasional workshops of varied nature which students may attend, as well as several presentations by visiting high school vocal and instrumental groups. More information and performance schedules may be obtained from the Music Department or from the Office of the Dean of CAS.

THEATRE

The Theatre Department offers a wide variety of programs that are available to students and the community. In addition to being able to participate in quality theatre productions, students have the opportunity to attend a variety of plays during the year. The Art Theatre and the Treehouse Players offer a number of productions on a regularly scheduled basis. Play schedules and brochures may be obtained from the Department or from the Office of the Dean of CAS.

Any student or organization may organize a team and enter it for competition. Students are encouraged to form teams consisting of students from the same high school, physical education class, fraternity, neighborhood, dormitory, major area, or rooming house. Independent players who have difficulty finding a team in which to participate should report to the Intramural Office for assistance. All business pertinent to intramural activities must be carried on in the Intramural Office, a branch of which is located in the gymnasiaum building on either campus. In addition to such organized sports, the gymnasiums on both campuses are open regularly for drop-in activities.

INTERNATIONAL FILM SERIES

Sponsored by the Cultural Affairs Committee, the weekly screenings of the International Films bring to the University community a broad range of films—from historically important masterpieces to the most recent developments in the film world. The screenings are at 7:30 P.M. on Thursday evenings in Bailey Auditorium (Gorham Campus) and are open to the public without charge. Schedules and further information may be obtained from Prof. Juris Ubans or from the Office of the Dean of CAS.
LIBRARY FACILITIES

The University has full library facilities on both of its campuses. Located in Bailey Hall on the Gorham Campus and in Bonney Hall on the Portland Campus, the libraries hold a combined total of over 200,000 volumes. In addition there are some 30,000 microfilms, 20,000 government documents and approximately 1700 periodical subscriptions. The campus collections are complementary; books and periodicals not found in one library may be in the other. Both libraries have specialized collections of old or unusual books as well as listening facilities for the libraries' record collections.

Students are encouraged to make use of the libraries both for assigned academic work and for cultural enrichment and esthetic enjoyment.

Intercollegiate Athletics

Intercollegiate athletics, an integral part of the physical education program provides special opportunities to develop physical skills and to encourage leadership and sportsmanship among outstanding athletes.

INTERCOLLEGIATE ATHLETICS FOR MEN

As a member of the New England State College Athletic Conference, the University competes successfully in varsity cross country, track and field, soccer, basketball, hockey, skiing, baseball, tennis, and golf. A Junior Varsity basketball schedule completes the present program.

As a member of the National Association of Intercollegiate Athletics (District 32), the University has participated in district play-offs in soccer, cross country, basketball, golf, tennis and baseball. The University is also a member of the National Collegiate Athletic Association, the Eastern College Athletic Conference, and the New England College Athletic Conference. The Warren Hill Gymnasium on the Gorham campus and the new physical education building on the Portland campus are two of the best designed and adequately equipped sports facilities in the area.

INTERCOLLEGIATE ATHLETICS FOR WOMEN

Intercollegiate athletic teams for women are available to all students who are full-time undergraduates. Women may participate in field hockey, tennis, ten pin bowling, volleyball, basketball, badminton, skiing, gymnastics, and lacrosse. The University is a member of the Maine Association for Physical Education and Intercollegiate Athletics for Women, the Eastern Association for Intercollegiate Sports for Women, and the Association for Intercollegiate Athletics for Women. As a member of these organizations, the University teams have the opportunity to qualify for and participate in state, regional, and national tournaments.

INTRAMURALS AND COMMUNITY RECREATIVE SERVICES

Intramural activities are voluntary and are organized to provide activity in as many different sports as student interest warrants. Special interest groups are encouraged to approach the intramural director for assistance in organizing club sports. When appropriate, competition will be arranged on an extramural basis to provide competition with intramural teams of other colleges and university campuses.

A partial list of intramural sports includes: soccer, tennis, golf, bowling, flag football, cross country, table tennis, basketball, wrestling, badminton, volleyball, softball, track and field, cycle racing, handball, squash, paddleball, foul-shooting, and archery.

Team play, sportsmanship, and individual participation are encouraged throughout the programs. Trophies are awarded to individual members of the championship team in each sport.
UMP G Academic Policies
1974-1975

GENERAL REQUIREMENTS FOR ALL BACCALAUREATE CANDIDATES

The General Education Requirement of the University consists of 30 semester hours, 24 hours of which consists of four 6-hour groups of courses, each group either interdisciplinary or chosen from a different one of the four areas of (1) Humanities, (2) Fine and Applied Arts, (3) Science and Mathematics, and (4) Social Sciences. The prefix-codes of acceptable course selections are listed on the inside front cover of this catalog.

The remaining six hours, designated Area 5-General, shall be selected from one, or a combination of the four academic groupings, SCOGIS courses, CAS designations, or when school or college requirements permit, PE Activity courses.

With the exception of K-P or GE majors, departmental courses in the student's major may not be applied toward fulfillment of the General Education Requirement.

A student who has matriculated before September 1971 may continue the program under the requirements in force at the time of matriculation, or may elect to complete the General Education Requirements under the provision stated above.

The School of Education, the School of Nursing, and one or more departments of the College of Arts and Sciences also have a Physical Education Requirement. This requirement, together with any exemption criteria, is explained in the section of the catalog having to do with the School or Department involved.

ATTENDANCE POLICY

The attendance policy is left to the discretion of the individual faculty member. Each semester, it is the responsibility of the faculty member to inform the students in each class of the attendance requirements for that class. Whenever, in the opinion of the instructor, a student's absences impair the quality of work, the instructor will report this fact to the Dean of the appropriate School or College.

EXAMINATION POLICY

The examination policy is left to the discretion of the individual faculty member to inform the students in each class of the examination requirements for that class. A final course-evaluation will be scheduled for all classes at a designated time and place during examination week.

Usually, two to four preliminary examinations are administered in each course and count heavily on the final grade. Final examinations are normally scheduled at the end of each semester according to a regular schedule. Finals cannot be taken before the regularly scheduled time.

ABSENCE FROM A FINAL EXAMINATION

An absence from a final examination must be made up during the semester immediately following the one in which the absence occurred, unless the time limit has been extended by the Dean.

Students who miss a final examination and are failing the course at the time may be given the grade of F instead of being marked I for the semester grade. A student who misses a final examination should immediately contact the instructor to apply for a special examination.
GRADE REPORTS

Regular grade reports are sent to all students at their official addresses at the end of the semester. Final grades cannot be secured in advance from the Registrar.

THE GRADING SYSTEM

Grades at the University are given in terms of letters representing levels of achievement. The basis for determining a grade is the relative extent to which the student has achieved the objectives of the course. The student's work in each course is graded as follows:

A — High honors.
B — Honors.
C — Satisfactory, successful, and respectable meeting of the course objectives.
D — Low-level work, below the average required for graduation for an undergraduate, and a failing grade for a graduate student. In addition, individual departments may limit the number of D grades accepted, as stated in the departmental sections of this catalog. The paragraph on “Minimum Grade Policy” and “Repeating Courses” should also be noted.
F — Failure to meet the course objectives.
P — Pass: given only for certain courses open to the pass-fail option.
I — Incomplete: a temporary grade given when the student, due to extraordinary circumstances, has failed to complete required work. Required work must be completed and a grade submitted in the semester following the semester in which the I grade was received.
W — Withdrawal during the second five weeks of a semester.
WP — Withdrawal while passing: Approved withdrawal from a course, after the end of the first ten weeks, when the student is doing satisfactory work to the date of recommendation for the withdrawal. The WP grade is not considered in grade-point average computation. The last day to withdraw from a course is the last day of classes.
WF — Withdrawal while failing: Approved withdrawal from a course, after the first ten weeks, when the student is doing failing work to the date of recommendation for the withdrawal. The WF grade is treated as an F in grade-point average computation. The last day to withdraw from a course is the last day of classes.

GRADE-POINT AVERAGES

The academic standing of each student is computed by the Registrar at the end of every semester. The following table represents the rating scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points per Credit Hour</th>
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<tbody>
<tr>
<td>A</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>0</td>
</tr>
</tbody>
</table>

To compute the grade-point average for a semester, first multiply the grade points earned in each course by the number of credit hours assigned to that course. The resulting product is the number of quality points for that course. Then divide the total number of quality points earned during the semester by the total number of credits carried in that semester. The result is carried out to two decimal places to produce the grade-point average for that semester.

To compute the cumulative grade-point average, divide the total quality points earned by the total credits carried in all semesters.

At the end of each semester, full-time students with grade-point averages of 3.2 or better are placed on the Dean's list.

REPEATING COURSES

If a student in the School of Business, School of Education, or School of Nursing repeats a course, the initial grade remains on the record but does not count toward the grade-point average or for credit. When a student in the College of Arts and Sciences repeats a course, the second grade stands and the initial grade is removed from the transcript.
ADD-DROP

Once a student has completed registration, a period of one week is permitted for dropping or adding courses. This procedure permits a student to make the necessary course changes in the planned curriculum. Also, during the first five weeks of the term a student may drop any course without having a grade recorded. All Add-Drops are initiated at the Registrar's Office. All students who register for a course and withdraw will be graded WF unless they officially complete the procedure of dropping the course.

Any students who find that their names are not on the instructor's official list should check immediately with the Registrar's Office to make necessary corrections in the registration records.

MINIMUM GRADE POLICY

Minimum cumulative grade-point averages for all undergraduate programs at the University are as follows:

<table>
<thead>
<tr>
<th>Grade-Point Averages</th>
<th>For Good Standing</th>
<th>For Probationary Standing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshmen: end of 1st semester</td>
<td>1.35</td>
<td>1.15</td>
</tr>
<tr>
<td>Freshmen: end of 2nd semester</td>
<td>1.60</td>
<td>1.35</td>
</tr>
<tr>
<td>Sophomores: end of 1st semester</td>
<td>1.80</td>
<td>1.60</td>
</tr>
<tr>
<td>Sophomores: end of 2nd semester</td>
<td>2.00</td>
<td>1.80</td>
</tr>
<tr>
<td>Juniors and Seniors: end of each semester</td>
<td>2.00</td>
<td>1.80</td>
</tr>
</tbody>
</table>

Students with majors or minors in English, History, or the Social Sciences Area, including both those in the baccalaureate program of the College of Arts and Sciences and also those in the Secondary Education program of the School of Education, must achieve at least six credits with grades of B or better in their major or minor requirements. No grades of D will count toward fulfillment of the major or minor requirements in these programs.

Students in the nursing major must achieve a 2.0 cumulative grade-point average in order to enter the clinical courses. D grades will not count toward fulfillment of the major requirements in the Nursing Program.

SUSPENSION

Students may be suspended from the University either by the University Committee on Academic Standing or by the University Disciplinary Committee. Academic suspension is automatic when a student receives a semester average below 1.0. Other standards vary from college to college and from class to class. Students are urged to consult advisers to learn the standards that apply to them. For details about disciplinary suspension and dismissal, consult the "Disciplinary Code," published by the Educational Services Office.

PROBATION

A student may be placed on academic probation by the Committee on Academic Standing if the student is making unsatisfactory progress toward meeting graduation requirements. The student is liable to be suspended at the end of the following semester unless substantial progress is made. Since exact standards vary somewhat from college to college and from class to class, students are urged to discuss with advisers in the appropriate academic Dean's Office the record they should maintain to avoid probation or suspension.

A student may remove himself from probation through Summer Session courses if the courses have been approved in advance by the adviser and the appropriate Dean.
WITHDRAWAL FROM THE UNIVERSITY

The procedure for withdrawal from the University is to secure an official withdrawal slip from the Registrar's Office. The student will then be instructed to seek an exit interview with a member of the Educational Services' staff.

If a student withdraws from the University during the first five weeks of the semester, there will be no course grade recorded. If a student withdraws from the University during the second five weeks, the student's record will show only "W" for the course in which the student was enrolled. When a student withdraws from the University during the last five weeks of the semester, the student will receive a "WF" or a "WP". The "WF" will be counted in the grade-point average.

Withdrawn students, in good standing with the University, who wish to return to school at a future date, must submit an application to return to the Admissions Office before July 1 for the fall semester and before November 15 for the spring semester.

CLASS MEMBERSHIP

Since a minimum of 120 credit-hours is required for graduation in most four-year programs, at least 30 credit-hours should be earned each year. To progress satisfactorily through college, a student is expected to carry at least 15 credit-hours each semester. Permission must be obtained from the adviser and the appropriate Dean if a student wishes to carry less than 12 or more than 18 credit-hours.

For standing as a sophomore, a student shall have completed at least 19 percent of the hours required for graduation, for junior standing 44 percent, and for senior standing 69 percent, except in the School of Nursing wherein the respective percentages are 25 percent, 50 percent, and 75 percent.

The requirements by classes, schools and college are:

<table>
<thead>
<tr>
<th>School or College</th>
<th>Sophomore</th>
<th>Junior</th>
<th>Senior</th>
<th>Total to Graduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts and Sciences</td>
<td>23</td>
<td>53</td>
<td>83</td>
<td>120</td>
</tr>
<tr>
<td>Business and Economics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baccalaureate Programs</td>
<td>23</td>
<td>53</td>
<td>83</td>
<td>120</td>
</tr>
<tr>
<td>Two-Year Business</td>
<td>23</td>
<td></td>
<td></td>
<td>62</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Music Education</td>
<td>26</td>
<td>60</td>
<td>94</td>
<td>137</td>
</tr>
<tr>
<td>Industrial Arts Technology</td>
<td>25</td>
<td>55</td>
<td>88</td>
<td>126</td>
</tr>
<tr>
<td>All Other Programs</td>
<td>23</td>
<td>53</td>
<td>83</td>
<td>120</td>
</tr>
<tr>
<td>Nursing</td>
<td>30</td>
<td>60</td>
<td>90</td>
<td>120</td>
</tr>
</tbody>
</table>

RESIDENCE REQUIREMENT

In all undergraduate divisions at the University, a minimum of 30 credit hours, including at least 9 hours in the major field, must be completed while registered in the school or college from which the degree is sought. A student may earn 6 of these 30 credit hours at another campus of the University of Maine. Unless special permission is granted by the dean of the school or college concerned to pursue work elsewhere, the work of the senior or final year must be completed at this University.

GRADUATION REQUIREMENTS

A candidate for a bachelor's degree must (a) receive passing grades in courses required by the University, the school or college, and the major department; (b) accumulate the number of credit hours required by the school or college in which the student is registered; (c) achieve an accumulative average of not less than 2.00; (d) meet the requirements of the major department; (e) complete an Application for Degree with the Office of the Registrar at least six weeks prior to the expected date of graduation.
GRADUATION WITH DISTINCTION

Graduating seniors are cited for graduation honors on the diploma and on the transcript. Students who have achieved a cumulative index of 3.50 or higher graduate summa cum laude; those with a cumulative index of 3.25 to 3.49 inclusive graduate magna cum laude; and those with a cumulative index of 3.00 to 3.24 inclusive graduate cum laude. The cumulative index for the purpose of graduation with distinction is based on the student's total college record.

Transfer students (including those transferring within this University from a two-year to a four-year program) must maintain an accumulative average of 3.0 or above for course work in the baccalaureate program, and must earn at least 30 credits, normally the final 30 credits, at this University.

DEPARTMENTAL HONORS PROGRAM

Students graduating in the University Departmental Honors Program will have the designation “with Honors in” the appropriate major.

Guidelines for graduation with departmental honors vary among University schools and colleges. Students should check with appropriate dean for details.

PASS-FAIL OPTION

Outside of courses in the major or minor area of concentration, or courses taken to satisfy the General Education Requirements, an undergraduate student is permitted to register for a maximum of six hours of pass-fail credits in any one semester, up to a maximum of 18 hours of the total credit-hours required for graduation.

An undergraduate in the School of Education may register for a total of 18 hours of pass-fail credits in addition to possible pass-fail credits for Student Teaching and the related seminar. Student Teaching and the related seminar are considered as a single bloc for election of the pass-fail option. Required courses in the Core Curriculum and in the student's major may not be taken pass-fail; and only one course in the minor may be taken pass-fail. Students may exercise the Pass-Fail Option only during the registration period or during the add period each semester.

INDEPENDENT STUDY

Junior and Senior students may elect independent study in their major for one to six credits. Normally, no more than three credits may be earned in a semester.

The student submits an independent study application which includes a detailed description of the proposed program of study. Permission of the instructor and approval by the department chairman and the dean are required.

The approved independent study form is filed with the Registrar during the registration period.

INDEPENDENT STUDY TERM

Information regarding an independent study term is provided in the section of the catalog dealing with the College of Arts and Sciences.

DOUBLE MAJORS

When a student completes the basic requirements for graduation from a school or college and the course requirements for two majors, the student should request the dean to notify the Registrar, who will record the double major on the student's transcript.
POST-BACCALAUREATE STUDY FOR SECOND DEGREE

A second Bachelor’s Degree may not be granted a student until he has completed an additional year of college work (as represented by a minimum of thirty (30) semester hours above the requirements for the second degree. Such work must be completed in accordance with all other University regulations.

It is the responsibility of the office of the Dean of the school or college in which the second degree is sought, to provide the approval for undertaking the second degree and certifying the completion of all requirements prior to receipt of the second degree.

CHANGE OF MAJOR WITH A SCHOOL OR COLLEGE

Permission to change from one major to another is granted only by the Office of the Dean and the head of the department in which the student expects to major. A form for the change must be obtained from the Dean’s Office. A change-of-major form must be filed with the Registrar’s Office.

CHANGE OF COLLEGE OR SCHOOL

Information on the procedure for change of College or School may be obtained from the Registrar’s Office.

COURSE WORK AT OTHER INSTITUTIONS

Matriculated students at the University are expected to secure written approval from the appropriate dean prior to taking course work at another institution. Such credits outside the University of Maine system count towards the total degree hours required but are not figured in the cumulative grade-point averages.
The College of Arts and Sciences offers a wide variety of courses, majors and programs leading to graduate and professional study, careers, and intellectual enrichment. The College, as a constantly developing unit of the University, provides a quality liberal education for students. Students in the College have the opportunity to specialize and increase their knowledge of a particular discipline or area of interest. A broad range of department and program options and alternative educational methods allows students to get the maximum benefit from their college experience. With good advising, experimentation and commitment, all CAS students have the opportunity to follow a quality program suited to their present needs and future aspirations.

In addition to meeting the needs of its students, the College of Arts and Sciences offers programs of study and service to students in all other schools of the University. Students enrolled in the School of Education, the School of Nursing, or the School of Business and Economics all must take some or most of their required and elective course work in various departments of the College of Arts and Sciences.

CAS DEPARTMENTAL ORGANIZATION

The College of Arts and Sciences is composed of the following departments, each of which is described in the following pages:

Art Department
Biology Department
Communication Department
English Department
Foreign Languages and Classics Department
Geography-Anthropology Department
History Department
Mathematics and Computer Science Department
Music Department
Philosophy Department
Physical Sciences and Engineering Department
Political Science Department - Criminal Justice Program
Psychology Department
Social Welfare Department
Sociology Department
Theatre Department

BACHELOR OF ARTS DEGREE PROGRAMS

Programs of study leading to a Bachelor of Arts (B.A.) degree are available for students who meet the admission standards for the specific program, who successfully complete the program requirements, and who satisfy the General Education Requirements of the University. B.A. degree programs are available in the following major areas:

Art
Biology
Earth Science
Economics
English
French
Geography-Anthropology
History
Mathematics
Music
Philosophy
Political Science
Psychology
Social Welfare
Sociology
Theatre/Communications
BACHELOR OF SCIENCE DEGREE PROGRAM

A Bachelor of Science (B.S.) degree with a major in Criminal Justice may be earned through the Criminal Justice Program in the College of Arts and Sciences.

BACHELOR OF FINE ARTS DEGREE PROGRAM

A Bachelor of Fine Arts (B.F.A.) degree with a major in Art may be earned through the Art Department in the College of Arts and Sciences.

INTERDISCIPLINARY DEGREE OPTIONS

Students in Arts and Sciences have a number of options to choose from in planning their academic program. In addition to the major programs listed above, it is also possible for students to earn a B.A. degree through two other programs: the Self-Designed Major and the Liberal Studies Major. These programs are described in the following pages.

ACADEMIC MAJORS
PROVIDED BY THE COLLEGE OF ARTS AND SCIENCES
FOR THE SCHOOL OF EDUCATION

The College of Arts and Sciences as one of its services provides a number of programs which enable students in the School of Education to concentrate in various subject areas. The Major and Minor programs in CAS available to Education students are:

Art ..........................................Art Education

Biology ..................................Biology Major (Secondary Education)
   Biology Minor (Secondary Education)
   (Certain biological sciences are also included in the Science Area Major and Minor for students of Education, as listed under Physical Sciences.)

English ..................................English Major and Minor (Secondary Education)
   English Major and Minor (Elementary or Kindergarten-Primary Education)

Foreign Languages .......................French Major (Secondary Education)

Geography-Anthropology ...............Social Science Area Major (Secondary Education)
   Social Science Area Major and Minor (Elementary or Kindergarten-Primary Education)
   Geography Minor (Elementary or Kindergarten-Primary Education)

History ..................................History Major and Minor (Secondary Education)
   History Major and Minor (Elementary or Kindergarten-Primary Education)

Mathematics ..............................Mathematics Major and Minor (Secondary Education)
   Mathematics Major and Minor (Elementary or Kindergarten-Primary Education)

Music ...................................Music Education

Physical Sciences
   and Engineering .......................Science Area Major (Secondary Education) (Certain biological sciences are included in this program.)
   Science Area Minor (Elementary or Kindergarten-Primary Education) (Certain biological sciences included)

Theatre/Communications .............Theatre/Communications Major (Secondary Education)
PLANNING AN ACADEMIC PROGRAM IN CAS

ADVISING

Perhaps the most important component in planning an academic program in the College of Arts and Sciences is good advising. Students are encouraged and urged to stay in close contact with their academic advisers in order to choose or develop a program best suited to their needs and aspirations. CAS advisers can keep them posted about the latest developments in the College and University which may affect or interest them as well as the ever-changing national picture. The adviser is the one resource a student always has for concerned evaluation, suggestions, and assistance in keeping an accurate record of accomplishments. Every student is assigned an adviser upon entering the College, although students always have the option of changing their adviser as interests grow and their academic program takes shape.

CHOOSING A MAJOR

Choosing a major is one of the difficult decisions all students have to make during their tenure in CAS. Since this is an important decision, students are encouraged to experiment fully during their freshman and sophomore years in the many disciplines available in the College before making a final decision at the end of the sophomore or the beginning of the junior year. With the help of their academic advisers, students should arrive at a choice which is both realistic and enjoyable. Although it is always possible for students to change their major, the most careful attention prior to their choice is urged to prevent students from limiting their exploration too early. All students may follow a major “track” in any department at any time. Fine Arts students, however, (especially in Art and Music) usually must begin their serious program early because of portfolio and audition requirements.

REQUIREMENTS FOR DEGREE PROGRAMS

Before students can qualify for a degree, they must fulfill three types of requirements which affect the total academic program: Departmental (or Program) requirements; College of Arts and Sciences requirements; and University requirements.

DEPARTMENTAL (or PROGRAM) REQUIREMENTS

Departments and Programs have specific requirements which must be met by students majoring in them as candidates for a baccalaureate degree. Students should consult the descriptions of the departmental or program requirements for the major under the appropriate headings in this catalog. Students should also keep in close contact with major advisers to stay abreast of changes and new directions in the curriculum sequence. Education students must be sure to consult both the CAS departmental sequence and the sequence for Education majors in this section of the catalog.

COLLEGE REQUIREMENTS

The College of Arts and Sciences requires that students successfully complete 120 credit hours and meet both departmental (or program) and University requirements in order to graduate with a baccalaureate degree. If, prior to the publication of the next catalog, the College adopts any additional requirements or changes the existing requirements, these will be announced and additional information may be obtained from the office of the Dean of Arts and Sciences.
UNIVERSITY GENERAL EDUCATION REQUIREMENTS*

All College of Arts and Sciences students must fulfill the General Education Requirement in order to graduate. This requirement consists of 30 credit hours selected from the following areas:

AREA 1:—HUMANITIES — 6 credits from:
- CLASSICS (CLS)
- COMPARATIVE LITERATURE (CPEN)
- ENGLISH (ENG)
- FRENCH (FRE)
- GERMAN (GMN)
- GREEK (GRK)
- LATIN (LAT)
- PHILOSOPHY (PLY)
- SPANISH (SPN)

AREA 2: FINE AND APPLIED ARTS — 6 credits from:
- ART HISTORY/APPRECIATION (ARTH)
- ART STUDIO COURSES (ARTS)
- DANCE (DNCE)
- MUSIC (MUS)
- THEATRE (THE)

AREA 3: SCIENCE AND MATHEMATICS — 6 credits from:
- ASTRONOMY (ASTR)
- BIOLOGY (BIO)
- CHEMISTRY (CHEM)
- EARTH SCIENCE (ESCI)
- GEOLOGY (GEOL)
- GENERAL SCIENCE (GSCI)
- GEOPHYSICS (PHYS)
- METEOROLOGY (MET)
- MATHEMATICS (MS)
- OCEANOGRAPHY (OCN)
- PHYSICS (PHYS)
- PHYSICAL SCIENCE (PSCI)

AREA 4: SOCIAL SCIENCES — 6 credits from:
- ANTHROPOLOGY (ANY)
- COMMUNICATION (COM)
- CRIMINAL JUSTICE (CJ)
- ECONOMICS (ECON)
- GEOGRAPHY (GEOG)
- HISTORY (HIST)
- POLITICAL SCIENCE (POL)
- PSYCHOLOGY (PSY)
- SOCIAL WELFARE (SWE)
- SOCIOLOGY (SOC)

AREA 5: GENERAL — 6 credits from:
- ANY COURSES FROM THE ABOVE ACADEMIC GROUPINGS
- COLLEGE OF ARTS AND SCIENCES (CAS) COURSES
- SCOGIS COURSES (SCO)
- PHYSICAL EDUCATION COURSES (PE)

*Except for K-P or GE majors, department courses in the student's major area may not be applied toward fulfillment of the General Education Requirement. In addition, students in the School of Business Administration, the School of Education, or the School of Nursing may be further restricted in course selections from one or more of the five areas because of the specific requirements of the program in which they are enrolled.

A student who has matriculated before September 1971 may continue the program under the requirements in force at the time of matriculation or the student may elect to complete the General Education Requirements under the provisions stated above.

**Physical Education is not a requirement for Arts and Sciences students, but may be elected under Area 5 of the General Education Requirements.
CAS MAJORS, MINORS, AND PROGRAMS

CAS Departments offer majors, minors, and concentrations in a number of different disciplines to allow students to follow the program which best suits their needs. In addition to those described under the following department headings, there are several other options that students may choose in planning their academic program: Honors, Self-Designed Major, Liberal Studies Major, Independent Study Term.

HONORS

Students with special interest in a subject and high achievement or potential may apply for the Honors Program in a department when they declare their major. Since these programs vary according to the course requirements of a given department, students may consult the department of their choice for guidelines, or they may obtain them from the office of the Dean of CAS.

SELF-DESIGNED MAJOR

The Self-Designed Major is an option for creative students who wish to pursue multidisciplinary program on a theme or problem not available to them within a department major. The Self-Designed Major must be structured around an area as broad as a departmental major and must provide breadth and depth dimensions consistent with a College of Arts and Sciences Major. This Major encourages a broad in-depth concentration and is structured by the individual student in conjunction with faculty sponsors. Students may apply for this program to the Committee on Self-Designed Majors at the normal time for declaring a major. The program description and guidelines may be obtained from the office of the Dean of CAS.

LIBERAL STUDIES MAJOR

The Liberal Studies Major is a structured, generalized program in the College of Arts and Sciences for students who choose not to specialize in an academic discipline, declare a major, or follow a program concentration. Students interested in this course of study may apply to the Liberal Studies Major Board at the normal time for declaring a major. Guidelines for this program may be obtained from the office of the Dean of CAS.

INDEPENDENT STUDY TERM

The Independent Study Term is designed to be a productive and challenging experience for mature, creative students. Students who have identified an academic project or program which they feel would contribute significantly to their program may, with the approval of a faculty sponsor and the department involved, apply for a semester of independent study. Students should discuss this option with their academic adviser, since it may be a useful tool in many programs requiring serious projects, theses, or original work. General guidelines may be obtained from departments or the office of the Dean of CAS.

CAS COURSES

Each semester the College of Arts and Sciences offers courses on a variety of topics and themes which are not sponsored by individual departments. These courses are listed as "CAS" courses in the schedules and special course description sheets every semester. Further information on these courses may be obtained from the Office of the Dean of CAS.

UMPG SYSTEM OF COURSE CODING

<table>
<thead>
<tr>
<th>Course Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>000-099</td>
<td>No degree credit</td>
</tr>
<tr>
<td>10-99</td>
<td>Two digits indicate</td>
</tr>
<tr>
<td></td>
<td>Associate Degree program</td>
</tr>
<tr>
<td>100-199</td>
<td>Introductory level</td>
</tr>
<tr>
<td>200-299</td>
<td>Intermediate level</td>
</tr>
<tr>
<td>300-399</td>
<td>Intermediate level</td>
</tr>
<tr>
<td>400-499</td>
<td>Senior level, others by permission</td>
</tr>
<tr>
<td>500-599</td>
<td>Graduate level</td>
</tr>
<tr>
<td>600-699</td>
<td>Professional graduate level</td>
</tr>
<tr>
<td></td>
<td>as in the School of Law</td>
</tr>
</tbody>
</table>
Art

Associate Professors Bearce, Moore, Sawtelle, Ubans (chairman); Assistant Professors Franklin, Rakovan.

In the College of Arts and Sciences, the Department of Art offers programs leading to both a Bachelor of Arts degree (B.A.) and a Bachelor of Fine Arts degree (B.F.A.). Through the School of Education, the Department offers an Art Education program leading to a Bachelor of Science degree (B.S.), which qualifies graduates to teach or supervise art in all grades of the public schools.

DEPARTMENT OF ART

Each applicant should first follow the standard admission procedures of the University, and then submit to the Department of Art (Gorham Campus) a portfolio of original art work. This portfolio should number approximately 20 works, consisting of one self-portrait drawn from life, and a selection of work which indicates the applicant's current interests and abilities. Prints, drawings, paintings, posters, photographs, films, and slides may be included. Slides or photographs should be submitted of three-dimensional work. The Department of Art will send each applicant further details, including the portfolio deadline.

Following the portfolio deadline, applicants will be invited to visit the Gorham Campus for a day of interviews and conferences. The details of the schedule will be available to the applicants upon their arrival and luncheon will be served at the Student Dining Center. Parents wishing to accompany applicants and become acquainted with the campus are cordially invited. Portfolios will be returned at this time.

Final notification of a decision will come from the Office of Admissions when the admission folder is completed. Students already enrolled in the University who wish to change their major to art must follow the departmental admission procedures concerning submission of portfolio, as described above.

RECOMMENDED ART COURSES TO MEET GENERAL EDUCATION REQUIREMENTS OF STUDENTS MAJORING IN OTHER PROGRAMS

For students outside the art major who seek to meet the General Education Requirement in Fine and Applied Art, the following courses are recommended by the Department of Art:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 101</td>
<td>Introduction to Art</td>
</tr>
<tr>
<td>ARTS 102</td>
<td>Introduction to Studio Art</td>
</tr>
<tr>
<td>ARTH 113</td>
<td>Film as Image and Idea</td>
</tr>
<tr>
<td>ARTH 111</td>
<td>History of Art I (space permitting)</td>
</tr>
<tr>
<td>ARTH 112</td>
<td>History of Art II (with instructor's permission, space permitting)</td>
</tr>
<tr>
<td>ARTS 141</td>
<td>Design I (space permitting)</td>
</tr>
<tr>
<td>ARTS 151</td>
<td>Drawing I (space permitting)</td>
</tr>
</tbody>
</table>

GENERAL EDUCATION REQUIREMENTS FOR ART MAJORS

All students are reminded that, in addition to their meeting departmental requirements for a major leading to a Baccalaureate Degree, they must also meet the requirements of the school or college involved, as well as the University's General Education Requirements, which are printed inside the front cover of this catalog.

All art majors must satisfy the General Education Requirement in Area 2 (Fine and Applied Arts) by acquiring six credits in courses coded DNCE, MUS, or THE, which are outside the art program.
REQUIREMENTS FOR ART MAJORS

REQUIREMENTS FOR
BACHELOR OF ARTS DEGREE*
(B.A.)

ART CORE (15 credits)
ARTS 141 Design I
ARTS 142 Design II
ARTS 151 Drawing I
ARTS 152 Drawing II
ARTH Elective (100 level)

ART HISTORY REQUIREMENT
(9 credits)
ARTH 411 Philosophy of Art
(may substitute PLY 220)

ARTH Elective

ART STUDIO REQUIREMENT
(18 credits of ARTS Electives)

GENERAL EDUCATION REQUIREMENT
(30 credits)
See inside cover.

ELECTIVES* (48 credits)
*No more than 60 credit hours with ART designation may be used to fulfill 120 credit hour degree requirement.

ART EDUCATION PROGRAM
REQUIREMENTS FOR
BACHELOR OF SCIENCE DEGREE
(B.S.)

ART CORE (15 credits)
ARTS 141 Design I
ARTS 142 Design II
ARTS 151 Drawing I
ARTS 152 Drawing II
ARTH Elective (100 level)

ART STUDIO REQUIREMENT*
45 Credits of Electives

ART HISTORY REQUIREMENT
(6 credits)
ARTH 411 Philosophy of Art
(may substitute PLY 220)

ARTH Elective

PROFESSIONAL EDUCATION REQUIREMENT (24 credits)
ARTE 221 Practicum in Art Education
ARTE 321 Principles and Procedures in Art Education
EDU 200 Studies in Educational Foundations
EDPY 333 Human Growth and Development
EDU 324 Student Teaching (6-cr. course)

GENERAL EDUCATION REQUIREMENT
(30 credits) See inside cover.
ELECTIVES (18 credits)

REQUIREMENTS FOR
BACHELOR OF FINE ARTS
(B.F.A.) DEGREE

ART CORE (15 credits)
ARTS 141 Design I
ARTS 142 Design II
ARTS 151 Drawing I
ARTS 152 Drawing II
ARTH Elective (100 level)

ART STUDIO REQUIREMENT*
45 Credits of Electives

ART HISTORY REQUIREMENT
(6 credits)
ARTH 411 Philosophy of Art
(may substitute PLY 220)

ARTH Elective

GENERAL EDUCATION REQUIREMENT
(30 credits) See inside cover.
ELECTIVES* (24 credits)
*No more than 12 concentrations in Painting, Printmaking, Ceramics, Drawing or Other (specified by the department) area is required.
COURSES IN ART

ART HISTORY AND APPRECIATION

ARTH 101 Introduction to Art
Selected experiences using original works, lecture, panel discussion, slides, films, and other means to confront the student with the significance of the visual arts in human history. The aim of the course is to involve students in direct experiences affecting their own perception of visual form. Prerequisite: permission of instructor. Three credit hours

ARTH 113 Film as Image and Idea
An approach to the appreciation of motion pictures and allied arts through the understanding and analysis of the context, range, and resources of this, the only major form of creative expression conceived and developed entirely within the industrial age. Principles of evaluation, illustrated through the development of motion pictures to their present state. Prerequisite: permission of the instructor. Three credit hours

ARTH 111 History of Art I
Examination and discussion of the early epochs of art from prehistoric cultures through the Renaissance. Special attention is directed to the relationships of historical and theoretical knowledge to creative expression. Divergent viewpoints of the art historian, the critic, and the artist are explored. The first half of an overview of the visual arts emphasizing the interrelationships of cultural values and the forms of art. Preference given to those matriculated in the Department of Art or those with permission of the instructor. Three credit hours

ARTH 112 History of Art II
A continuation of ARTH 111 from the Renaissance through the 20th Century. In both semesters of the course examples of architecture and sculpture, paintings, etc. are used as the basis of inquiry. Prerequisite: ARTH 111 or permission. Three credit hours

ARTH 211 History of Architecture and the Urban Environment
A study of the European-American tradition of architectural design with emphasis upon the basic styles which influence American architecture and their utilization in urban America. Consideration of aesthetic and social interplay of architectural design throughout history, especially as it is manifest in urban design. Prerequisite: ARTH 112. Three credit hours

ARTH 312 History and Appreciation of the Graphic Arts
An explanation of the graphic techniques: woodcut, engraving, etching, aquatint, lithography, etc. A study of the graphic arts as they have evolved throughout the history of art with emphasis upon the important graphic artists of Europe, America, and the Orient. Prerequisite: ARTH 112. Three credit hours

ARTH 314 Renaissance Art
The effects of the ideas of ancient Greece and Rome on the art forms of the 15th and 16th centuries in Florence, Rome, and other parts of Europe. Northern European ideas in conflict and resolution. Prerequisite: ARTH 112. Three credit hours

ARTH 316 Western Art from 1850-1900
A study of the major movements in the first half of the modern era. Prerequisite: ARTH 112. Three credit hours

ARTH 317 Western Art from 1900-1950
A continuation of ARTH 316 including the growth and development of the modern “isms”. Prerequisite: ARTH 112. Three credit hours
ARTH 411 Philosophy of Art  
An investigation into the theories of art and beauty found in the writings of philosophers, painters, writers, and critics which form the basis of understanding of the fine arts. Readings and discussion of writers from ancient to modern times. Prerequisite: ARTH 112.  
Three credit hours

ARTH 412 Contemporary Art  
Examination of current developments in all the visual media: 1950 to the present. Prerequisite: ARTH 112.  
Three credit hours

ARTH 418 Independent Study in Art History  
An opportunity for the student who has demonstrated competence in a specific area of study to work independently with scheduled tutoring from a faculty member of the student's choice. Prerequisite: Permission of instructor and Art Department chairman.  
One to six credit hours

ART STUDIO COURSES

ARTS 141 Design I  
A coordinated series of experiments with basic design problems directed toward developing a sense of personal integrity, an awareness of the design potential, and the confidence, imagination, and skill needed to realize these potentials. Problems in color and light, systems of space, and visual design of graphic symbols stressing the presentation and use of basic tools. Preference given to those matriculated in Department of Art or those with permission of instructor.  
Three credit hours

ARTS 142 Design II  
Basic problems in two-dimensional design with relation to painting, sculpture, graphic arts, and architecture. Problems deal with elements of composition, color, space, time, movement, symbolic representation, and communication. Prerequisite: ARTS 141.  
Three credit hours

ARTS 143 Design III  
Problems in three-dimensional design utilizing the systemic study of order and space. Construction and analysis of basic forms in various materials (paper, wood, clay, plaster, and plastics). Prerequisite: ARTS 142.  
Three credit hours

ARTS 151 Drawing I  
The craft and concepts of making drawings, stimulated by the forms, spaces, and images of the tangible world, an introduction to marking tools and surfaces. Exposure to places, events, and objects with the purpose of stimulating the need to draw. Preference given to Art or Art Education majors or those with permission of instructor.  
Three credit hours

ARTS 152 Drawing II  
Continuation of Drawing I with drawing from the model. Prerequisite: ARTS 151.  
Three credit hours

ARTS 153 Drawing III  
Extensive combining of media. Stress on role of images, both object and model. Prerequisite: ARTS 152.  
Three credit hours

ARTS 231 Materials and Techniques  
An introduction to materials, methods, and techniques for the professional artist-craftsman. Examination, comparison, and testing of materials, both traditional and experimental. Prerequisite: ARTS 143 and 153 or permission.  
Three credit hours

ARTS 232 Ceramics I  
An introduction to methods and processes of clay forming, including modeling, pressing, handbuilding, and the potter's wheel. Emphasis of form and texture, with aspects of glaze composition and firing procedures. Prerequisite: Art core courses.  
Three credit hours

ARTS 234 Weaving I  
An introduction to basic fabrics including a study of terms, tools, and procedures used in weaving. Problems may include tie dye, batik, mocrene, stenciling, and black print on various fibers. Prerequisite: Art core courses.  
Three credit hours
ARTS 241 Design IV
Investigation of advanced design problems with emphasis on presentation. Prerequisite: ARTS 143. Three credit hours

ARTS 251 Drawing IV
Continued drawing with emphasis on independent direction. Prerequisite: ARTS 153. Three credit hours

ARTS 261 Painting I
An introduction to pigments, grounds, and methods of painting in varying media. Emphasis on technical and formal problems. Prerequisite: Art core courses. Three credit hours

ARTS 271 Photography I
Photography as a creative medium. Provision of basic skills in the use of the camera and laboratory equipment. Investigation and practice in the fundamental techniques and processes of black and white photography as an art form. Prerequisite: Art core courses. Three credit hours

ARTS 281 Printmaking—Relief
Introduction to Relief Printmaking: Woodcut, Linoleum Block, Wood Engraving. Prerequisite: Art core courses. Three credit hours

ARTS 282 Printmaking—Stencil
Introduction to silk screen printing, including photo-mechanical reproduction. Prerequisite: Art core courses. Three credit hours

ARTS 283 Printmaking Intaglio I
Introduction to Intaglio printmaking, using etching, engraving, aquatint, mezzotint, and drypoint. Prerequisite: Art core courses. Three credit hours

ARTS 284 Printmaking Lithography I
Introduction to the process of lithographic printing from stones. Prerequisite: Art core courses. Three credit hours

ARTS 291 Sculpture I
Clay modeling with emphasis on structure and anatomy of figure, and their relationship to sculptural form, including the building of an armature and a finished plaster cast. Prerequisite: Art core courses. Three credit hours

ARTS 332 Ceramics II
Application of design principles in production of ceramicware with a concentration on advanced problems in wheel thrown forms and hand building sculptures. Prerequisite: ARTS 232. Three credit hours

ARTS 334 Weaving II
Advanced work on hand and foot treadle looms; how to design and produce pattern weaves; the practical application of various fibers used in weaving. Prerequisite: ARTS 234. Three credit hours

ARTS 351 Drawing V
Making personal and complete drawings and series of drawings. Emphasis on individual concepts and personal expression. Prerequisite: ARTS 251. Three credit hours

ARTS 361 Painting II
Studies, principally from tangible situations, in the organization of pictorial ideas, the derivation of forms, and the control of space. Use of various painting media. Prerequisite: ARTS 261. Three credit hours
ARTS 362 Painting III
Exploration of the concepts and techniques of painting with emphasis on individual expression. Prerequisite: ARTS 361.  
Staff  
Three credit hours

ARTS 363 Watercolor
Watercolor, wash, dry-brush, ink and wash, gouache, and other techniques in watermedia. Emphasis on individual concepts and personal expression. Prerequisite: Art core courses.  
Staff  
Three credit hours

ARTS 371 Photography II
Exploration of concepts and techniques of photography with emphasis on individual forms of expression. Prerequisite: ARTS 271.  
Ubans  
Three credit hours

ARTS 383 Printmaking Intaglio II
Continuation of Intaglio I with emphasis on viscosity techniques. Prerequisite: ARTS 283.  
Bearce  
Three credit hours

ARTS 384 Printmaking Lithography II
Continuation of Lithography I with emphasis on color printing. Prerequisite: ARTS 284.  
Rakovan  
Three credit hours

ARTS 391 Sculpture II
The theory and practice of sculptural composition using a variety of techniques with traditional and new materials. Prerequisite: ARTS 291.  
Franklin  
Three credit hours

ARTS 408 Independent Study in Art Studio
An opportunity for the student who has demonstrated competence in a specific area of study to work independently with scheduled tutoring from a faculty member of the student's choice. Prerequisite: Permission of instructor and Art Department chairman.  
Staff  
One to six credit hours

ARTS 461 Painting IV
Continuation of Painting III. Emphasis on individual concepts and personal expression. Prerequisite: ARTS 362.  
Staff  
Three credit hours

ARTS 462 Painting V
Continuation of Painting IV. Investigation of advanced painting problems with emphasis on individual expression. Prerequisite: ARTS 461.  
Staff  
Three credit hours

NOTE: Independent Study in Art may also be taken in a variety of art areas numbered as follows:
   ARTH 418  Art History
   ARTE 428  Art Education
   ARTS 408  Art Studio

NOTE: Art Education courses are listed on page 48.
ART EDUCATION

ARTE 121 Introduction to Art Education
A study of growth and development in the creative abilities of children; how to utilize art projects to foster initiative, imagination, cooperation, and appreciation in the classroom. Prerequisite: Permission of instructor; not for students accepted as Art Education majors. Three credit hours

ARTE 122 Handcrafts
An introduction to the general handcrafts using simple tools and materials. Permission of instructor. Three credit hours

ARTE 221 Practicum in Art Education (Saturday Workshop)
Designed to give the art major student an early first-hand experience with children and the professional aspects of teaching. The student will work with children from elementary and secondary schools in the area. Prerequisite: Art core courses. Three credit hours

ARTE 321 Principles and Procedures in Art Education
A study of growth and development in the creative abilities of elementary and secondary students; introduction to methods of teaching art designed to enrich the curriculum. Prerequisite: ARTE 221. Three credit hours

ARTE 421 Student Teaching Seminar
For student teachers in art, this course takes the form of discussion and problem solving. Students endeavor to arrive at a tentative philosophy of art education and basic instructional techniques. Prerequisite: ARTE 321 and concurrent enrollment in EDU 324. Three credit hours

ARTE 428 Independent Study in Art Education
An opportunity for the student who has demonstrated competence in a specific area of study to work independently with scheduled tutoring for a faculty member of the student's choice. Prerequisite: Permission of instructor and Art Department chairman. One to six credit hours
Biology

Professor Najarian (Chairman); Associate Professors Greenwood, Holmes, Kern, Riciputi, Schwinck; Assistant Professors Dorsey, Hartman, Mazurkiewicz.

A four-year program is offered in biological sciences. The program is designed so that upon completion, a student may enter graduate school, public school teaching, medicine, dentistry, veterinary medicine, or allied health fields.

A Biological Science minor, requiring 18 credit hours in basic and advanced Biology, is available in Secondary Education.

Students who are in the Elementary or Kindergarten-Primary programs of the School of Education, and who are interested in the Biological Sciences, are referred to the Science Area program described in the section of the catalog dealing with Physical Sciences and Engineering. This program includes both physical and biological sciences and offers either an 18-hour academic minor or a 30-hour academic major for such students.

All students are reminded that, in addition to their meeting departmental requirements for a major leading to a baccalaureate degree, they must also meet the requirements of the school or college involved, as well as the University's General Education Requirements.

Arts and Sciences Biology majors are also required to have a reading knowledge of a foreign language. Advanced Placement and Credit by Examination will be decided on an individual basis.
### REQUIREMENTS FOR A BIOLOGY MAJOR IN ARTS AND SCIENCES OR A BIOLOGICAL SCIENCE MAJOR IN SECONDARY EDUCATION

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit hours</th>
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<tbody>
<tr>
<td><em>MS 152</em></td>
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<td>PHYS 121 and 122</td>
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<td>CHEM 113 and 114</td>
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<td>CHEM 251 and 252</td>
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<td>CHEM 261 and 262</td>
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<td>PHYS 121, 122 and 123</td>
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<tr>
<td>CHEM 113, 114 and 115</td>
<td>10</td>
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<tr>
<td>CHEM 251, 252 and 253</td>
<td>6</td>
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<tr>
<td>CHEM 261, 262 and 263</td>
<td>4</td>
</tr>
</tbody>
</table>

**Foreign Language through Intermediate Level (Arts and Sciences only)**

- Physical Education
  - BIO 101 and 102: Biological Principles (3 credits) plus Biological Experiences (1 credit) to be taken together: 4 credits
  - BIO 103 and 104: Biological Diversity (3 credits) plus Survey of Animals and Plants (1 credit) to be taken together: 4 credits
  - BIO 201: Principles of Genetics: 3 credits
  - BIO 203 and 204: Developmental Biology (2 credits) plus Comparative Vertebrate Embryology (2 credits) to be taken together: 4 credits
  - BIO 311 and 312: Microbiology (3 credits) plus Microbiological Laboratory (2 credits) to be taken together: 5 credits

**Choice:**

- BIO 331 & 332: Ecological Principles (2 credits) plus Field Ecology (2 credits) to be taken together: 4 credits
- BIO 341 & 342: Principles of Limnology (2 credits) plus Limnological Methods (2 credits) to be taken together: 4 credits

**Choice:**

- BIO 401 & 402: General Physiology (2 credits) plus General Physiology Laboratory (2 credits) to be taken together: 4 credits
- BIO 411 & 412: Plant Physiology (3 credits) plus Plant Physiology Laboratory (1 credit) to be taken together: 4 credits

- BIO 421: Biology Seminar I: 1 credit
- BIO 431: Biology Seminar II: 1 credit

*Students not prepared for MS 152 should precede this course with MS 140, Pre-Calculus Mathematics (3 credits).*

**Credits to be earned depend upon the language proficiency of the student. Challenge examinations are available.**

**NOTE:** Every student, in order to graduate with a B.A. in Biology must take the Graduate Record Examination in Biology.
COURSES IN BIOLOGICAL SCIENCES

BIO 101 Biological Principles
A study of the structure and function of cells and a consideration of multicellular organisms, in terms of heredity, evolution, and ecology. Three credit hours

BIO 102 Biological Experiences
Laboratory studies of the structure, function, and reproduction of cells and the examination of representative animals and plants. Prerequisite: BIO 101, or concurrent with BIO 101. One credit hour

BIO 103 Biological Diversity
Studies of the structure, function, and behavior of animals and plants. Prerequisite: BIO 101. Three credit hours

BIO 104 Survey of Animals and Plants
Laboratory examination of the structure and function of representative animals and plants. Prerequisite: BIO 103, or concurrent with BIO 103. One credit hour

BIO 111 Human Anatomy and Physiology
The structure and function of the human body. Prerequisite: BIO 101. Three credit hours

BIO 112 Practical Human Anatomy and Physiology
Laboratory studies of the structures and functions of the human body, including microscopy and physiological experiments. Prerequisite: BIO 102 or equivalent and BIO 111 or concurrent with BIO 111. One credit hour

BIO 151 Neurobiological Basis of Behavior
Comparative analysis of neural elements and processes with emphasis on reception, integration, and simple behaviors in lower and higher animals. Prerequisite: A Biology course or consent of the instructor. Three credit hours

BIO 201 Principles of Genetics
A study of heredity through a discussion of the mechanism and control of gene action. Current research on the nature of mutations and the role of genes in development, behavior, and populations will be examined. Prerequisite: BIO 101. Three credit hours

BIO 202 Experimental Genetics
Practical laboratory experience in techniques used in genetics. Prerequisite: BIO 201, or concurrent with BIO 201. Two credit hours

BIO 203 Developmental Biology
A study of the embryology of several organisms, including man, and an analysis of the mechanisms which influence development. Current research in the fields of aging, regeneration, and metamorphosis will also be considered. Prerequisite: BIO 101. Two credit hours

BIO 204 Comparative Vertebrate Embryology
Laboratory experiments and observations on amphibian, chick, and mammalian embryos. Prerequisite: BIO 203 or concurrent with BIO 203. Two credit hours

BIO 205 Evolution
A study of the processes and evidences of organic evolution. Three credit hours

BIO 209 Vertebrate Zoology
The form, structure, and life processes of the major groups of vertebrates are considered in respect to the animal's adaptation to its environment. Prerequisite: BIO 103. Three credit hours

BIO 210 Vertebrate Zoology Lab
Investigations into the classification, form, structure, and functioning of the major groups of vertebrates. Prerequisite: BIO 104. Two credit hours

BIO 215 Vascular Botany
A study of the major groups of vascular plants with emphasis on morphology, life cycles, and ecology. Prerequisites: BIO 101, and BIO 103. Three credit hours
BIO 216 Vascular Field Botany 
Laboratory and field studies on the vascular plants of Maine. Prerequisites: BIO 215, or concurrent with BIO 215. One credit hour

BIO 225 Non-Vascular Botany 
A study of the major groups of non-vascular plants with emphasis on morphology, life cycles, and ecology. Prerequisites: BIO 101 and BIO 103. Three credit hours

BIO 226 Non-Vascular Field Botany 
Laboratory and field studies on the non-vascular plants of Maine. Prerequisite: BIO 225, or concurrent with BIO 225. One credit hour

BIO 251 History of Biology 
A chronological survey of developments in biological investigations from earliest records to the present day. Emphasis will be placed on the methods of scientific discovery and the relationship between past milestones in biological investigations and modern understanding. Prerequisite: 9 credit hours in biology. Three credit hours

BIO 292 Ornithology 
The basic biology of birds: life histories, migration, behavior, and economic importance, with emphasis on species found in eastern North America. (Students supply their own binoculars or spotting scopes.) Prerequisite: BIO 101, or BIO 103. Two credit hours

BIO 311 Microbiology 
A consideration of protozoa, fungi, bacteria, and viruses of biological and medical importance. Prerequisites: BIO 101 and CHEM 114. Three credit hours

BIO 312 Microbiological Laboratory 
The laboratory isolation and examination of micro-organisms by various techniques. Prerequisite: BIO 311, or concurrent with BIO 311. Two credit hours

BIO 321 Histology 
A laboratory course which studies the microscopic anatomy of animal tissues and methods of preparing biological material. Prerequisite: BIO 101. Two credit hours

BIO 331 Ecological Principles 
The interrelationships of living organisms and their environments, including man's role as a modifier of ecosystems. Prerequisite: BIO 101. Two credit hours

BIO 332 Field Ecology 
Laboratory and field studies which demonstrate the basic concepts of ecology. (Numerous field trips.) Prerequisite: BIO 331, or concurrent with BIO 331. Two credit hours

BIO 341 Principles of Limnology 
Geological, physical, chemical, and biological interrelationship of inland waters, including man's impact on these relationships. Prerequisite: BIO 101. Two credit hours

BIO 342 Limnological Methods 
Laboratory and field methods of investigating the ecological attributes and significance of inland waters. Prerequisite: BIO 341, or concurrent with BIO 341. Two credit hours

BIO 351 Invertebrate Zoology 
The morphology, physiology, and phylogenetic relationships of non-backboned animals. Prerequisite: BIO 101. Two credit hours

BIO 352 Survey of Invertebrates 
Laboratory experience on the anatomy, physiology, and behavior of invertebrate animals. Prerequisite: BIO 351, or concurrent with BIO 351. Two credit hours

BIO 361 Parasitology 
The life histories and host-parasite relationships of animal parasites, with emphasis on those of men. Prerequisite: BIO 101. Two credit hours

BIO 362 Parasitological Laboratory 
The morphology and life cycles of parasitic protozoa, helminths, and arthropods. Prerequisite: BIO 361, or concurrent with BIO 361. Two credit hours

BIO 381 Ichthyology 
The structure, origin, evolution, natural history, classification, zoogeography, and economic importance of fishes, with particular emphasis on species found in the northeastern United States. Prerequisites: BIO 103 and BIO 104. Two credit hours
**BIO 382 Field Ichthyology**  
Riciputi  
Laboratory methods and techniques of collecting and identifying fishes. Extensive field-collecting at various habitats. Prerequisite: BIO 381, or concurrent with BIO 381.

**BIO 401 General Physiology**  
Hartman  
A study of physiological processes and their regulation in single-cell and multicellular organisms. Prerequisites: BIO 101, CHEM 252, and CHEM 262.  
Two credit hours

**BIO 402 General Physiology Lab**  
Hartman  
Laboratory examination of physiological mechanisms of single-cell and multicellular organisms. Concurrent with BIO 401.  
Two credit hours

**BIO 411 Plant Physiology**  
Schwinck  
A study of the physiological activities of plants, and their growth and development as influenced by internal and external factors. Prerequisites: BIO 103, and BIO 104, 1 year chemistry.  
Three credit hours

**BIO 412 Plant Physiology Laboratory**  
Schwinck  
Laboratory examination of phenomena in plant physiology. Prerequisite: concurrent with BIO 411.  
One credit hour

**BIO 421 Biology Seminar I**  
Staff  
Weekly oral reports and discussions by students and staff, on biological topics of current interest. Prerequisite: Biology seniors.  
One credit hour

**BIO 431 Biology Seminar II**  
Staff  
A continuation of BIO 421. Prerequisite: Biology seniors.  
One credit hour

**BIO 441 Problems in Biology**  
Staff  
Independent library or laboratory studies on a special topic, as mutually arranged by instructor and student. Prerequisite: by arrangement.  
Credit arranged

**BIO 451 Comparative Physiology**  
Hartman  
A study of physiological processes and regulatory mechanisms in vertebrates and invertebrates. Prerequisite: BIO 401 or consent of instructor.  
Two credit hours

**BIO 452 Comparative Physiology Lab**  
Hartman  
Laboratory examination of the physiological processes and regulatory mechanisms of vertebrate and invertebrate animals. Prerequisite: Concurrent with BIO 451.  
Two credit hours

**BIO 461 Cell Mechanisms**  
Holmes  
A physico-chemical analysis of cell processes, with emphasis on mechanisms controlling growth, differentiation, and cell division. Prerequisites: BIO 101 and CHEM 252.  
Three credit hours

**BIO 481 Cell Biology**  
Schwinck  
Structure and function of cells on the cellular, subcellular, and molecular levels. Prerequisites: BIO 101 and BIO 102 and CHEM 252 or CHEM 202 or instructor’s permission.  
Three credit hours
Communication

Professor Hansen (on leave Fall semester 1974), Miller; Associate Professors Pic'l
(Acting Chairman), Whiting

Undergraduates desiring to major in Theatre/Communications may do so in either
the Bachelor of Arts program of the College of Arts and Sciences, or under programs leading
to the degree of Bachelor of Science in the School of Education. All students are re­
mined that, in addition to meeting departmental requirements for a major, they must
also meet the University's General Education Requirements.

REQUIREMENTS FOR THEATRE/COMMUNICATIONS MAJORS
IN THE COLLEGE OF ARTS AND SCIENCES

Theatre/Communications majors desiring a Bachelor of Arts degree are required to
complete 36 hours of Theatre and/or Communication courses, which are to include THE
101 (Introduction to Theatre) or COM 102 (Introduction to Communication). At least 18
additional hours must be selected from courses designated THE and/or COM. To complete
this major, the remaining 15 hours or less may be selected from Allied Areas or from
courses at the 200 level or above in any Department, School or College, with the adviser's
permission. Students are reminded that prerequisites to courses in Allied Areas must be
satisfied as prescribed by the appropriate Department, School or College.

REQUIREMENTS FOR THEATRE/COMMUNICATIONS MAJORS
IN SECONDARY EDUCATION

Theatre/Communications majors desiring a secondary education credential are required
to follow the above program in Theatre and Communications courses and specialized re­
quirements in the School of Education where applicable.

REQUIREMENTS FOR MINORS

Theatre/Communications minors are required to complete 18 hours of courses designated
THE and/or COM, to include THE 101 or COM 102.

ALLIED AREAS OF COGNATE STUDIES FOR
COMMUNICATIONS MAJORS

| BIO 151 Neurobiological Basis of Behavior | PLY 200 Symbolic Logic |
| ENG 381 Modern Grammars | PLY 370 Linguistic Analysis |
| ENG 382 Introduction Linguistics | PSY 330 Social Psychology |
| ENG 384 Structural Linguistics and Culture | PSY 350 Psychology of Learning |
| ENG 387 Semantics | PSY 351 Psychology of Motivation |
| ANY 101 Cultural Anthropology | PSY 360 Cognitive Processes |
| CS 158 Introduction to Computer Science | PSY 361 Sensation and Perception |
| SOC 101 Introduction to Sociology | SOC 355 Social Structure and Politics |

Students desiring a concentration in Theatre are referred to the catalog entry under the
Theatre Department for a description of Theatre courses and Allied Areas for majors
emphasizing Theatre.
COURSE DESCRIPTIONS
COMMUNICATIONS

COM 100 Research
A lecture course designed to acquaint students with the sources and methods of scholarly research. Course will provide students with basic knowledge to carry out projects in secondary and primary research, from conception to execution. Research project required.
Three credit hours

COM 102 Introduction to Communications
A lecture-discussion course designed to provide students with a conceptual framework of the basic elements of communications. Topics discussed will include the history and criticism of public address, communication theories, types of communications, educational practices and related topics germane to communications. Course includes a discussion of career and professional options for communications majors.
Three credit hours

COM 150 Business Communications
A lecture-discussion course in Organizational Communication, emphasizing industrial, managerial, and labor communications. Investigation of communication, theory, models, nets, barriers to communications, and other topics, including basic methods and techniques of internal business communications.
Three credit hours

COM 171 Interpersonal Communication
A lecture-discussion course designed to acquaint the student with the elemental components of speech communication, its basic nature and function. The course involves a study of the potential of human speech communication; the phenomenon of communication through a study of logic, dialectic, and critical and creative thinking. These topics are brought to focus upon the problems of misunderstanding and their remedy.
Three credit hours

COM 172 Parliamentary Procedure
A lecture-performance course in the conduct of organizational procedures, including the framing of constitution, conduct of assembly and committee meetings, and related topics.
One credit hour

COM 175 Intercollegiate Forensics I
Participation in intercollegiate competitive speaking activities, including debate, extemporaneous speaking, impromptu, oral interpretation and persuasion. Emphasis is placed upon preparation and execution.
One to three credit hours

COM 176 Intercollegiate Forensics II
A continuation of COM 175. Prerequisite: COM 175.
One to three credit hours

COM 177 Intercollegiate Forensics III
A continuation of COM 176. Prerequisite: COM 176.
One to three credit hours

COM 178 Intercollegiate Forensics IV
A continuation of COM 177. Prerequisite: COM 177.
One to three credit hours

COM 271 Argumentation
A lecture-discussion-performance course in analysis, development, strategy, and tactics of rational discourse. Primary emphasis is upon the uses of evidence and logic as tools of argumentative inquiry and argumentative advocacy. Rationality is examined in the context of alternate life styles.
Three credit hours

COM 272 Persuasion
A lecture-discussion-performance course in art of influencing human behavior by means of speech communication. A study of the art of persuasion as a means of defense against the multitude of persuasive messages to which a member of contemporary American society is subjected. Investigation of the ethics of persuasion; beliefs; attitudes and values; and the persuasive impact of motivational appeals and other psychological factors. Practice in persuasive speaking.
Three credit hours
COM 380  Rhetorical Theory

A lecture-discussion course designed to investigate the literature in rhetorical theory from Aristotle to Kenneth Burke and I. A. Richards. Emphasis is placed upon the study of rhetoric as the art of discourse adapted to its end. Students will be required to complete a series of short critical research projects and to report the results in class. Final paper required. Prerequisite: any 3-credit speech course.  

COM 420  Communications and Cognition

A lecture-discussion course designed to explore the relationships and interactions of the communications and thinking. Emphasis is upon rationality as it may be influenced by language. Discussion topics include language acquisition, the Whorfian hypothesis, grammatical structures, and cultural influences upon communications and cognition. Prerequisites: Junior, Senior or permission. (Not offered in 1973-74)

COM 433  Project I

Investigation of special topics, or execution of special projects which fall within the purview of theatre and/or communications. Students may select an inter- or intradepartmental committee of three professors to approve, assist, and oversee the project. Prerequisites: Junior and Seniors only; precise definition of project and unanimous permission of committee.

COM 434  Project II

A continuation of COM 433.
Criminal Justice

Assistant Professor Thayer.

NOTE: The present Criminal Justice Baccalaureate and Certificate Programs are currently under review, and revisions will be instituted January 1, 1975. No student enrolled in either program prior to September, 1974, will lose degree credit for past work accomplished. However, any such student should seek an individual appointment with the Criminal Justice Program Coordinator in order to insure normal progress toward the degree.

PROGRAM LEADING TO THE DEGREE OF BACHELOR OF SCIENCE IN CRIMINAL JUSTICE

The Criminal Justice Program leading to a baccalaureate degree is a complete four-year program with major concentration patterns in Political Science, Sociology, and Criminal Justice sequences. The program is designed to permit each student to select a 36-hour core curriculum sequence in addition to completing all University requirements for the degree.

In addition, two academic-credit Criminal Justice Certificate programs, basic and advanced, are offered in cooperation with the Continuing Education Division (see note below). The certificate programs are designed to meet the specific needs of those students who are interested in improving their professional qualifications in areas directly related to the criminal justice system.

The objective of these programs is to provide a basis for examining various activities concerned with the process of criminal justice. Students will receive a broad liberal education in conjunction with their concentration upon specialized areas involved within the criminal justice system.

All students must elect a Criminal Justice Program major sequence:

(1) Criminal Justice Major with a Political Science Sequence
(2) Criminal Justice Major with a Sociology Sequence
(3) The Criminal Justice Sequence

All Criminal Justice Program majors must complete the basic core curriculum:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>CJ 101</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CJ 110</td>
<td>Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>CJ 120</td>
<td>Criminal Evidence</td>
<td>3</td>
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<tr>
<td>CJ 201</td>
<td>Administration of Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CJ 315</td>
<td>Criminal Justice and the Community</td>
<td>3</td>
</tr>
<tr>
<td>CJ 316</td>
<td>Criminal Justice-Community Practicum</td>
<td>3</td>
</tr>
<tr>
<td>CJ 425</td>
<td>Scope of Criminal Justice</td>
<td>3</td>
</tr>
</tbody>
</table>

Further details about each of the three sequences are listed on the following page. Students are reminded that, in addition to meeting specific Criminal Justice requirements, they must also meet the University's General Education Requirements which are printed inside the front cover of this catalog.
Criminal Justice Majors with a Political Science Sequence will also be required to complete:

- POL 101 Introduction to Government I 3
- POL 102 Introduction to Government II 3
- POL 283 The American Judicial System 3
- POL 233 The American City 3
- POL 284 American Civil Liberties 3

Criminal Justice Majors with a Sociology Sequence will be required to complete the core courses together with the following courses if regularly scheduled; or Sociology Sequence substitution may be arranged in consultation with the Director.

- SOC 101 Introduction to Sociology 3
- SOC 350 Sociology of Urban Life 3
- SOC 370 Social Problems 3
- SOC 371 Race and Culture Conflict 3
- SOC 373 Criminology: The Adult Offender 3

The Criminal Justice Majors Sequence will require the core courses together with an additional 15 hours of credit to be selected from the following:

- CJ 102 Police Administration & Personnel 3
- CJ 130 Criminal Investigation 3
- CJ 135 Police Operations 3
- CJ 140 Criminal Information & Records Systems 3
- CJ 202 Advanced Police Administration 3
- CJ 210 Police Role in Social Aspects of Crime 3
- CJ 390 Research in Criminal Justice 3

Elective courses in areas related to any Criminal Justice major sequence may be selected in consultation with the student's faculty advisor. Ordinarily, each student will be expected to complete from 12-18 hours of related advanced courses.

NOTE: CRIMINAL JUSTICE CERTIFICATE PROGRAMS

Detailed information about the Criminal Justice Certificate Programs may be obtained through the C.E.D. or Criminal Justice Program offices.

COURSE DESCRIPTIONS

**CJ 101 Introduction to Criminal Justice**
Staff
An introduction to the philosophic basis and historic development of the American criminal justice system. Focus upon the role of the various components involved with due process: law enforcement, the judicial system, and corrections. Special attention will be given to basic terminology and definitions. Three credit hours

**CJ 102 Police Administration and Personnel**
Thayer
A survey of organizational and administrative principles as they relate to the contemporary law enforcement agency. Areas under examination include: structure, line and staff functions, and operational techniques. In addition, the basic principles of budgeting, controlling, coordinating, planning and research will be examined with special emphasis on personnel selection and evaluation. Three credit hours

**CJ 110 Criminal Law**
Staff
An undergraduate introduction to substantive criminal law. General doctrines of criminal liability, corpus delicti and legal classification of crimes against persons, property, and the public welfare. Emphasis on the concept of governmental sanction of individual conduct. (Offered in 1973-74 only by the Continuing Education Division) Three credit hours

**CJ 120 Criminal Evidence**
Staff
An introduction to the rules of criminal evidence and the admissibility of evidence under the rule of law. Areas include: arrest, interview, search and seizure. Emphasis upon criminal justice procedure and the presentation of physical, documentary and testimonial evidence. (Offered in 1973-74 only by the Continuing Education Division) Three credit hours
CJ 130 Criminal Investigation
Thayer
An introduction to the theory and practice of criminal investigation. The scientific and analytical evaluation of factual data derived from persons and things. A non-laboratory course with some emphasis on personal identification theories. Prerequisite: CJ 120.
Three credit hours

CJ 135 Police Operations
Staff
Theories or organization and management as they relate to law enforcement field operations; An analysis of the effectiveness of two major police functions, patrol and traffic management, are examined within an administrative framework of purpose, type and application. The future of police field operations is considered.
Three credit hours

CJ 140 Criminal Information and Records Systems
Thayer
The organization and administration of criminal information systems with emphasis upon design, maintenance, storage and retrieval of police records. Focus will be upon the use of data to serve operational needs for the administration of police services. In addition, methods of gathering intelligence information will be emphasized. (Offered in 1973 Fall semester only by the Continuing Education Division)
Three credit hours

CJ 201 Administration of Criminal Justice
Staff
An in-depth study of the administration of criminal justice in the United States. Selected topics demonstrating the function and purpose of various components effecting the administration of justice. The procedures associated with criminal justice will receive critical and constructive examination. Prerequisite: CJ 101 or instructor's permission.
Three credit hours

CJ 202 Advanced Police Administration
Thayer
An advanced study of supervision and leadership requirements with some focus upon comparative examination of selected police systems throughout the world. Emphasis on advanced management theory and practices as they apply to the administration of police services. Prerequisite: CJ 102 or instructor's permission.
Three credit hours

CJ 210 Police Role in Social Aspects of Crime
Staff
The police service's role in dealing with behavior defined as deviant and/or delinquent. Emphasis given to the significance of public policy in relationship to "victimless crimes." The handling of social and inter-personal problems by legal agents with discretionary power will be a feature of this course.
Three credit hours

CJ 315 Criminal Justice and the Community
Staff
A study of the Criminal Justice system's role and responsibility within the community. Focus will be on the identification of groups existing within the community and how they relate to the Criminal Justice system. Emphasis will be upon the organization and effectiveness of public information and crime prevention efforts.
Three credit hours

CJ 316 Criminal Justice: Community Practicum
Staff
A community laboratory designed to provide first-hand perspectives on the Criminal Justice system's role. Activities include assignments and discussion based upon observation and evaluation of selected community service agencies and their interrelationship with the Criminal Justice system. Directed field work experience is a feature of this course. Prerequisite: CJ 315 or the instructor's permission.
Three credit hours

CJ 390 Research in Criminal Justice
Staff
An independent or organized group research project or activity. May only be repeated once. Prerequisite: the director's permission.
One-three credit hours

CJ 425 Scope of Criminal Justice
Staff
A seminar designed for senior criminal justice majors. Focus will be upon the interrelationship of the student's educational experience to major issues in criminal justice. Emphasis on the interdisciplinary perspective of criminal justice will be a feature of this course. Open to senior criminal justice majors or with the instructor's permission.
Three credit hours
Dance

Associate Professor Goodwin.

Dance instruction is offered through “The Modern Dance Group.” Students engage in lecture-demonstrations and developmental activities and present programs to collegiate and local civic-community organizations. Interested students, with or without experience, should meet with the instructor and register under one of the DNCE numbers.

COURSE DESCRIPTIONS

DNCE 300 Contemporary Dance I
Goodwin
A course involving the technique of modern dance; beginning, intermediate, and advanced depending on the degree of competency; work in choreography, program planning, use of music in dance, history of the dance. Open to men and women students. Permission of instructor required One credit hour

DNCE 301 Contemporary Dance II
Goodwin
A continuation of DNCE 300. One credit hour

DNCE 302 Contemporary Dance III
Goodwin
A continuation of DNCE 301. One credit hour

DNCE 303 Contemporary Dance IV
Goodwin
A continuation of DNCE 302. One credit hour

Economics as a Major

In a Program
Leading to a Bachelor of Arts Degree
And in a Program
Of the School of Education
Leading to a B.S. in Ed. Degree

Students interested in receiving a Bachelor of Arts degree in Economics will be required to complete the same requirements as for the Bachelor of Science degree in Economics described under the “School of Business and Economics” section of this catalog, except that students in the Bachelor of Arts program may not take more than 42 hours of Economics courses or 21 hours of Business courses for credit toward a Bachelor of Arts degree.

Students in the School of Education may also obtain an academic major or minor in Economics in a program leading to the degree of Bachelor of Science in Education, as described in this catalog in the section dealing with the School of Business and Economics. For students in Secondary Education a Social Science Area Major with Concentration in Economics is also available, as described in the section of the catalog dealing with the Arts and Sciences department of Geography-Anthropology.

All students are reminded that, in addition to their meeting departmental requirements for a major leading to a baccalaureate degree, they must also meet the requirements of the school or college involved, as well as the University’s General Education Requirements. These general requirements are printed inside the front cover of this catalog.
English

Professors Bernard, Hanna, Jaques, Rutherford (on leave Spring Semester, 1975), Weeks (on leave Fall Semester, 1974); Associate Professors Baier, Burke, Coffin, Reuter, Rosen, Slavick (Chairman); Assistant Professors Carner, Carper, O'Reilly (on leave Fall Semester, 1974), Selkín, Vincent, Wilson, Wolf; Visiting Assistant Professor Mirto; Instructor Milliken.

GENERAL REQUIREMENTS AND WAIVER POLICIES

1. ENG 120 must be taken before any other courses numbered above ENG 120, with the exception of courses listed under Category IV, Linguistics and Related Courses.
2. ENG 120 may be waived for a few exceptional students who can pass a qualifying examination administered by the English Department.
3. The requirements of the English Major Program defined below may be waived in favor of a self-designed major that is approved in advance by the English Department Curriculum Committee.

ENGLISH MINOR PROGRAM IN SECONDARY EDUCATION

Secondary Education students in the School of Education may complete an English minor by passing 12 credits with at least a C and six credits with at least a B, for a total of 18 credits from the distributive categories listed below.

- Category III — 3 credits
- Category IV — 3 credits
- Category VI — 6 credits

Categories VII and VIII — 6 credits

ACADEMIC MAJORS AND MINORS IN KINDERGARTEN-PRIMARY AND ELEMENTARY EDUCATION

Students in Elementary Education or Kindergarten-Primary Education in the School of Education may complete 30 hours of English in an approved program for an academic major or 18 approved hours for an academic minor. Details of such programs may be obtained from the appropriate faculty advisors in the School of Education.

ENGLISH MAJOR PROGRAMS IN ARTS AND SCIENCES OR SECONDARY EDUCATION

In addition to meeting English Department requirements, the B.A. or B.S. candidate must also meet college or school requirements and the general education requirements of the University.

Both Arts and Sciences and Secondary Education English majors must meet the following English Department requirements:

1. English 120 and English 121 with at least a C.
2. At least 36 hours of courses acceptable for English major credit, excluding English 120 and 121.
3. At least six of the 36 hours with a B or better, the rest with a C or better.
4. Major credit courses with a C or better in one each of the following:
   (a) poetry or prose and poetry, (b) drama (other than Shakespeare), (c) fiction,
   (d) major figure (other than Shakespeare).
5. A course in Shakespeare with a C or better.
6. One course from each of the following categories with C or better:
   - Category II, Category III, Category IV, Category VI-A, Category VI-B, Category VI-C, Category VI-D, Category VII, and Category VIII. Requirements specified in item 4 above may be satisfied through appropriate courses meeting the requirements of item 6.
COURSE DESCRIPTIONS

I — INTRODUCTORY COURSES

ENG 001 Writing Laboratory
Intended for the use of any student with a writing problem at any time in the college career. The laboratory will be run and supervised by the regular English staff with the help of advanced students. (Every semester) No credit

ENG 100 College Writing
An introductory course in writing at the college level. The course will deal with such matters as organizations, strategy, tone, and logic. Generally, this course is not remedial; it offers graduation credit, but no major or humanities credit. For particulars, see instructor. (Every semester) Three credit hours

ENG 120 Introduction to Literature
A general introduction to the various literary genres — poetry, short story, drama — which will include a study of critical terminology, close textual reading, and frequent practice in writing — at least six papers of 500-1000 words each, two in each of the genres. (Every semester) Three credit hours

ENG 121 Literary Masterpieces
A study of selected major works from western literature which will provide students with a common background in the most influential books of our culture. Required for all English majors. (Every semester) Three credit hours

II — WRITING COURSES

ENG 202 Poetry Workshop I
An intensive study of poetic forms and techniques, with extensive discussion of the students' own poetry. Emphasis on understanding various techniques through reading and imitation. (Fall, even years) Three credit hours

ENG 203 Fiction Workshop
The writing and discussion of fiction. Emphasis will be on the short story. (Fall, even years) Three credit hours

ENG 204 Advanced Writing
Study of various forms of discourse with concentration on exposition. Provides experience in logical analysis and in the uses of persona, appeals to reader, stylistic and fictional devices, and other strategies. (Annually) Three credit hours

ENG 205 Creative Writing
An advanced course. Focus is on the writing of a short story; includes a study of plot, design, point of view, characterization, tension and related techniques, modes of creative thinking, and the transformation of experience into the medium of story. (Fall, even years) Three credit hours

ENG 210 Expository Writing
Primarily for juniors and seniors majoring in Business Administration. Training in clear expository writing of formal reports, business communications, and related materials. (Spring, even years) Three credit hours

III — CRITICISM COURSES

ENG 364 Critical Approaches to Literature
This course will provide a basic introduction to the major critical interpretive perspectives indispensable for the sensitive reader (moral-philosophical, formalistic, psychological, mythological, archetypal, and exponential). It will be structured around a close reading of specific works from several genres. It will also study literary terms, prosody, prose style, and the relation of literature to the other arts. (Fall) Three credit hours
ENG 365 Study of Literature and Literary Criticism  
Carner, Wilson  
An examination of the discipline called "Literature" or "English" or "Criticism." This course attempts to define the aims and ends of literary study, ways of knowing about literature and the creative act, and the relations of literature to life. It includes formalism, historicism, bibliography, psychological criticism, and a number of other critical methods. In short, a survey of the discipline, its meaning, and tools. Recommended especially for sophomores who want an introduction to the major and to seniors who want an overview.  
(Annually)  
Three credit hours

ENG 367 Topics in Literary Criticism  
Carner  
Studies in specific problems or historical movements in literary criticism. Topics will change from year to year.  
(Annually)  
Three credit hours

ENG 369 Introduction to Literary Criticism  
Carner  
The major methods of modern criticism, problems in aesthetics — intention, expression, relation of literature to other areas of study. Readings in ancient through modern critics, concentrating on the 20th century.  
Three credit hours

IV — LINGUISTICS AND RELATED COURSES

ENG 220 Old English  
Coffin  
The student develops Old English reading ability by working with the best Old English poems and prose. Modern techniques of rapid language acquisition are used.  
(Annually, fall)  
Three credit hours

ENG 380 History of the English Language  
Bernard, Rutherford  
This course includes a survey of the pre-history of the language as well as a detailed study of the Old, Middle, and Modern English and the forces which shaped these stages. Some methods of modern linguistic science are utilized in examining current usage. Change and development of the language are emphasized. (Every semester)  
Three credit hours

ENG 381 Modern Grammars  
Rutherford  
Designed to acquaint students with the three most common forms of English grammatical analysis: traditional, structural, and transformational. The mechanics of the various analyses will be examined, and comparisons will be made to determine what tentative combination best explains the structure of English. (Not offered 1974-75)  
Three credit hours

ENG 382 Introduction to Linguistics  
Rutherford  
A general introduction to modern linguistic science, including studies in the development of language, phonology, morphology, the dictionary, and varieties of English and usage. Also examined are the various grammatical philosophies and their methods — traditional, structural, and transformation. (Not offered 1974-75)  
Three credit hours

ENG 384 Structural Linguistics and Culture  
Coffin  
The course starts with the analysis of the structure of many languages. Knowledge of structure is then used to analyze art, religion, poetry. American Indian language and cultures constitute part of the course. Recommended for English and language teachers.  
(Annually, fall)  
Three credit hours

ENG 387 Semantics  
Coffin  
Interpretation of literature by means of analysis of the language used. Recommended for prospective teachers of literature and English. (Spring, odd years)  
Three credit hours
V — NON-REQUIRED MAJOR CREDIT COURSES

ENG 200  Topics in Literature  Staff
A selection of courses, dealing with this general subject and varying in content from term to term, is offered each semester. Descriptions of current offerings are available in the English office. These courses may be offered in a two-semester sequence, and more than one section may be taken for credit. Typical sections may offer: The Epic, American Literature, the Literature of Alienation, Pop Semantics, The English Bible, The Nature of Poetry, Literature of Indians and Black Men, Literature and Insanity, The Politics of Literature. (Annually, fall)  Three credit hours

ENG 312  The Image of the Black Man in American Literature  Slavick
A study of the developing image of the black man in American prose and poetry in the context of American culture from stereotype to victim, outsider, masked man, and Everyman. Douglass, Stowe, Melville, Twain, Whitman, Cable, Chesnutt, DuBois, Heyward, McKay, Cullen, Hughes, James Weldon Johnson, Faulkner, Toomer, Wright, Ellison, Warren, Welty, Tolson, Styron, Baldwin, Leroi Jones, Martin Luther King, Malcolm X, and Cleaver. (Annually, fall)  Three credit hours

ENG 351  Backgrounds of American Thought  Burke
Readings in the ideas and lives of those figures who were philosophically influential in American life. (Spring, odd years)  Three credit hours

ENG 362  Poetry: A Survey  Carper
A study of representative English and American poets in major periods from Chaucer's to our own. (Fall, annually)  Three credit hours

ENG 366  Literature and the Visual Arts  Wilson
This course will examine in chronological sequence the relationship between leading English writers or schools and the movements in European painting, architecture, and sculpture to which they most closely correspond.  Three credit hours

ENG 374  Writers of Maine  Jaques
Historical and literary analysis of writers in and about Maine. The emphasis will be on the literary quality of the best-known writers and the place in history both past and present of the lesser-known writers. Extra credit in the course will be given for a report about any off-campus project related to an author, especially a study of an author and a particular locality in Maine. English majors should have already taken a survey of American literature; prospective teachers will prepare an annotated bibliography of one author of their choice.  Three credit hours

ENG 410  Independent Study in English  Staff
Individual study programs as arranged with an instructor. Prerequisite: permission of instructor.  One to three credit hours

CPEN 294  Three Continental Humanists  Hanna
A study of the Divine Comedy, Gargantua and Pantagruel, and Don Quixote. Beginning with Dante's medieval synthesis of the Greco-Roman and Judaeo-Christian traditions, the focus shifts to Rabelais' lusty, iconoclastic hunger for worldly experience, and finally to Cervantes' picaresque tale of faded Spanish glory and Renaissance skepticism. Oral reports, class discussions, brief critiques.  Three credit hours

CPEN 298  Great Continental Novelists  Hanna
A study and interpretation of eight representative works of European fiction and of underlying literary and historical trends. Students will read four French and four Russian novels: Stendhal, The Red and the Black; Balzac, Pere Goriot; Gogol, Dead Souls; Flaubert, Madame Bovary; Turgeniev, Fathers and Sons; Dostoevsky, Crime and Punishment; Tolstoy, Anna Karenina; and Zola, L'Assommoir. Oral reports, class discussion, short critical papers.  Three credit hours
CPEN 372 Greek Epic, Tragedy, Comedy
Hanna
Homer’s Iliad and Odyssey; heroic poetry as a reflection of Aegean civilization, of arms and the man, of myth and legend, of social, economic, and literary values. Fifteen tragedies by Aeschylus, Sophocles, and Euripides — their origin and development, staging and production, structure and technique; Aristotle’s Poetics and components of tragedy; three comedies by Aristophanes — their structure, thought, tone, and style; Virgil’s Aeneid and its indebtedness to Homeric tradition. Oral reports, class discussions, short critical papers.
Three credit hours

CPEN 487 Oriental and Primitive Masterpieces
Coffin
The course starts with primitive literature of Black Africa and the American Indian and continues to early epic and other literature of Egypt, Babylonia, and Israel.
Three credit hours

CPEN 488 Oriental and Oceanic Masterpieces
Coffin
The course introduces the best of Chinese lyrical poetry and the spiritual epics of India. Related material of interest will be used from Tibet and Oceania. (Fall, 1974)
Three credit hours

NOTE: Up to six hours of specific courses offered by such other CAS departments as Foreign Languages and Classics, History, Theatre, Communication, etc., may be elected for English major credit.

VI — ENGLISH LITERATURE

A — OLD AND MIDDLE: 600-1450

ENG 220 Old English (See Category IV)

ENG 221 Beowulf
This Old English poem is studied as the greatest literary work of the first 600 years of English Literature. Partially in modern English. Prerequisite: ENG. 220. (Spring, odd years)
Three credit hours

ENG 223 Medieval Literature
Extensive readings in major philosophical background texts and the literature of 14th century England exclusive of Chaucer. (Annually)
Three credit hours

ENG 224 Chaucer
Selections from the major poetry, with attention to the literary and historical background. (Every semester)
Three credit hours

B — RENAISSANCE: 1450-1660

ENG 231 16th Century Prose and Verse
Bernard, Reuter
The prose and non-dramatic poetry of the 16th century. Major authors of the Tudor Age (1485-1603) in their cultural setting from Skelton to Donne. (Annually, spring)
Three credit hours

ENG 232 Spenser
Bernard
Readings in the works of Edmund Spenser with special emphasis on The Faerie Queene.
Three credit hours

ENG 242 Shakespeare I
Vincent
A study of representative early and middle comedies, histories, and early tragedies. Reading and discussion of Elizabethan dramatic traditions, poetic modes, critical approaches, and current productions. (Every semester)
Three credit hours

ENG 243 Shakespeare II
Vincent
Continuation of Shakespeare I. A study of representative dark comedies, major tragedies, and dramatic romances. (Every semester)
Three credit hours

ENG 244 Shakespeare Special Studies
Reuter
A study of allegorical elements in selected plays.
Three credit hours
ENG 246  British Drama to 1642
Shakespeare's predecessors, contemporaries, and followers to 1642. (Annually, fall)
Three credit hours

ENG 249  17th Century Prose and Poetry to 1660
A study of major non-dramatic writers of the 17th century exclusive of Milton and Dryden. Included will be Bacon, Donne, Jonson, Hobbes, Burton, Herrick, Herbert, Vaughan, Marvell, Suckling, Lovelace, Crashaw, Carew, Browne, Waller, Traherne. (Annually, fall)
Three credit hours

ENG 250  Milton
Study of Milton's major poetry and selected prose with attention to critical and historical background.
Three credit hours

C — RESTORATION THROUGH 18TH CENTURY: 1660-1798

ENG 262  Restoration and Early 18th Century Prose and Poetry
An exploration of representative writings of the English Neo-classical period, including works by such writers as Dryden, Swift, Pope, Gray, Addison, and Steele. (Annually, fall)
Three credit hours

ENG 263  Later 18th Century Prose and Poetry
Johnson and Boswell and their circle, poetry from Smart and Collins to Burns and Blake, and other works of the period. (Annually, spring)
Three credit hours

ENG 264  Swift
A study of Swift and his writings, both prose and poetry — imaginative, political, personal, satiric, and even "unprintable." Prerequisite: at least one previous course from those listed in Section VI, Group B or C.
Three credit hours

ENG 266  Restoration Drama
A study of Restoration and early 18th Century drama with emphasis on innovations in the post-Elizabethan theatre and on changing definitions of the tragic and comic hero. Playwrights studied will include Davenant, Dryden, Otway, Etherege, Shadwell, Cibber, Wycherley, Congreve, Farquhar. (Fall, odd years)
Three credit hours

ENG 267  The Development of the Novel
A study of the development of the novel from Christian and classical sources through early 18th century England with emphasis on Bunyan, Defoe, and Swift. (Annually, spring)
Three credit hours

ENG 268  The Earlier English Novel
The principal novelists from the beginnings to Sir Walter Scott. (Annually)
Three credit hours

ENG 271  Masterpieces of English Satire
A thorough exploration of its backgrounds in classical literature and an attempt to define and understand satire as a mode will be followed by readings and discussions in depth of the most important satires in English. Works to be read will include at least the following: Langland's Piers Plowman, Chaucer's Sir Thopas, Butler's Hudibras, Dryden's Absalom and Achitophel, Swift's Gulliver's Travels, Pope's Dunciad, and Gay's Beggar's Opera. (Fall, odd years)
Three credit hours

ENG 273  The Poetry of Alexander Pope
A close study of the most brilliant poet between Milton and Wordsworth. Pope dominated English poetry for half a century, but his most significant works often became lost in anthologies and period courses. Minimum readings will include a sampling of the pastorals, Essay on Criticism, Rape of the Lock, Eloisa to Abelard, selections from Martin Scriblerus, the Moral Essays, and the Dunciad.
Three credit hours
**D — ROMANTIC AND VICTORIAN: 1798-1900**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Instructor(s)</th>
<th>Notes</th>
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<tr>
<td>ENG 281</td>
<td>Prose and Poetry of the Romantic Period</td>
<td>Carner, Carper</td>
<td>A study of the major British poets and essayists of the Romantic period (approximately 1785-1832) and of the nature of the “Romantic” movement. Readings selected from among Blake, Burns, Wordsworth, Coleridge, Keats, Byron, Shelley, Lamb, DeQuincey, Beddoes, Hunt, Peacock, etc. (Annually, spring) Three credit hours</td>
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<tr>
<td>ENG 282</td>
<td>William Blake</td>
<td>Carner</td>
<td>Examination of Blake’s writings and visual art, attempting to develop a comprehensive understanding of Blake's system and intellectual contexts. (Annually, fall) Three credit hours</td>
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<tr>
<td>ENG 286</td>
<td>Fiction of the Romantic Period</td>
<td>Carner</td>
<td>The novels of Jane Austen; readings in Maturin, Peacock, Edgeworth, Lewis, Godwin, Mary Shelley, Scott. (Spring, odd years) Three credit hours</td>
</tr>
<tr>
<td>ENG 291</td>
<td>Victorian Prose and Poetry</td>
<td>Hanna</td>
<td>Intensive reading in the poetry of Tennyson, Browning, and Arnold, together with representative selections from Clough, the Rossettis, Meredith, and such late transitional figures as Hopkins, Hardy, and Housman. The critical and controversial prose of Carlyle, Ruskin, Arnold, Huxley, Newman, Mill, Morris, and Pater. Background reading in the cultural conflicts of the Industrial Revolution: Utilitarianism, the science-religion debate, the poetry of alienation. Special projects in the literary use of myth and symbol, the decline of tragedy, and “the Victorian compromise.” Oral reports and short critiques. (Fall) Three credit hours</td>
</tr>
<tr>
<td>ENG 293</td>
<td>From Pre-Raphaelitism to the Bloomsbury Group</td>
<td>Wilson</td>
<td>This course will study the poetry, novels, paintings, and criticism of the Pre-Raphaelites, John Ruskin, William Morris, Art Nouveau, the Beardsley period, and the Bloomsbury Group. Three credit hours</td>
</tr>
<tr>
<td>ENG 296</td>
<td>Tennyson and Browning</td>
<td>Hanna</td>
<td>A wide-ranging investigation of the poetry of two major Victorian figures, Tennyson and Browning, who contrast dramatically as spokesmen for the nineteenth-century Englishman’s inner and outer world. A paradox closely examined: despite the universal appeal of both poets, they share little in technique, “voice,” and philosophy. Answers may be sought in a close reading of the poems chronologically arranged, and in the various cultural conflicts of the Industrial Revolution: Utilitarianism, the science-religion debate, artistic alienation. Special projects will be assigned on such topics as the poets’ uses of myth and symbol, the decline of tragedy in an age of disbelief, and “the Victorian compromise.” Oral reports and short critiques. Three credit hours</td>
</tr>
<tr>
<td>ENG 297</td>
<td>The Later English Novel</td>
<td>Bernard, Hanna</td>
<td>The principal novelists from Austen to Hardy. (Annually) Three credit hours</td>
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**VII — AMERICAN LITERATURE: Colonial to 1900**

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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>ENG 342</td>
<td>American Literature I</td>
<td>Jaques</td>
<td>American literature through the 18th and 19th centuries, with emphasis on the principal writers. (Fall, annually) Three credit hours</td>
</tr>
<tr>
<td>ENG 344</td>
<td>The American Renaissance</td>
<td>O'Reilly, Slavick</td>
<td>Major American writers of the mid-19th century. Includes critical study of major works by Emerson, Thoreau, Hawthorne, Melville, Whitman, and Dickinson with attention to the social and literary backgrounds. (Annually, fall) Three credit hours</td>
</tr>
<tr>
<td>ENG 345</td>
<td>Thoreau</td>
<td>Jaques</td>
<td>An intensive critical study of the major works of Henry David Thoreau with attention to the social and literary backgrounds of his art. Three credit hours</td>
</tr>
<tr>
<td>ENG 348</td>
<td>The American Novel I</td>
<td>Burke, Slavick</td>
<td>A study of the American novel from Charles Brockton Brown to Henry James. (Annually, fall; and spring, even years) Three credit hours</td>
</tr>
</tbody>
</table>
ENG 355  Hawthorne and Melville
O'Reilly, Slavick
The chief works of two major figures in American literature. Emphasis will be on Melville. Some supplementary reading will be required. (Annually, spring) Three credit hours

ENG 358  Whitman, Twain, and James
Slavick
A study of representative works of three major American writers of the last half of the 19th century. (Fall, odd years) Three credit hours

VIII — MODERN LITERATURE: 1900 to the Present

ENG 302  20th Century British and American Poetry I
O'Reilly
A close study of the major poets of the 20th century. Emphasis is usually upon Eliot, Yeats, Wallace Stevens, Hart Crane, Dylan Thomas, Robert Lowell, etc. although the poets chosen may vary with semester and instructor. Prerequisites have not been established, but this is not intended as an introductory course to poetry. (Annually, fall) Three credit hours

ENG 303  20th Century British and American Poetry II
A continuation of English 302. First semester poets are not duplicated in II. (Annually, spring) Three credit hours

ENG 305  D. H. Lawrence: The Search for Being
Wilson
By studying the paintings, poetry, novels, letters, and critical writings of David Herbert Lawrence in chronological sequence, this course will explore his search for being. This search will involve the class in an examination of Lawrence's attitude to the unconscious life, myth, archetypes, and sexuality, his criticism of western civilization and the 20th century, and his turning to the mystical experience. It will also involve a study of his development of a language appropriate to this awareness and his acting out the dynamics of this view of the world in his art. Student evaluation will be based on small group discussions and three individual class essays (reports). Three credit hours

ENG 306  Joyce's Dubliners, Portrait, and Ulysses
Hanna
A first trip, unencumbered by scholarly and critical baggage, into the immense Joycean world. Movement through the three major works will be empirical and inductive. Sights, smells, sounds — all modes of perception will be heightened and clarified through class discussion of Joyce's ends and his seemingly inexhaustible means. Except for a side trip now and then into the abstruse or arcane, guidelines will be simple. To satisfy intellectual curiosity and enrich class discussion, each participant will be solely responsible for only one critical commentary selected from among Joyce's twenty leading expositors. Regular oral reports; six short critiques. Prerequisite: previous reading of Dubliners or Portrait of the Artist as a Young man. (Spring, 1975) Three credit hours

ENG 307  Modern Short Story
Rosen
Detailed consideration of from six to ten short story collections reflecting contemporary themes and narrative methods. Although selections will vary, the recent reading list has included Jorge Luis Borges, Franz Kafka, Anton Chekhov, James Joyce, Thomas Mann, and Isaac Babel. A necessarily wide range of themes are confronted: the corruption of reality by dream; personal inadequacy, alienation, and paranoia; self-deceit; varieties of ignorance and cowardice; the moral insight afforded the artist; violence as a mode of self-discovery. Students are responsible for a term paper, a classroom report, and a weekly review of some critical article. Prerequisite: Junior class standing or permission of the instructor. (Spring, annually) Three credit hours

ENG 308  Modern Novel
Rosen
Works by six or more distinguished novelists expressing contemporary subject matter and technique. Among representative themes students will consider those of dream and illusion, revolution and personal revolt, alienation and anxiety, crime and self-assertion; among narrative techniques, ellipsis and adaptations of stream-of-consciousness. The list of novelists will vary, but recent assignments include Knut Hamsun, Franz Kafka, Thomas Mann, Hermann Hesse, Andre Malraux, D. H. Lawrence, and James Joyce. Students are responsible for a term paper, a classroom report, and a weekly review of some critical article. Prerequisite: Junior class standing or permission of the instructor. (Fall, 1974) Three credit hours
ENG 309 The Southern Renaissance

ENG 310 The Fugitive Poets
   Studies in the poetry of the Southern Renaissance. (Spring, 1975) Three credit hours

ENG 311 Twentieth Century British Literature
   Selected novels, plays, poetry from the late 19th century to the present. The course will study naturalism, impressionism, and symbolism, as well as the political and existential implications of British literature of the 20th century. (Fall, 1974) Three credit hours

ENG 313 Southern Short Story

ENG 326 Fitzgerald, Hemingway, Faulkner
   Studies in the fiction of three 20th century American writers. Three credit hours

ENG 343 American Literature II
   A continuation of American Literature I. (Spring, annually) Three credit hours

ENG 349 The American Novel II
   A study of the American novel from 1900 to the present. (Spring, 1975) Three credit hours

IX — EXPERIMENTAL COURSES

Occasionally the English Department will offer special courses not listed individually in the catalog but listed and described (in the current Schedule of Courses) under the designation 99, 199, 299, 399, or 499. Such courses will usually be experimental: pursuing original research, testing new approaches to literature, testing new alignments of figures or materials, or trying out courses before installing them permanently in the catalog.
Foreign Languages and Classics

Associate Professors Clark, Crochet, Dalvet, Duclos, Lepelley; Assistant Professors Carroll, Di Benedetto, Rolfe (Chairman), Ubans; Instructor Hernandez.

I. COURSES IN ENGLISH TRANSLATION

The Foreign Language and Classics Department offers a number of courses in English translation requiring no previous knowledge of a foreign language and open to any student interested in foreign or classical literature and civilization. These courses are numbered 251-300.

II. BILINGUAL STUDENTS

Franco-American students and other bilingual students will find two French courses especially devised for them (although not exclusively). They are numbered FRE 181 and FRE 381.

III. LANGUAGE PROGRAMS

The department offers programs in French, German, Classical Greek, Latin, and Spanish. Elementary courses (101-102) are for students who have never studied the language. Intermediate level courses (131-132 for modern languages; 201-202 for the ancient languages) and for students with two successful years of high school language study. Students who do not feel prepared to enter the intermediate course in a modern language must begin with the review course numbered 103. Students whose aim is exclusively the ability to read a modern language should enroll in courses numbered 111-112, which are also a preparation for language tests required by graduate schools.

IV. CONVERSATION

Besides the oral practice in the classroom, any student interested in acquiring the ability to speak fluently is invited to use the language laboratory located on the Portland campus in Payson Smith Hall, Room 203, and open every weekday from 9 a.m. to 3 p.m. Students enrolled in language courses (101-132) may register for a supervised language practice twice a week in the laboratory; they will receive an extra credit for regular and active attendance. Students who have already reached the level of literature courses may enroll in conversation courses meeting once a week (207-208) which may be repeated for one credit each semester.

V. FRENCH MAJOR

At the present time the department offers a major only in French. French majors must take a minimum of thirty credit hours on the 200 level and above, of which twenty-one hours must be in literature courses. They are advised to take as early as possible FRE 231, FRE 251, FRE 252, and FRE 203. Summer and junior year studies in France or French Canada are encouraged and acknowledged by transfer of credits.

All majors already engaged in studies of French Literature should maintain an active effort to reach fluency in speaking French through constant practice, use of the Language Laboratory and conversation courses FRE 207 and 208. They are expected to have reached proficiency in speaking and writing French before their graduation.

All students are reminded that, in addition to their meeting departmental requirements for a major leading to a baccalaureate degree, they must also meet the requirements of the school or college involved, as well as the University's General Education Requirements. These general requirements are printed inside the front cover of this catalog.
VI. FRENCH MAJOR AND MINOR FOR STUDENTS IN THE SCHOOL OF EDUCATION

More than any other students, future teachers of French need a very solid foundation in the language so that they will be ready to teach it with accuracy. The following programs are devised to assure that they reach such a goal:

French Major 30 credits above the 200 level

Required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRE 201 or 202 Composition I, II</td>
<td>3</td>
</tr>
<tr>
<td>FRE 203 or 204 Conversation I, II</td>
<td>3</td>
</tr>
<tr>
<td>FRE 231 or 232 Introduction to French Literature</td>
<td>3</td>
</tr>
<tr>
<td>FRE 205 Phonetics</td>
<td>3</td>
</tr>
<tr>
<td>FRE 251 or 252 French Civilization</td>
<td>3</td>
</tr>
<tr>
<td>FRE 401 or 402 Advanced French Grammar</td>
<td>3</td>
</tr>
</tbody>
</table>

Credit Hours: 18 hours

Elective courses:

Literature courses on the 300 level

Any course listed above as required, beyond the 18 credits...

Students must also take the professional course FLED 301 — The Teaching of Foreign Languages.

French Minor 12 credits above the 200 level. (18 including FRE 131-132)

Required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRE 201 or 202 Composition I, II</td>
<td>3</td>
</tr>
<tr>
<td>FRE 203 or 204 Conversation I, II</td>
<td>3</td>
</tr>
<tr>
<td>FRE 231 Introduction to French Literature</td>
<td>3</td>
</tr>
</tbody>
</table>

Credit Hours: 9 hours

Elective courses:

FRE 205 Phonetics
FRE 232 Introduction to French Literature II
FRE 401 or 402 Advanced French Grammar

Any French Literature course on the 300 level

Students should also take the professional course FLED 301 — The Teaching of Foreign Languages.

COURSE DESCRIPTIONS

LITERATURE AND CIVILIZATION IN ENGLISH TRANSLATION

CLS 251 The Epic Hero in Ancient Literature
Intensive readings in English translations of Gilgamesh, Iliad, Odyssey, Argonautica, Aeneid; discussion, papers.

Duclos

Three credit hours

CLS 252 The Tragic Hero in Ancient Literature
Intensive reading of selected plays in English translation by Aeschylus, Sophocles, Euripides, Seneca; discussion; papers.

Duclos

Three credit hours

CLS 255 The Golden Age of Greece
The literature, history, politics, philosophy, art, and architecture of the fifth century B.C. with particular attention to the achievements of Athens. Lectures, discussion, papers, museum trip. (Not offered in 1974-75)

Duclos

Three credit hours

CLS 256 Rome, from Republic to Empire
The literature, history, politics, philosophy, art, and architecture of Rome in the first century B.C. Lectures, discussion, papers, museum trip.

Duclos

Three credit hours

CLS 257 Greek Tragedy in Translation: Philosophy or Politics?
This course examines a selection of Greek Tragedies in English translation from a literary, philosophical, and historical point of view. It involves students in developing a multi-level approach to a complex and often misunderstood art form. In keeping with this ultimate objective, several modern "tragedies" on Greek themes will be explored during the semester, to enhance understandings of Classical drama and to demonstrate the "Classical elements" in contemporary forms.

Carroll

Three credit hours
FRE 251 French Civilization: An Historical Approach
Aspects of the society, institutions, arts, literature, and religion of France, from the origins to the end of the XIX century. Three credit hours

FRE 252 French Civilization: Contemporary France
Institutions, education, society, economy, politics of France. Requires reading knowledge of French, but no French is spoken in the classroom. Prerequisite: FRE 112. (Not offered in 1974-75) Three credit hours

FRE 261 Masterpieces of French Literature in English Translation I
Novels and plays representative of French Literature from the beginning of the XIXth century to the present. Three credit hours

FRE 262 Masterpieces of French Literature (in English Translation) II
Novels and plays representative of French Literature from the Middle Ages to the end of the 18th century. No knowledge of French is necessary. Three credit hours

FRE 263 Contemporary French Thinkers (in English Translation)
Readings and discussion of recent works of French literature selected for their philosophical and ethical importance: Saint-Exupery, Sartre, Camus, de Beauvoir, Teilhard de Chardin and others. No knowledge of French is necessary. Three credit hours

FRE 264 Avant Garde Theatre in France (in English Translation)
Study of plays and theoretical texts in English translation from Jarry to Beckett. No knowledge of French is necessary. Three credit hours

FRE 268 18th Century Literature in France and England
A study of the emergence of the bourgeoisie and its relationship to literature in 18th Century France and neighboring countries. The social and moral evolution of the family, sentimentalism, and middle class revolt will be discussed. Special attention will be paid to the literary interchange between France and England. Readings in Prevost, Marivaux, Rousseau, Diderot, Richardson, Goldsmith, Sterne, Goldoni. In English. (Not offered in 1974-75) Three credit hours

CLASSICS: GREEK AND LATIN

GRK 101 Elementary Greek I
Fundamentals of classical Greek. Emphasis upon acquisition of reading knowledge. Three credit hours

GRK 102 Elementary Greek II
Selections from Euripides' Alcestis. Prerequisite: GRK 101. Three credit hours

GRK 201 Intermediate Greek I
A study of Plato's Apology, Crito and selections from the Phaedo. Prerequisite: GRK 101 or equivalent. (Not offered in 1974-75) Three credit hours

GRK 202 Intermediate Greek II
A study of selected books from Homer's Odyssey. (Not offered in 1974-75) Three credit hours

LAT 101 Elementary Latin I
Fundamentals of the Latin language. Three credit hours

LAT 102 Elementary Latin II
Continuation of LAT 101. Three credit hours

LAT 201 Intermediate Latin I
Selected readings from masters of Latin prose and poetry. Prerequisite: LAT 101 or equivalent. (Not offered in 1974-75) Three credit hours

LAT 202 Intermediate Latin II
Continuation of LAT 201. (Not offered in 1974-75) Three credit hours
LAT 231 Readings in Latin Literature I
Readings in the prose and poetry of the late Republic and Early Empire, with emphasis upon literary values. Duclos
Three credit hours

LAT 232 Readings in Latin Literature II
Continuation of LAT 231. Duclos
Three credit hours

FRENCH

FRE 101 Beginning French I
Beginner’s course in French. Initiation in the four skills of language learning: listening comprehension, speaking, reading, and writing. Students are encouraged to register also for laboratory practice (one more credit). Di Benedetto Three credit hours. (With lab, four credit hours.)

FRE 102 Beginning French II
Continuation of FRE 101. Di Benedetto Three credit hours. (With lab, four credit hours.)

FRE 103 Review of Elementary French
Elementary French for students with some previous study of the language who feel the need for a refresher course before entering FRE 131. If possible, register also for laboratory practice (one more credit). Dolvet Three credit hours. (With lab, four credit hours.)

FRE 111 Reading French
Beginner’s course in French aiming exclusively at a reading knowledge of the language. No French spoken. Recommended also as preparation for language tests required by graduate schools. Dolvet Three credit hours

FRE 112 Readings in French
Further practice of the skill acquired in FRE 111 through an accelerated reading of books on various topics (fiction, history, science, etc). Prerequisite: FRE 111. Dolvet Three credit hours

FRE 131 Intermediate French I
Development of the language skills through an analysis of contemporary texts: Camus, Sartre, Anouilh, or others. Students are encouraged to register also for laboratory practice (one more credit). Prerequisite: FRE 102, FRE 103, or equivalent. Crochet, Lepelley Three credit hours. (With lab, four credit hours.)

FRE 132 Intermediate French II
Continuation of FRE 131. Crochet, Lepelley Three credit hours. (With lab, four credit hours.)

FRE 181 French for Franco-Americans
An analysis of the French language (grammar, vocabulary, pronunciation) spoken in French communities of New England. The course is also recommended for French majors who plan to teach in such communities. Rolfe Three credit hours

FRE 201 French Composition I
Advanced study of the French language based on grammatical review, regular compositions, some translation and vocabulary analysis. Di Benedetto, Lepelley Three credit hours

FRE 202 French Composition II
Continuation of FRE 201. Lepelley Three credit hours

FRE 203 French Conversation
Intensive oral practice, expository reports, debates, class discussions. Prerequisite: FRE 132. Lepelley Three credit hours

FRE 204 French Conversation II
Continuation of FRE 203. Lepelley Three credit hours

FRE 205 French Phonetics
A formal study of the French sound system and an initiation into phonetic transcription with practical and remedial work in pronunciation. Prerequisite: FRE 132 or equivalent. Rolfe Three credit hours
FRE 207 The Practice of Conversation I
For advanced students needing oral practice. This course, which meets once a week, is especially recommended for French majors who may take it repeatedly for credit. Prerequisite: FRE 204 or equivalent. One credit hour per semester.

FRE 208 The Practice of Conversation II
Continuation of FRE 207.

FRE 231 Introduction to French Literature I
Reading and discussion of representative literary works in the major genres (novel, drama, poetry). Techniques of close reading and explication de texte are studied. Designed to give a general background for the major as well as to provide a representative sampling for the non-major. Prerequisite: FRE 202 or equivalent. Three credit hours.

FRE 232 Introduction to French Literature II
Continuation of FRE 231.

FRE 301 The French Novel Between the World Wars
Study of important novels by Gide, Proust, Mauriac, Malraux, Giono, and others. Students participate through group discussion and individual oral reports. Prerequisite: FRE 231. (Not offered in 1974-75) Three credit hours.

FRE 302 The French Novel from World War II to the Present
Contemporary trends in the novel, with some attention to the short story. The post-war works of Camus and Sartre; novels by Robbe-Grillet, Beckett, Butor, Claude Simon, Marguerite Duras, and others. Prerequisite: FRE 231. Three credit hours.

FRE 303 French Theatre in the Twentieth Century
Plays by Giraudoux, Claudel, Montherlant, Genet, Ionesco. Prerequisite: FRE 231. Three credit hours.

FRE 340 Women in Contemporary French Literature
The course examines, through fictional and semi-autobiographical works, womanhood as seen by well-known women writers of the 20th century. Works to be studied are: La Vagabonde, Colette; Mémoires d’une jeune fille rangée, Simone de Beauvoir; Une Femme heureuse, Celia Bertin; Les Stances à Sophie, Christiane Rochefort; Journal d’une bourgeoise, Geneviève Gennari; Le Rempart des bergères, Françoise Mallet-Joris; L’Astragale, Albertine Sarra. Prerequisite: FRE 231. Three credit hours.

FRE 345 French Literature of the 17th Century until 1660
Readings from Malherbe, Scarron, Descartes, Pascal, Portailler. Prerequisite: FRE 231. Three credit hours.

FRE 346 French Literature of the 17th Century: the Apogee of the Classical Age
Readings from Mme. de la Fayette, Molière, Racine, La Fontaine, La Bruyère, Boileau. Prerequisite: FRE 231. Three credit hours.
FRE 345 French Literature of the Medieval Period
Lepelley
Chansons de geste, Romans courtois; theatre, lyric, poetry. In modern French translation. Prerequisite: FRE 231. (Not offered in 1974-75)
Three credit hours

FRE 381 Franco-Canadian Literature
Crochet
Readings from the younger generations of French Canadian novelists Gabrielle Roy, Jean-Guy Pilon, Rejean Ducharme, Marie-Claire Blais, Jacques Godbout. Selections of French Canadian poetry. Prerequisite: FRE 231. (Not offered in 1974-75)
Three credit hours

FRE 401 Advanced French Grammar I
Clark
Designed to provide prospective teachers with an adequate foundation in French grammar. Prerequisite: FRE 202.
Three credit hours

FRE 402 Advanced French Grammar II
Clark
Continuation of FRE 401.
Three credit hours

FOREIGN LANGUAGE EDUCATION

FLED 301 The Teaching of Foreign Languages
Rolfe
Principles and practices of teaching foreign languages at different learning levels. Survey of current trends and methods. Application of language learning principles to classroom procedures. For seniors seeking certification in teaching foreign languages.
Three credit hours

GERMAN

GMN 101 Elementary German I
Ubans
Beginner's course in German. Initiation in the four skills of language learning: listening comprehension, speaking, reading, and writing. Students are encouraged to register also for laboratory practice (one more credit). Three credit hours. (With lab, four credit hours.)

GMN 102 Elementary German II
Ubans
Continuation of GMN 101. Three credit hours. (With lab, four credit hours.)

GMN 103 Review of Elementary German
Staff
Elementary German for students with some previous study of the language who feel the need for a refresher course before entering GMN 131. If possible, register also for laboratory practice (one more credit). Three credit hours. (With lab, four credit hours.)

GMN 111 Reading German I
Staff
Beginner's course in German aiming exclusively at a reading knowledge of the language. No German spoken. Recommended also as preparation for language tests required by graduate schools. Three credit hours

GMN 122 Reading German II
Staff
Further practice of the skill acquired in GMN 111 through an accelerated reading of books on various topics (fiction, history, science, etc). Prerequisite: GMN 111.
Three credit hours

GMN 131 Intermediate German I
Ubans
For students who have completed GMN 102 or 103 or the equivalent. Review of grammar. Classroom practice aiming at fluency in speaking and reading. Students are encouraged to register also for laboratory practice (one more credit). Prerequisite: GMN 102 or 103. Three credit hours. (With lab, four credit hours.)

GMN 132 Intermediate German II
Ubans
Continuation of GMN 131. Three credit hours. (With lab, four credit hours.)

GMN 201 Composition and Conversation in German I
Ubans
Systematic training in correct pronunciation and usage, and in vocabulary building, with written and oral practice and work in the laboratory. Prerequisite: GMN 132 or equivalent.
Three credit hours

GMN 202 Composition and Conversation in German II
Ubans
Continuation of GMN 201.
Three credit hours
GMN 231 Introduction to German Literature I

Ubans

Reading and discussion of selected works representing the major literary movements from Enlightenment to Realism. (In Fall, 1973, the class discussions will be in English.) Prerequisite: GMN 132 or GMN 112 or an equivalent reading ability of German. (Not offered in 1974-75) Three credit hours

GMN 232 Introduction to German Literature II

Ubans

Reading and discussion of selected works representing the major literary movements from Naturalism to the present. Prerequisite: GMN 132 or GMN 112 or an equivalent reading ability of German. (Not offered in 1974-75) Three credit hours

SPANISH

SPN 101 Elementary Spanish I

Clark

Beginner's course in Spanish. Initiation in the four skills of language learning: listening comprehension, speaking, reading, and writing. Students are encouraged to register at the same time for laboratory practice (one more credit). Three credit hours. (With lab, four credit hours.)

SPN 102 Elementary Spanish II

Clark

Continuation of SPN 101. Three credit hours. (With lab, four credit hours.)

SPN 103 Review of Elementary Spanish

Clark

Elementary Spanish for students with some previous study of the language who feel the need for a refresher course before entering SPN 131. If possible, register also for laboratory practice (one more credit). Three credit hours. (With lab, four credit hours.)

SPN 131 Intermediate Spanish I

Hernandez

For students who have completed SPN 101 or the equivalent. Review of grammar. Classroom practice aiming at fluency in reading and speaking. Students are encouraged to register also for laboratory practice (one more credit). Prerequisite: SPN 102 or equivalent. Three credit hours. (With lab, four credit hours.)

SPN 132 Intermediate Spanish II

Hernandez

Continuation of SPN 131. Three credit hours. (With lab, four credit hours.)

SPN 201 Composition and Conversation in Spanish I

Hernandez

Advanced study of the Spanish language. Frequent practice of composition. Conversation and oral reports. Prerequisite: SPN 132 or equivalent. Three credit hours

SPN 202 Composition and Conversation in Spanish II

Hernandez

Continuation of SPN 201. Three credit hours

SPN 231 Readings in Spanish Literature I

Hernandez

A survey of the important periods and trends in Spanish literature with reading of representative works. Prerequisite: SPN 132. (Not offered in 1974-75) Three credit hours

SPN 232 Readings in Spanish Literature II

Hernandez

Continuation of SPN 231. (Not offered in 1974-75) Three credit hours
Geography-Anthropology

Associate Professors French, Hodges (Chairman); Assistant Professor Tizon.

The Department of Geography-Anthropology currently offers a 24-hour concentration of geography courses as part of one of three alternative programs providing a 51-hour Social Science Area Major for Secondary Education students in the School of Education. The department has also designed a major program leading to a degree in the College of Arts and Sciences. The program leading to a major in Geography-Anthropology will emphasize the integration of the two disciplines. The details of all these programs are listed below.

The Department of Geography-Anthropology also offers an 18-hour Minor in Geography for all students in the School of Education, including Kindergarten-Primary, Elementary, and Secondary Education Majors.

All students with majors or specific discipline minors in the Social Sciences must achieve at least 6 credits with grades of B or better in such major or minor requirements. No grades of D will count toward fulfillment of the major or minor requirements. No required course may be repeated more than once.

All students are reminded that, in addition to their meeting departmental requirements for a major leading to a baccalaureate degree, they must also meet the requirements of the school or college involved, as well as the University's General Education Requirements. These general requirements are printed inside the front cover of this catalog.

GEOGRAPHY-ANTHROPOLOGY MAJOR

College of Arts and Sciences

<table>
<thead>
<tr>
<th>Required</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td><strong>9 hours of Introductory Level Courses from:</strong></td>
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<tr>
<td>ANY 101, Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANY 102, Physical Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 105, Principles of Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 105, The Local Environment</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Required</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>18 hours of intermediate level courses with at least 3 hours from each of the categories of Regional, Methods, Concepts and Comparisons from:</td>
<td></td>
</tr>
<tr>
<td><strong>Regional:</strong></td>
<td></td>
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<tr>
<td>ANY 201, South American Culture History</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 201, World Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 310, Geography of Asia</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 311, Geography of North America</td>
<td>3</td>
</tr>
<tr>
<td>ANY 310, Latin American Cultural Ecology</td>
<td>3</td>
</tr>
<tr>
<td>ANY 351, Man in the Northeast</td>
<td>4</td>
</tr>
</tbody>
</table>

**Methods:**

| ANY 412, Methods of Anthropological Investigation | 3 |
| GEOG 221, Spatial Organization                   | 3 |
| GEOG 301, Geomorphology                          | 3 |
| GEOG 105, The Local Environment                  | 3 |
| GYAY 100, Museum Aide                            | ½ |
| ANY 351, Man in the Northeast                    | 4 |

(Continued on next page)
Continuation of Intermediate Level Required Courses

**Concepts and Comparisons:**
- ANY 314 Magic, Religion, and Witchcraft 3
- ANY 301 Culture Contact and Culture Change 3
- ANY 300 Independent Study in Anthropology 1-3
- GEOG 300 Independent Study in Geography 1-3
- GEOG 304 Political Geography 3
- GEOG 303 Economic Geography 3
- GEOG 302 Urban Geography 3

**Required**

6 hours of advanced level courses from:
- ANY 402 The History of Anthropology 3
- ANY 300 Independent Study in Anthropology 1-3
- GEOG 300 Independent Study in Geography 1-3

Honors—Directed Research in Geography or Anthropology or integrated

6 hours of electives from Geography or Anthropology courses, or from another discipline relevant to the student’s major to be agreed upon in consultation with the faculty of the department of Geography-Anthropology.

**TOTAL** 39 hours

The major in Geography-Anthropology will be a 39 hour interdisciplinary major to the extent that students will be required to take courses from the two disciplines of geography and anthropology. It will be possible for a student to concentrate his interest in Anthropology and take a few Geography courses, or the opposite. At least 33 hours in the major must be Geography-Anthropology courses. Six hours may be obtained from related disciplines after the student has consulted with the department and the relevance of the six hours has been demonstrated.

In the 33 hours of required courses, there must be at least 9 hours taken from the discipline in which the student is not concentrating; and there must be a concentration of at least 24 hours in one of the disciplines.

The options for students will be:

**Option A**

33 hours of geography-anthropology courses with 24 hours in Geography, 9 hours in Anthropology, and 6 hours of electives as specified in Option B.

**Option B**

24 hours in Anthropology, and 9 hours in Geography, and 6 hours of electives from either Geography or Anthropology or another discipline relevant to the student’s major to be agreed upon in consultation with the faculty of the department of Geography-Anthropology.
SOCIAL SCIENCES AREA MAJOR—School of Education

With a 24-hour Concentration in Geography

Required

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>HIST 101-102</td>
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<tr>
<td>HIST 131-132</td>
<td>6</td>
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<tr>
<td>HIST 133-134</td>
<td>6</td>
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<tr>
<td>SOC 101</td>
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<td>POL 101</td>
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<td>ECON 102</td>
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<tr>
<td>ECON 201</td>
<td>6</td>
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</table>

SUBTOTAL OF NON-GEOGRAPHY COURSES 27

GEOG 101 Principles of Geography 3
GEOG 201 World Geography 3
GEOG 221 Spatial Organization 3
GEOG 302 Urban Geography 3
GEOG 303 Economic Geography 3
GEOG 304 Political Geography 3
GEOG 310 Geography of Asia 3
GEOG 311 Geography of North America 3

SUBTOTAL OF GEOGRAPHY COURSES 24
TOTAL REQUIREMENTS IN THE SOCIAL SCIENCES 51 hours

GEOGRAPHY MINOR

For Kindergarten-Primary, Elementary, or Secondary Education Students

Required

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>GEOG 101</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 201</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 310</td>
<td>3</td>
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<tr>
<td>GEOG 311</td>
<td>3</td>
</tr>
</tbody>
</table>

At least one course in regional geography from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 201</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 310</td>
<td>3</td>
</tr>
</tbody>
</table>

12 hours of electives from the remaining geography courses 12

TOTAL REQUIREMENTS FOR A MINOR IN GEOGRAPHY 18

OTHER OPTIONS

Students in the School of Education may also select the following options which are described below:

1. A 51-hour Social Science Area Major for Secondary Education Majors, with a 24-hour concentration in History courses.
2. A 51-hour Social Science Area Major for Secondary Education Majors, with a 27-hour concentration in Economics courses.
3. A 30-hour Social Science Area Major for Kindergarten-Primary or Elementary Education Majors.
4. An 18-hour Social Science Area Minor for Kindergarten-Primary Majors.
### SOCIAL SCIENCES AREA MAJOR—School of Education

**With a 24-hour Concentration in History**

<table>
<thead>
<tr>
<th>Required</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 101-102 Western Civilization I and II</td>
<td>6</td>
</tr>
<tr>
<td>HIST 131-132 U. S. History to 1877; U. S. History Since 1877</td>
<td>9</td>
</tr>
<tr>
<td>or HIST 133-134 American History I and II</td>
<td>6</td>
</tr>
<tr>
<td>Any additional 12 hours in HIST courses</td>
<td>12</td>
</tr>
<tr>
<td>SOC 101 Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>POL 101 Introduction to American Government</td>
<td>3</td>
</tr>
<tr>
<td>ECON 101 Principles of Economics I and II</td>
<td>12</td>
</tr>
<tr>
<td>or ECON 102 Principles of Economics II</td>
<td>6</td>
</tr>
</tbody>
</table>

**ELECTIVES**

A minimum of 9 credit hours in any HIST, SOC, POL, ANY, ECON, GEOG courses.

**TOTAL REQUIREMENTS IN THE SOCIAL SCIENCES** 51

### SOCIAL SCIENCES AREA MAJOR

**With a 27-hour Concentration in Economics**

<table>
<thead>
<tr>
<th>Required</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 101 &amp; 102 Western Civilization</td>
<td>6</td>
</tr>
<tr>
<td>HIST 131 &amp; 132 U. S. History to 1877; U. S. History since 1877</td>
<td>9</td>
</tr>
<tr>
<td>or HIST 133 &amp; 134 American History I and II</td>
<td>6</td>
</tr>
<tr>
<td>GEOG 101 Principles of Geography</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101 Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>POL 101 Introduction to American Government</td>
<td>3</td>
</tr>
<tr>
<td>ANY 101 Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ECON 101 Principles of Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 350 Comparative Economic Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECON 201 Current Economic Problems</td>
<td>3</td>
</tr>
<tr>
<td>EC ED 300 Economic Concepts and Resource Materials for Educators</td>
<td>3</td>
</tr>
<tr>
<td>Additional Electives from Economics</td>
<td>12</td>
</tr>
</tbody>
</table>

**TOTAL REQUIREMENTS IN THE SOCIAL SCIENCES** 51

(Practice teaching should be arranged to provide practice in the teaching of economics classes, if possible.)

### SOCIAL SCIENCES MAJOR

**For Kindergarten-Primary or Elementary Education Students**

A minimum of 30 credit hours of HIST, SOC, POL, ANY, ECON, GEOG courses.

### SOCIAL SCIENCES MINOR

**For Kindergarten-Primary Education Students**

A minimum of 18 credit hours of HIST, SOC, POL, ANY, ECON, GEOG courses.
COURSE DESCRIPTIONS

Anthropology

ANY 101 Cultural Anthropology  
Tizon  
The nature of culture; A survey of such human institutions as social organization, kinship, political and economic systems, religion and values with cross-cultural examples; a brief history of anthropology and the growth of cultural relativism; modern approaches to the study of culture.  
Three credit hours

ANY 102 Physical Anthropology  
Tizon  
Physical Anthropology; a look at the theories of human evolution, fossil man, the mechanisms of inheritance and natural selection; a discussion and evaluation of the concept of race; primate behavior and what it tells us about our ancestors, the relationship between biology and culture in man's evolution.  
Three credit hours

ANY 201 South American Culture History  
Tizon  
This course deals with pre-Columbian South American cultures, from the earliest signs of population to the Spanish conquest. The rise and fall of “high” civilizations (Chavin, Huari, Inca) as well as regional patterns (coast, highlands, tropical forest) will be reviewed. Various theories on the development, interconnection, and disappearance of cultures will be analyzed, along with topical problems such as the origin and spread of agriculture and the evidence for trans-Pacific and trans-Atlantic contact. (Offered every other fall)  
Three credit hours

ANY 300 Independent Study in Anthropology  
Staff  
The department faculty offers independent study in a topic in Anthropology for upper level students (Junior and Senior status). Individuals wishing to take advantage of this option should secure a faculty sponsor and departmental approval. Variable credits will be offered.

ANY 301 Culture Contact and Culture Change  
Tizon  
This course reviews the factors involved in different types of culture change (e.g., acculturation, autonomous “evolution”), typologies of culture-contact situation, the part played by “cultural brokers,” and the effects of different kinds of contact. The arguments for and against applied anthropology with respect to culture change will be explored, as well as the analysis and definitions of exploitation, as complex technologically advanced societies come into contact with small, homogeneous “primitive” cultures. Both forces favoring and those working against assimilation will be considered. Prerequisite: ANY 101. (Offered every spring)  
Three credit hours

ANY 310 Latin American Cultural Ecology  
Tizon  
An examination of the relationship between culture and environment in Latin America; presentation of current controversy in cultural-ecological theory as it relates to Latin America, with particular emphasis on the tropical forest zone; comparison of land-use patterns, as well as perceptions of space and land; environment viewed as involving other cultures as well as physical surroundings. Prerequisite: ANY 101 or 102 or permission. (Offered every other spring)  
Three credit hours

ANY 314 Magic, Religion, and Witchcraft  
Tizon  
Belief in the supernatural as a cultural universal; definition and function of religion cross-culturally; comparison of “primitive” beliefs with those of Judao-Christian tradition; discussion of the origin and evolution of religious systems; parapsychological studies and problems. Prerequisite: ANY 101 or 102 or permission. (Offered every fall)  
Three credit hours

ANY 351 Man in the Northeast  
Staff  
A detailed study of the sequence of aboriginal cultures in the American Northeast with special reference to central New England. It correlates directly with archeological research being conducted by the department of Geography-Anthropology and emphasizes the classification and interpretation of archeological data. Lab required. Prerequisites: ANY 101 or 102 or permission of instructor.  
Four credit hours
ANY 402 The History of Anthropology

Tizon

This course traces the development of the field of anthropology from its early roots in philosophy, through its popularism with the discovery of the New World, to present-day schools of thought. The course deals with such questions as whether or not anthropology can be considered a science, if it is a legitimate pursuit or merely a piecing together of other social sciences, and what are the ultimate goals of the discipline. The course is primarily designed for students who are contemplating graduate work in anthropology, and will focus on the critical analysis of anthropological approaches and the definition of the student’s own goals in anthropology. Prerequisites: ANY 101 plus 3 hours ANY over 100 level. (Offered every other year) Three credit hours

ANY 412 Methods of Anthropological Investigation

Tizon

This course covers the range of methods used by anthropologists in their studies. The focus is on ethnology and field work although archaeological techniques are reviewed. Attention will be paid to the role of the ethnologist during fieldwork, a much-neglected factor in the analysis of data. Students will be expected to become proficient in one or more investigative techniques during the course and sensitive to the kinds of problems which might arise in field situations. This course is recommended for those who plan to continue studies in cultural and physical anthropology, or archaeology. Prerequisite: ANY 101, 102 plus 3 hours ANY over 100 level. (Offered every other year) Three credit hours

Geography

GEOG 101 Principles of Geography

French, Hodges

Surveys the field of geography and presents an introduction to the several approaches to the discipline. Geographic theory, methods of investigation, and concepts are examined. Physical and cultural factors are interrelated to present the man and environment relationship from the point of view of the geographer. The course is a prerequisite for all advanced courses in geography. (Offered every semester) Three credit hours

GEOG 105 The Local Environment

French

This is a field oriented course that deals with the application of fundamental geographic concepts in the interpretation of areal development. The local area serves as the “laboratory” and provides models of geographic interaction that have application on a broader scale. (Offered only in summer sessions) Three credit hours

GEOG 201 World Geography

French

A concept-oriented approach to human geography that explores both natural and cultural influences upon man’s use of the land and the varied spatial patterns that reflect the manner of occupancy. Environmental quality, perception of environment, the dynamics of process, and new methods in the teaching of geography are among the areas receiving special emphasis. Prerequisite: GEOG 101. (Offered every semester) Three credit hours

GEOG 221 Spatial Organization

French

Basic concepts of geography are approached within a spatial-organizational format. This involves concepts of spatial efficiency, the geometry of space, geographic predictive approaches, as well as computer simulations and applications. (Offered fall 1973) Three credit hours

GEOG 300 Independent Study in Geography

Staff

The department faculty offers independent study in a topic in geography for upper level students (Junior and Senior status). Individuals wishing to take advantage of this option should secure a faculty sponsor and department approval. Variable credits will be offered.

GEOG 301 Geomorphology (cross-listed with GEOL 301)

Novak

Description and interpretation of landform development in terms of geologic structure, process, and stage. Field trips. Laboratory. Prerequisite: GEOL 201 or permission. (Offered every spring) Three credit hours
GEOG 302  Urban Geography  Hodges
Deals with the American city as a type. Urban centers are dealt with at two levels — as whole entities in which location, characteristics, growth, and relations with the countryside are explored, and as complex nodal regions in which the internal variations of the city are examined. Prerequisite: GEOG 101. (Offered alternate springs) Three credit hours

GEOG 303  Economic Geography  Hodges
Economic Geography presents a topical approach to economic activities in the world. Primary, secondary, and tertiary economic activities are examined. The major objectives are (1) to present the pattern of economic activities on a world scale and (2) to present explanations for the location of economic activities. Prerequisite: GEOG 101. (Offered alternate falls) Three credit hours

GEOG 304  Political Geography  Hodges
Political Geography is an examination of political conditions in selected areas of the world with emphasis upon theory, process, and results of political decisions. Physical, economic, and cultural factors are considered as explanations for political problem areas. Prerequisite: GEOG 101. (Offered alternate falls) Three credit hours

GEOG 310  Geography of Asia  Hodges
The course examines the regions of South Asia, Southeast Asia, and East Asia. Monsoon Asia is regional in approach and all aspects of the environment are presented. Physical, cultural, economic, and political factors are examined in an integrative analysis to allow an understanding of some of the reasons for conditions in this part of the world. Prerequisite: GEOG 101. (Offered alternate springs) Three credit hours

GEOG 311  Geography of North America  French
An open-ended approach, ranging from theory to the empirical, that deals with progress and problems in North America as seen from the spatial point of view. Prerequisite: GEOG 101. (Offered alternate falls) Three credit hours

GYAY 100  Museum Aide  French
The museum aide serves on volunteer (unpaid) projects relating to research classification, maintenance and display of artifactual materials. Since the museum solicits student input his contribution is expected to show originality and compliment the goals of the Museum of Man. A minimum of 30 hours of service each semester is required for credit. ½ credit hour
History

Professors Cole, Emerson, Hunt, York, Young; Associate Professors Albee, Bibber, Connick, Dietrich, Feig, Schleh (Chairman), Whitmore; Assistant Professors Eastman, Ventresco, Padula; Instructor Ganzevoort.

The courses offered by the history department are intended to provide broad acquaintance with the past experience of human society. The history curriculum offers the student an opportunity to participate in and investigate the procedures and methods of historical study through lectures, discussion, research, and the writing of history; or, combined with the necessary academic credits in education, the program will provide certification for teaching at the secondary level.

It is hoped that students from many departments, schools, and colleges will take history courses in which they are interested. For students wishing to major in history, as part of the B.A. program or as part of a Secondary Education program, the following minimum program has been structured. Students will probably take more elective courses than the minimum, and should distribute them among the three areas (American, European, and non-Western).

A history major or minor must achieve at least six credits of "B" or better grades in history courses. No grade of "D" will count toward fulfillment of a history major or minor. No required course may be repeated more than once.

The History Department offers an Honors Program to outstanding history majors. Any student interested in applying to this program may contact the History Department Chairman for details.

All students are reminded that, in addition to their meeting departmental requirements for a major leading to a baccalaureate degree, they must also meet the requirements of the school or college involved, as well as the University's General Education Requirements.

MINOR IN HISTORY FOR STUDENTS
IN SECONDARY EDUCATION

A student in Secondary Education may elect to minor in History. A minimum of 18 credit hours, including HIST 101-102 and HIST 131-132 or HIST 133-134 and elective history courses, is needed for this minor. Details of this program may be obtained from the student's faculty advisor.

ACADEMIC MAJORS AND MINORS
IN KINDERGARTEN-PRIMARY AND ELEMENTARY EDUCATION

Students in Kindergarten-Primary or Elementary Education in the School of Education may complete 30 hours of History in an approved program for an academic major or 18 approved hours for an academic minor. HIST 101-102 and HIST 131-132 or HIST 133-134 are required courses in either the Academic Major or Academic Minor Program.

ARTS AND SCIENCES OR SECONDARY EDUCATION
REQUIREMENTS FOR HISTORY MAJORS

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>HIST 101 and 102</td>
<td>6</td>
</tr>
<tr>
<td>HIST 131 and 132</td>
<td>6</td>
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<tr>
<td>or HIST 133 and 134</td>
<td>6</td>
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</tbody>
</table>

Choice of one of the two-semester sequences in U.S. History listed below, each offering 3 credits each semester:

- U.S. History to 1877
- U.S. History Since 1877
- American History I & II
- American History II

Credit will be given for one or the other, not both (i.e., not for both HIST 131 and HIST 133 or for both HIST 132 and HIST 134.)

84
Choice of two courses from the introductory sequences in non-western history listed below:

HIST 161 and 162 Introduction to African History to Partition and Introduction to African History since Partition

or

HIST 171 and 172 Traditional East Asia and Modern East Asia

or

HIST 181 and 182 Latin America I and II

HIST 200 Methodology in History

Other History Courses

Minimum Total to Meet Major Requirements

Unusually well-prepared entering students may, upon passing an examination, gain exemption from any of the required courses. Up to six hours of credit may be granted for superior achievement on such examinations. Otherwise, students will take advanced elective courses to complete the minimum number of credit hours for the major.

It is strongly recommended that history majors, especially those expecting to do graduate study, acquire proficiency in a foreign language.

COURSE DESCRIPTIONS

HIST 101 Western Civilization I

An introduction to the intellectual and political heritage of Western man from prehistoric times to the late 17th century. Divergent concepts of the theories and writing of history as a systematic explanation of past events form an integral part of the course.

Three credit hours

HIST 102 Western Civilization II

A survey of the experiences, ideas, and major creative works of Western man from the 17th century to recent times. The course interweaves political, intellectual, social, and economic developments. It considers international relations, the changing power balance among leading states, and contacts with non-Western civilizations.

Three credit hours

*HIST 131 United States History to 1877

A basic survey and introduction to the field of American history, covering the political, social, and economic development of the United States through Reconstruction.

Three credit hours

*HIST 132 United States History Since 1877

The course is a continuation of HIST 131. A survey of American political, social, and economic development since about 1877.

Three credit hours

*HIST 133 American History I

A team-taught survey of United States history which examines institutional development and change in major areas of American society and culture before 1900 by means of lecture case studies, a variety of paperbound readings, films, slides, music, and small group discussions.

Three credit hours

*HIST 134 American History II

A continuation of HIST 133 which examines institutional change and development in modern American urban industrial society and culture since 1900.

Three credit hours

*HIST 131-132 and HIST 133-134 are both introductory courses, though class procedures differ. Credit will be given for one or the other, not both (i.e., not for both HIST 131 and HIST 133 or for both HIST 132 and HIST 134.)
HIST 161 Introduction to African History to Partition
Schlehr
Survey of African history from early migrations to the beginning of the Colonial era. Approach is both regional, stressing selected countries representative of their regions, and topical, cutting across political boundaries (e.g., states of the Sudan, city states of East Africa), role of Islam, conduct and impact of the slave trade, exploration, and partition.
Three credit hours

HIST 162 Introduction to African History Since Partition
Schlehr
Survey of the Colonial era, the transformation of African societies, the rise of nationalist movements, wars of liberation, and early years of the new era of independence.
Three credit hours

HIST 171 Traditional East Asia
Bibber, Dietrich
The history and culture of China and Japan from earliest times to about 1700, with emphasis on the composition of the "traditional" societies.
Three credit hours

HIST 172 Modern East Asia
Dietrich
China and Japan since about 1700, emphasizing contrasting moves toward modernization in two traditional societies.
Three credit hours

HIST 181 Latin America I
Padula
The Spanish and Portuguese colonial empires in America from their establishment to their achievement of independence in the early 19th century.
Three credit hours

HIST 182 Latin America II
Padula
A survey of modern Latin America beginning with the Latin American wars of independence in the early 19th century and extending to the present.
Three credit hours

HIST 195 History of Canada I
Ganzevoort
Canada's history from the earliest settlements in New France to 1867. Emphasis on the evolution of Canada within the British Empire-Commonwealth, relations with the United States, and on the background of contemporary constitutional, economic, and cultural problems.
Three credit hours

HIST 196 History of Canada II
Ganzevoort
Canada's history since 1867. Continuation of HIST 295.
Three credit hours

HIST 200 Methodology in History
Connick, Eastman
An introduction to research and writing, designed to prepare undergraduates for the requirements of upper level courses in history and the social sciences with emphasis on practical methods of utilizing a library, locating materials, taking and organizing notes, and writing and rewriting research papers and reports. (Offered both Fall and Spring semesters in Day sessions; offered in CED only in the Spring semester.)
Three credit hours

HIST 231 Ancient History I
Staff
The political, social, and economic history of the civilizations of the ancient Mediterranean world, with Egypt, the Near East, and Greece being studied. (Not offered in 1974-75)
Three credit hours

HIST 232 Ancient History II
Staff
A continuation of HIST 231 concentrating upon an examination of ancient Rome. (Not offered in 1974-75)
Three credit hours

HIST 235 Medieval Civilization
Staff
Europe from late antiquity through the Carolingian Empire, Islamic Empire, Byzantine Empire, Medieval Church and State and the coming of the Renaissance and Reformation. Prerequisite: HIST 101.
Three credit hours

HIST 241 Early Modern Europe
Ventresco
A political, social, and intellectual study of Europe from the era of Martin Luther to the age of Sir Isaac Newton. One of the major themes of this course is the development of the state, and the rise of the great powers within the broader context of international struggles. Prerequisite: six hours of history. (Not offered in 1974-75)
Three credit hours
HIST 242 French Revolution and Napoleon

The course takes the French Revolution as a climax of major intellectual, political, and social trends in eighteenth-century Europe. Thorough coverage is given to the Old Regime, the Enlightenment, the influence of the American Revolution, the French Revolution itself, and its impact outside France. The Napoleonic era is handled as the culminating phase of the Revolution and as a major influence on nineteenth-century Europe. Prerequisite: HIST 102.

Three credit hours

HIST 243 Europe in the Nineteenth Century

An intensive survey of the history of Europe's major powers and their international relations. Major topics also included are liberalism, nationalism, socialism, and imperialism. Intellectual and cultural developments are stressed. Prerequisite: HIST 102.

Three credit hours

HIST 244 Europe 1890-1939

A study of European society from the turn of the century through the aftermath of World War I. Particular attention will be given to industrialization, urbanization, imperialism, and nationalism, as well as to the approach of world war and the war's consequences. Prerequisite: HIST 102.

Three credit hours

HIST 245 Europe Since 1939

An intensive survey of European developments in the twentieth century stressing intellectual, economic, psychological, social, and political factors. Europe's changing role; the impact of World Wars I and II; the meaning of Fascism, Nazism, and Soviet Communism; and problems facing Europe in today's world are considered. Prerequisite: HIST 102.

Three credit hours

HIST 261 History of England

A survey of England from Anglo-Saxon times to the beginning of the twentieth century, with emphasis on the nature of English monarchy, the development of political institutions, and evolving constitutionalism. Particular attention is given to broad movements such as the Reformation, the Industrial Revolution, and Imperialism. Prerequisite: HIST 101 and 102.

Three credit hours

HIST 263 England in the 20th Century

A study including the Edwardian Age. The Liberal Party's decline and the Labour Party's rise, the Depression, the English people in two World Wars, the transition from Empire to Commonwealth, the problem of Ireland, and the leadership of Lloyd George and Churchill.

Three credit hours

HIST 265 Modern Italy I

A political, intellectual, diplomatic, and social history of Italy from the Risorgimento to the eve of World War I. Considerable emphasis will be given to the role of the Papacy in Italian affairs. Major literary figures to be examined will include Foscolo, Leopardi, Manzoni, Verga, and Carducci. Prerequisites: HIST 101 and HIST 102.

Three credit hours

HIST 266 Modern Italy II

A continuation of Italian History from World War I to contemporary times. The political aspects will stress the rise of the Fascist State, the fall of Mussolini, and the post-war era. The literature of such figures as Pirandello, Sveve, Levi, and Moravia will be examined; as well as Italian historical writings. Prerequisites: HIST 101 and HIST 102.

Three credit hours

HIST 271 German History, 1648-1900

A study of the German people from the Thirty Years' War until the twentieth century. Particular attention will be given to the rise of Prussia as a rival to Austria, to life in the Germanies during the Enlightenment, and to the romanticism, liberalism, and nationalism of the nineteenth century. Prerequisite: HIST 102. (Not offered in 1974-75)

Three credit hours

HIST 272 Germany in the 20th Century

A study of the German Empire, its dissolution in 1918, the Weimar Republic, Hitler's Third Reich, Germany in World War II, and divided Germany since 1945. Includes a study of cultural and social factors which help explain Germany's role in the modern world. Prerequisite: HIST 102 or permission.

Three credit hours
HIST 273 History, Literature, and Drama of Nazi Germany

A combined study of the literature, drama, films, history, and internal institutions relating to Hitler Germany for a comprehensive social/political/historical analysis of the Third Reich. Prerequisite: Sophomore standing except with permission. Three credit hours

HIST 275 History of Russia I

Political, social, cultural, and economic history of the Russian people to 1801. Surveys geographic backgrounds, the influence of Byzantine civilization, the impact of invasions, and the development of Russia's unique social, cultural, and political institutions through the reign of Catherine the Great. Prerequisite: one survey or permission. Three credit hours

HIST 276 History of Russia II

A continuation of Russian history from 1801 to today. The course deals with pressures for reform and weaknesses in imperial Russia, role of the intelligentsia, and revolutionary parties, the Bolshevik Revolution, and the history of Communist Russia since 1917. Prerequisite: one survey or permission. Three credit hours

HIST 301 American Colonial History

Half the semester is devoted to discovery, exploration, and colonization. New Spain, New France, New Netherland, and New Sweden are compared with the English settlements (13 colonies), each of which is considered in detail. Second half of semester emphasizes social and intellectual topics (e.g., religion, law, medicine, painting, literature, and music). Prerequisite: HIST 131 or 133. Three credit hours

HIST 302 The American Revolution

The Anglo-French conflict, the series of inter-colonial wars, and the “Old Imperial System” are considered as background to the American Revolution. Subsequently, the period 1763-1789 is treated in detail, including leading personalities, military campaigns, social aspects of the war, and the Constitution (origins, constitutional convention and ratification). Historiography of the period is emphasized. Prerequisites: HIST 131 and 132 or HIST 133 and 134. Three credit hours

HIST 305 Hamilton and Jefferson

Special emphasis on Hamilton and Jefferson to include: biographical information, the Jefferson-Hamilton political dichotomy, and its subsequent influence. Following this, a general analysis of social, intellectual, political, economic, and diplomatic problems facing the “New Nation” between 1789-1815 is presented. Prerequisites: HIST 131 and 132, or HIST 133 and 134, or permission. Three credit hours

HIST 306 The Age of Jackson, 1815-1850

A consideration of American political, cultural, social, and economic development in the first half of the 19th century. Specific topics will include the controversies surrounding Jacksonian democracy, the Bank of the United States, internal improvements, the tariff, “Manifest Destiny,” and the sectional-slavery issue. Prerequisites: HIST 131 and 132 or permission.

HIST 307 Civil War and Reconstruction

An examination of the period 1850-1877, dealing with the background and causation of the war; Lincoln and the secession crisis; the military, political, diplomatic, and economic aspects of the Civil War; and the challenges and ultimate failure of reconstruction after 1865. Prerequisite: HIST 131 or 133.

HIST 308 The Gilded Age in America, 1869-1898

The United States in the age of enterprise with emphasis on the development of political and economic radicalism, the commercialization of agriculture, the rise of the American city, new directions in social thought, concentration of industrial wealth and financial power, and American foreign policy. Prerequisite: HIST 132 or 133 or permission. (Not offered in 1974-75) Three credit hours

HIST 309 Early 20th Century America, 1898-1938

The United States in the first four decades of the twentieth century with coverage of the Spanish-American War, the progressive movement, American entry into World War I, the Roaring Twenties, the Great Depression, and the domestic programs of the New deal. Prerequisite: HIST 132 or 134. Three credit hours
HIST 310  America Since 1938  Eastman, Emerson
The United States since the Great Depression with coverage of the foreign policy of the New Deal, the background to Pearl Harbor, World War II, the Fair Deal, the Cold War, the Eisenhower years, the New Frontier, and the Great Society. Prerequisite: HIST 132 or HIST 134 or permission.
Three credit hours

HIST 321  History of Maine  York
A survey of Maine's social, economic, and political life from primitive times to the present.
Three credit hours

HIST 323  History of the South  Whitmore
A survey of the social, political, economic, intellectual, cultural, and racial elements of the American South from the colonial period to the present. Prerequisite: HIST 131 and HIST 132 or HIST 133 and HIST 134. (Not offered in 1974-75)
Three credit hours

HIST 325  History of the American Frontier  Staff
The Turner thesis, historiography, and adaptations to the challenges of the environment are considered. Various frontiers from the Atlantic seaboard to the last frontier on the Great Plains are studied. Prerequisites: HIST 131 and 132, or HIST 133 and 134, or permission.
Three credit hours

HIST 331  History of Black Americans  Emerson, Whitmore
The experience of black people within American society from the colonial period to the present is treated through their interaction with the nation’s social, political, cultural, and economic institutions. Major topics include the African heritage, components of slavery, abolitionism, segregation, programs of race advancement, and the modern search for identity. Prerequisite: HIST 131, or HIST 133, or permission.
Three credit hours

HIST 335  American Urban History  Whitmore
The American city is surveyed in regard to this history of its social, political, intellectual, and cultural components; the changing nature of “community”; the course of urban development; and the emergence of urban life styles. Special attention is focused on the population movement to the city; the development of slums, ghettos, and suburbs; the growth of municipal institutions and services; the relationship of city dwellers and government; and the emergence of “Megalopolis.” Prerequisite: HIST 131 or HIST 133. (Not offered in 1974-75)
Three credit hours

HIST 337  American Economic and Business History, 1607-1860  Eastman
Economic and business developments in the United States from the first settlements to the Civil War with coverage of the British mercantile system, the colonial economy, the Transportation Revolution, the Southern plantation system, and the beginnings of American industrialization; and with in-depth analysis of selected topics of special interest. Prerequisite: HIST 131, or HIST 133, or permission.
Three credit hours

HIST 338  American Economic and Business History Since 1860  Eastman
Economic and business developments in the United States from the Civil War to the present with coverage of the growth of a national market and distribution system, the revolution in agriculture, the rise of big business, the organization of labor, and the growing involvement of the federal government in business and the economy; and with in-depth analysis of selected topics of special interest. Prerequisites: HIST 131 and 132, or HIST 133 and 134, or permission.
Three credit hours

HIST 339  American Labor in the Twentieth Century  Emerson
A chronological examination of the efforts of American corporate society. Topics will include the emergence of the AFL, labor radicalism, labor and immigration, the nature and role of labor leadership, racketeering labor and the New Deal, and the rise of Big Labor. The focus will be on organized labor but attention will also be given to white collar workers, blacks, migrants, and other fringe groups. Emphasis will be placed on labor theory. Prerequisite: HIST 132, or HIST 134, or permission. (Not offered in 1974-75)
Three credit hours

HIST 341  American Social and Intellectual History I  Emerson, Whitmore
An analysis of the evolution of American religious, political, economic, social, and scientific thought from the colonial period to 1865 emphasizes major principles, assumptions, and values; the relation of American thought to class structure, ethnic and racial associations, mobility, and immigration; and its relation to contemporary intellectual patterns in the western world.
Three credit hours
HIST 342 American Social and Intellectual History II

A continuation of HIST 341 from 1865 to the present. (Not offered in 1973-74) Emerson, Whitmore

Three credit hours

HIST 343 Diplomatic History of the United States I

This course covers the development of key United States foreign policies from the Revolution to the Spanish-American War. Prerequisite: HIST 131 or HIST 133. (Not offered in 1974-75) Bibber

Three credit hours

HIST 344 Diplomatic History of the United States II

The chief emphasis is placed on the causes and results of World Wars I and II, the nature of the Cold War, and the character of our present commitments. Prerequisite: HIST 132 or HIST 134. (Not offered in 1974-75) Bibber

Three credit hours

HIST 345 American Character

A course focusing on a particular problem of historical analysis; the interpretation of the national character as revealed in sources ranging from the earliest accounts of foreign travellers to the most recent works of social psychologists. Authors to be considered in discussions, reports, and papers include Tocqueville, Bryce, Adams, Turner, Siegfried, Mead, Potter, Riesman, and others. Prerequisite: HIST 131, or HIST 133, or permission. (Not offered in 1974-75) Emerson

Three credit hours

HIST 347 Viewpoints in American History

A seminar involving discussions of selected topics in United States history, with emphasis on varying interpretations of trends and events. Students will read and analyze both traditional and more recent views, noting changes in frames of reference, methodology, and general approach. Prerequisite: 12 hours of U.S. history. Bibber

Three credit hours

HIST 348 A History of Religion in America

A study of religion in American society from the colonial era to the present examines theological patterns, forms of religious organization, major figures and movements in the criticism and/or advocacy of religion, and the religious contribution to the American heritage. Prerequisites: HIST 131 and 132, or HIST 133 and 134, or permission. (Not offered in 1974-75) Whitmore

Three credit hours

HIST 361 The United States and Africa

A history of United States' interests in and relations with Africa from the early seventeenth century to the present. Areas covered include commerce, social and humanitarian contacts, America's role in the exploration of Africa, and diplomacy. Prerequisite: 9 hours of history or permission. Schleeh

Three credit hours

HIST 362 Contemporary Africa

Seminar to examine major interdisciplinary elements in today's Africa including: literature and the arts, social change, development and adaption in African politics, economic development, race relations, and international politics. Schleeh

Three credit hours

HIST 371 The United States and Asia

A history of the United States' interests in the Far East from 1789 to the 1960's, considering economic and social contacts as well as diplomatic. Prerequisites: HIST 131 and 132 or HIST 133 and 134. HIST 172 strongly recommended. (Not offered in 1974-75) Bibber

Three credit hours

HIST 373 History of Late Traditional China

Before the nineteenth century no Chinese doubted — and few outsiders who saw it disagreed — that the "Middle Kingdom" was the greatest of the world's civilizations. No society was larger, had stronger ties to its past, or had contributed more to the development of human culture. This course will explore the institutions and values of China in the period from 800 to 1800, and its relationships with other societies. Prerequisite: HIST 171 recommended. Dietrich

Three credit hours

HIST 374 History of Modern China

After dealing with the nature of Chinese society and institutions as they existed around 1800, the course will take up problems of modernization, imperialism, revolution, warlordism, Japanese aggression, civil war, and the present communist regime. Prerequisite: HIST 172 recommended. Dietrich

Three credit hours
HIST 376 History of Modern Japan
This course will explore what Japan was like when Perry "opened" it in 1854 and will deal with the rapid social changes which made Japan the outstanding example of modernization among non-western nations. The problems which this development has created will also be considered. Prerequisite: HIST 172 recommended. Three credit hours

HIST 377 Chinese Intellectual History
Prior to the modern era, the Chinese interpreted their world through traditional idea systems, the most prominent of which were Confucianism, Taoism, and Buddhism. This course will explore these traditions: their assumptions and values, their varieties and internal tensions, and their relationships to the larger social system. Prerequisite: HIST 171 recommended. Three credit hours

HIST 381 Latin America and the United States
A survey of United States participation in Latin American affairs from the recognition of independence and the enunciation of the Monroe Doctrine to the Good Neighbor policy and the present day. Prerequisite: HIST 182 recommended. Three credit hours

HIST 382 Social Revolution in Latin America
A comparative history of social revolution in Latin America with emphasis on the Mexican, Argentine, Cuban, and Chilean revolutions. Substantial student participation will be expected; substantial reading for each weekly session will be required. Three credit hours

HIST 392 Problems in Contemporary History
An analysis in depth of a selected controversial and contemporary problem. The topic to be studied and the method of approaching it will be chosen jointly by interested students and the staff. Prerequisite: permission of the instructor. (Not offered in 1974-75) Three credit hours

HIST 394 Selected Topics in History
An analysis in depth of a selected controversial historical problem. The topic to be studied and the method of approaching it will be chosen jointly by interested students and the staff. Prerequisite: permission. Three credit hours

HIST 410 The European Revolutionary Tradition Since 1789
A seminar analyzing modern European revolutions, revolutionary theory, revolutionary leadership, and the dynamics of revolution, including the role of the revolutionary crowd. Open to seniors and others by permission. Prerequisite: At least six hours of European history or equivalent in unusual cases. Three credit hours

HIST 415 Recent Literature in European History
A survey of the most important recent literature in the field of European history. Designed to inform the public school teacher and advanced undergraduate of the newest publications and historical controversies. Annotated bibliographies will be prepared. Emphasis on reading and discussing books and articles with applicability to secondary education programs. Prerequisite: six hours of European history or permission. Three credit hours

HIST 445 Recent Literature in United States History
A survey of the most important recent literature in the field of U.S. History. Designed to inform the public school teacher and advanced undergraduate of the newest publications and historical controversies. Annotated bibliographies will be prepared. Emphasis on reading and discussing books and articles with applicability to secondary education programs. Prerequisite: twelve hours of U.S. history or permission. (Not offered in 1974-75) Three credit hours

HIST 495 Historiography
A survey of the principal schools of historical writing and of their products, with a detailed analysis of the philosophical principles, specific purposes, and research and writing techniques of selected major historians. Prerequisite: Senior history majors only. (Not offered in 1974-75) Three credit hours

HIST 498 Independent Study in History
To provide juniors and seniors who have demonstrated critical and analytical capability an opportunity to pursue a project independently, charting a course and exploring an area of interest within their major field, bearing upon it previous course experiences and emerging with an intellectually sound, coherent synthesis reflecting a high caliber of performance. Prerequisite: permission. One to three credit hours
Mathematics and Computer Science

Professors Estes, Fish (Chairman), P. Rogers; Associate Professors Brown, Guay, Kratzer, Mainville, Moulton (on leave, Fall 1974); Assistant Professors Bruckner, Chabot, Foster, Irish, MacDonald, Soychak; Instructors Bradbard (on leave, 1974-75), Murley.

The Department of Mathematics and Computer Science offers a four-year program leading to a baccalaureate degree in mathematics, and provides courses to meet the requirements of a number of undergraduate and graduate programs. Students may follow a traditional mathematics program as outlined in Option 1 below, or they may choose to concentrate in applied mathematics or computer science as described in Options 2 and 3. The Department is now exploring the possibility of Cooperative Education.

Mathematics majors intending to pursue graduate work should choose Option 1 and are urged to take Real Analysis I and II, Abstract Algebra, Topology, and one year of French, German, or Russian. Those interested in teaching at the secondary level should also follow Option 1 and are encouraged to take Abstract Algebra, College Geometry, Probability and Statistics I, and should satisfy the appropriate education requirements. To be eligible for student teaching in secondary mathematics, a student must have completed 30 hours of mathematics courses having second digit 5 or greater with a grade point average of at least 2.0 in these courses and have successfully completed MsEd 345.

Those majors intending to enter industry or other applied fields should consider the applied mathematics or computer science option. Majors who plan to prepare for the actuarial profession should be certain to include in their programs Linear Algebra, Probability and Statistics I and II, Numerical Analysis, and the appropriate courses in the School of Business.

All students are reminded that, in addition to meeting departmental requirements for a major, they must also meet the requirements of the school or college involved, as well as the University's General Education Requirements. These general requirements are printed inside the front cover of this catalog.

I. REQUIREMENTS FOR ALL MATHEMATICS MAJORS

A. MS 152, Calculus A, MS 153 Calculus B, MS 252 Calculus C, MS 290 Foundations, and CS 160 Programming Language I. These courses should normally be completed by the end of the sophomore year.

B. Each student must have an accumulative grade point average of at least 2.0 in major courses before being considered for a baccalaureate degree in mathematics.

C. Each student must also complete one of the three options below.

1. Option for Mathematics Majors Intending to Teach or Pursue Graduate Work.
   a) Successful completion of one of the courses listed in each of the following four areas:
      (1) Algebra: MS 382 Abstract Algebra
              MS 380 Linear Algebra
      (2) Analysis: MS 352 Real Analysis I
              MS 354 Topics in Advanced Calculus
              MS 355 Complex Analysis
      (3) Applied Mathematics: MS 350 Differential Equations
              MS 362 Probability & Statistics I
              MS 361 Numerical Analysis
      (4) Geometry: MS 370 College Geometry
               MS 372 Non-Euclidean Geometry
               MS 371 Projective Geometry
      Any exceptions to the above requirements must be approved by the Department.
   b) Successful completion of at least nine additional hours of MS courses with second digit 5 or greater, not to include courses with numbers ending in 99 without written permission of the Department.
2. Option for Mathematics Majors Who Intend to Specialize in the Area of Applied Mathematics.
   b) Successful completion of two of the following: MS 354 Topics in Advanced Calculus, MS 492 Graph Theory and Finite Combinatorics, MS 366 Linear Programming, MS 361 Numerical Analysis.
   c) Successful completion of at least 18 hours in allied disciplines which utilize mathematical techniques. The particular program of courses must be approved in writing by the Department.

3. Option for Mathematics Majors Who Intend to Specialize in the Area of Computer Science.
   a) Successful completion of five of the following ten courses: MS 350 Differential Equations, MS 354 Topics in Advanced Calculus, MS 355 Complex Analysis, MS 361 Numerical Analysis, MS 362 Probability & Statistics I, MS 363 Probability & Statistics II, MS 366 Linear Programming, MS 380 Linear Algebra, MS 430 Partial Differential Equations, MS 460 Mathematical Modeling.
   b) Successful completion of five of the following six courses: CS 158 Introduction to Computer Science, CS 260 Programming Language II, CS 269 Machine and Assembler Language, MS 361 Numerical Analysis (not to be included if taken in (a) above) CS 368 Data Structures, CS 369 Systems Programming.

II. REQUIREMENTS FOR MATHEMATICS MINORS AND EDUCATION MAJORS

A. A minor in mathematics may be obtained by successfully completing 18 hours of mathematics courses in which the second digit is 5 or greater.

B. Kindergarten-Primary or Elementary majors may fulfill an area concentration by successfully completing MS 131, MS 231, MS 232, and seven elective three-credit-hour mathematics courses with MS code numbers of 120 or above.

C. Kindergarten-Primary or Elementary majors may complete an academic minor in mathematics by successfully completing MS 131, MS 231, MS 232, and three elective three-credit-hour mathematics courses with MS code numbers of 120 or above.

III. RECOMMENDED COURSES FOR NON-MAJORS

Students who desire an introductory course to satisfy the Area 3 general education requirement should consider MS 104 and MS 105. For students majoring in other disciplines but wishing to develop competency in using mathematics, the following courses are recommended. Individual course descriptions should be consulted to determine prerequisites.

- MS 109 Linear Systems
- MS 110 Elementary Mathematical Analysis (or MS 152 and MS 153 for greater depth in calculus.)
- CS 158 Introduction to Computer Science (or CS 160 for greater depth in computer programming.)
- MS 120 Statistical Inference (or MS 211 and MS 212 for greater depth in probability and statistics.)
- MS 264 Statistical Methods for Research
COURSE DESCRIPTIONS
COMPUTER SCIENCE

CS 158  Introduction to Computer Science
A general course with a non-technical emphasis. History of data processing, terminology, study of the tools and methods, the application of computers and their economic and social implications, and an introduction to Basic programming language. Three credit hours

CS 160  Programming Language I
A study of programming techniques and applications using the Fortran language. Three credit hours

CS 260  Programming Language II
A continuation of CS 160. A further study of programming languages and techniques to include Cobol and PL/1. Prerequisite: CS 160. Three credit hours

CS 269  Machine and Assembler Language
Software organization, a study of assembler and macro language capabilities, assembler language coding, loader and execution tasks. Comparison with interpretive processing. Introduction to program and data structures. Prerequisite: CS 160. Three credit hours

CS 368  Data Structures
Basic concepts of data, strings, stacks, arrays, and lists. Representations of trees and graphs. Storage systems and structures, searching and sorting techniques. Multi-linked structures. Prerequisite: CS 260. Three credit hours

CS 369  Systems Programming
Operating systems: batch processing, multi-programming and multi-processor systems, time sharing, scheduling, storage allocation, input-output. File system organization and management. Remote and hierarchical job control. Prerequisite: CS 269. Three credit hours

MATHEMATICS

Note that MS 10 and MS 11 carry credit only toward the Associate Degree.

MS 10  Elementary Algebra
The first course of a two-course sequence designed for students who are deficient in high school algebra. Topics covered include number systems, functions, graphs, the solution of equations, and the solution of problems with a business orientation. No prerequisites. Three credit hours

MS 11  Intermediate Algebra
A continuation of MS 10. Prerequisite: MS 10 or one year of high school algebra. Three credit hours

MS 102  Basic Technical Mathematics I
This course includes the traditional topics of college freshman mathematics: slide rule, functions, graphs, equations, systems of linear equations, determinants, trigonometry. Prerequisites: one year of high-school algebra and geometry, or permission of instructor. Three credit hours

MS 103  Basic Technical Mathematics II
A continuation of MS 102 including more trigonometry, vectors, complex numbers, logarithms, analytic geometry, derivatives with applications, and integrals with applications. Prerequisite: MS 102 or permission of instructor. Three credit hours

MS 104  Topics in Mathematics I
The first course of a two-course sequence designed for students not majoring in mathematics. The emphasis will be on applications of mathematics as well as the basic concepts encountered in mathematics. The topics presented may be inter-disciplinary in nature. Three credit hours

MS 105  Topics in Mathematics II
This course has the same format as MS 104 and should be a continuation of it. However, since the topics need not be related, MS 105 may be taken independently of MS 104. Prerequisite: Permission of the instructor if topics are a continuation. Consult the Mathematics Department for topics offered each semester. Three credit hours
MS 109 Linear Systems
   An introduction to vectors, matrices, and linear systems of algebraic equations; linear programming; elementary functions. Prerequisites: two years of high school algebra and one year of geometry.
   Three credit hours

MS 110 Elementary Mathematical Analysis
   A unified treatment of the elementary functions of analysis: their analytical properties including derivatives, integrals, and series; introduction to multivariate calculus; applications. Prerequisite: three years of high-school college-preparatory mathematics.
   Three credit hours

MS 120 Statistical Inference
   An introductory course including basic probability, random variables, and their distributions; estimation and hypothesis testing; regression and correlation. Prerequisite: two years of high-school algebra.
   Three credit hours

MS 131 Mathematics for Elementary Teachers I
   This is the first course in a basic two-course sequence of special interest to prospective primary and elementary teachers. The course places major emphasis on an intuitive approach to the structure of the real number system. Topics covered: sets and logic, system of whole numbers, integers, rationals, numeration systems, elementary number theory. Restricted to students majoring in elementary or primary education. Prerequisites: one year of high-school algebra and geometry.
   Three credit hours

MS 132 Mathematics for Elementary Teachers II
   Continuation of MS 131. Topics covered: decimals and real numbers, mathematical systems of modern mathematics, probability, elementary statistics, informal geometry, algebra concepts. Prerequisite: MS 131 or permission of instructor.
   Three credit hours

MS 140 Pre-Calculus Mathematics
   A brief review of elementary algebra followed by a study of the algebraic, exponential, logarithmic, and trigonometric functions. Prerequisite: two years of high-school algebra.
   Three credit hours

MS 152 Calculus A
   This is the first of a sequence of three basic calculus courses covering functions of one or more variables, graphs, limits, derivatives, integrals, optimization, infinite series, vectors, and various applications. Calculus A provides an introduction to the differential and integral calculus of functions of one variable. Prerequisite: Two years of high school algebra plus geometry and trigonometry, or MS 140.
   Four credit hours

MS 153 Calculus B
   A continuation of Calculus A. Calculus B will usually include infinite series and an introduction to vectors. Prerequisite: MS 152.
   Four credit hours

MS 211 Probability
   Discrete and continuous sample spaces; common probability laws; expected values; sampling distributions. Prerequisites: MS 110 or MS 152.
   Three credit hours

MS 212 Statistics
   Sampling distributions; estimation; hypothesis testing; introduction to regression analysis and analysis of variance. Applications primarily in business and economics. Prerequisite: MS 211.
   Three credit hours

MS 231 Algebra for Elementary Teachers
   A course as recommended by the Committee on the Undergraduate Program, Mathematical Association of America, to follow the two-course sequence on number systems; emphasis on generalization and abstraction, algebraic properties, linear equations and inequalities in two variables, quadratics, systems of equations and inequalities, modular arithmetic, group, field, complex numbers, functions. Prerequisite: MS 131 or permission of instructor.
   Three credit hours

MS 232 Geometry for Elementary Teachers
   To provide the prospective elementary teacher with the common core of geometric knowledge; congruence, measurement, parallelism, and similarity; presented at first intuitively, then as part of a deductive system; applications. Follows recommendations of CUPM, Mathematical Association of America. Prerequisite: MS 131 or permission of instructor.
   Three credit hours
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Instructor</th>
<th>Description</th>
<th>Prerequisite</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS 233</td>
<td>Probability for Elementary Teachers</td>
<td>Krotzer</td>
<td>An introductory course in probability designed for the elementary and junior high teacher. The course content includes empirical probability through conditional probability, random variables and their distributions, including binomial and normal distributions.</td>
<td>MS 232</td>
<td>Three</td>
</tr>
<tr>
<td>MS 235</td>
<td>History of Mathematics for Elementary Teachers</td>
<td>Estes</td>
<td>A history of certain topics in number theory, geometry, and elementary algebra.</td>
<td></td>
<td>Three</td>
</tr>
<tr>
<td>MS 252</td>
<td>Calculus C</td>
<td>Staff</td>
<td>Multivariate calculus and vector calculus.</td>
<td>MS 153</td>
<td>Four</td>
</tr>
<tr>
<td>MS 264</td>
<td>Statistical Methods for Research</td>
<td>Staff</td>
<td>An applied methods course. Selected topics from analysis of variance and covariance, regression, correlation, non-parametric methods, factor analysis. The computer system is utilized, but programming is not necessary.</td>
<td></td>
<td>Three</td>
</tr>
<tr>
<td>MS 265</td>
<td>Design of Experiments</td>
<td>Staff</td>
<td>The study and application of the various factors used in conducting a statistical study; including block, split-plot, factorial designs; replication; some sampling methods. Applications.</td>
<td></td>
<td>Three</td>
</tr>
<tr>
<td>MS 290</td>
<td>Foundations of Mathematics</td>
<td>Staff</td>
<td>Selected topics in set theory, symbolic logic, and methods of proofs needed in more advanced mathematics courses.</td>
<td>MS 264</td>
<td>Three</td>
</tr>
<tr>
<td>MS 291</td>
<td>The Real Numbers</td>
<td>Staff</td>
<td>An axiomatic construction of the real number system.</td>
<td>MS 290 or permission of instructor</td>
<td>Three</td>
</tr>
<tr>
<td>MS 292</td>
<td>Theory of Numbers</td>
<td>MacDonald</td>
<td>Basic course in number theory, including such topics as divisibility properties of integers, prime numbers, congruences, multiplicative number theoretic functions, and continued fractions.</td>
<td></td>
<td>Three</td>
</tr>
<tr>
<td>MS 350</td>
<td>Differential Equations</td>
<td>Chabot</td>
<td>A study of various methods for solving ordinary differential equations and initial value problems including transform, numerical, and series methods.</td>
<td>MS 252</td>
<td>Three</td>
</tr>
<tr>
<td>MS 352</td>
<td>Real Analysis I</td>
<td>Guay</td>
<td>Limits, continuity, differentiation and integration of functions of one or more real variables, infinite series, uniform convergence, and other selected topics.</td>
<td>MS 252, and MS 290</td>
<td>Three</td>
</tr>
<tr>
<td>MS 353</td>
<td>Real Analysis II</td>
<td>Guay</td>
<td>A continuation of Real Analysis I.</td>
<td>MS 352</td>
<td>Three</td>
</tr>
<tr>
<td>MS 354</td>
<td>Topics in Advanced Calculus</td>
<td>Staff</td>
<td>Selected topics on multivariate functions, vectors, transformations, line integrals, and surface integrals.</td>
<td>MS 252 and MS 290</td>
<td>Three</td>
</tr>
<tr>
<td>MS 355</td>
<td>Complex Analysis</td>
<td>Staff</td>
<td>A study of the complex number system and its applications: differentiation and integration of complex-valued functions, the Cauchy integral theorem and formula, Taylor and Laurent series, singularities and residues, conformal mappings.</td>
<td>MS 252 or permission of instructor</td>
<td>Three</td>
</tr>
<tr>
<td>MS 361</td>
<td>Numerical Analysis</td>
<td>Estes, Rogers</td>
<td>A study of the theory and application of computational algorithms for interpolation, equation solving, matrix methods, integration; error analysis.</td>
<td>MS 350 and CS 160</td>
<td>Three</td>
</tr>
</tbody>
</table>
MS 362 Probability and Statistics I
Probability laws, random variables and distributions, correlation, regression, estimation and hypothesis testing. Prerequisite: MS 252.
Three credit hours

MS 363 Probability and Statistics II
Continuation of MS 362. Sampling, hypothesis testing; non-parametric methods, analysis of variance, decision theory, topics in random processes. Prerequisite: MS 362.
Three credit hours

MS 366 Linear Programming
A study of matrix algebra applied to the problem of optimizing a linear function subject to linear inequality constraints, utilizing the simplex procedure. Prerequisite: MS 290.
Three credit hours

MS 370 College Geometry
Selected topics from Euclidean geometry. Prerequisite: MS 290.
Three credit hours

MS 371 Projective Geometry
Synthetic and analytic projective geometry, including finite projective planes. Prerequisite: MS 290.
Three credit hours

MS 372 Non-Euclidean Geometry
A development of one or more of the non-Euclidean geometrics. Prerequisite: MS 290.
Three credit hours

MS 373 Differential Geometry
A first course in the metric differential geometry of curves and surfaces in Euclidean space. Prerequisite: MS 252.
Three credit hours

MS 375 Coordinate Geometry
The choice and role of coordinate systems in various geometries. Prerequisite: MS 140.
Three credit hours

MS 380 Linear Algebra
An introduction to the theory of vector spaces and linear transformations. Prerequisite: MS 290.
Three credit hours

MS 382 Abstract Algebra
Algebraic structures, such as groups, rings, integral domains, and fields. Prerequisite: MS 290.
Three credit hours

MS 390 History of Mathematics
The development of mathematics from ancient to modern times. Prerequisites: MS 152 and MS 290.
Three credit hours

MS 450 Partial Differential Equations
An introduction to the general properties of partial differential equations followed by solutions of specific equations. The techniques include eigenfunction, expansions, operational methods, and conformal mapping. Prerequisite: MS 350.
Three credit hours

MS 460 Mathematical Modeling
An introduction to the process of formulating problems in mathematical terms, solving the resulting mathematical model and interpreting and evaluating the solutions. Examples will be chosen primarily from the behavioral and biological sciences. Prerequisites: Multivariate calculus and some knowledge of basic probability and matrix algebra.
Three credit hours

MS 490 Topology
An introduction to fundamental concepts in topology, including topological spaces, mappings, convergence, separation and countability, compactness, connectedness, metrization, and other selected topics. Prerequisites: MS 252 and MS 290.
Three credit hours

MS 492 Graph Theory and Combinatorics
This course is designed to acquaint students with some fundamental concepts and results of graph theory and combinatorial mathematics. Applications will be made to the behavioral, managerial, and social sciences. Prerequisite: MS 290.

97
MS 495 Mathematical Problem Solving Techniques  
Estes  
Study of a variety of techniques used in the solution of verbal problems from algebra and calculus, geometric problems, non-verbal problems, and the use of analogies. Special emphasis will be given to Polya’s Method. Prerequisite: Calculus or the permission of the instructor.  
Three credit hours

MS 496 Problem Solving Research  
Estes  
Study of research concerning various approaches to problem solving in mathematics with emphasis on research. Study of research designs and construction of a design for a research project. Prerequisites: MS 495 and Statistics or permission of the instructor.  
Three credit hours

MS 497 Independent Study in Mathematics  
Staff  
An opportunity for juniors and seniors who have demonstrated critical and analytical capability to pursue a project independently, charting a course and exploring an area of interest within their major field. Prerequisite: junior or senior standing, and consent of the Department.  
One to three credit hours

MS 498 Topics  
Staff  
Selected topics in advanced mathematics. Prerequisite: permission of instructor.  
Three credit hours

MATHEMATICS EDUCATION

MSED 345 Teaching Mathematics in the Secondary School  
Moulton  
Critical study of programs and techniques for teaching and learning mathematics in grades 7-12 for the slow, average and advanced pupil. Prerequisite: junior or senior standing.  
Three credit hours
Music

Professors Bowder, H. Brown (Chairman), Chamberland; Associate Professor Puopolo; Assistant Professors R. Cole, Heel. Part Time Instructors Aldrich, Barker, Bennett, Garland, Schwartz, Tainter, Trefry.

APPLIED MUSIC INSTRUCTORS

Piano: Donna Aldrich
           Majorie Arnold
           Nina Bailey
           Nayedne Bowder
           Thomas Bucci
           Ronald Cole
           Ocy Downs
           Robert Glover
           Elizabeth Volstad
           Richard Roberts

Voice: Harold Brown
          Gerard Chamberland
          Jeannette Chamberland
          Frank Hoffmeister
          Stewart Shuster
          Johanna von Tiling

Organ: Malcolm Cass
          John Fay
          Douglas Rafter
          George Whitney

Violin: Rebecca Garland
          Stephen Kecskemethy
          Ronald Lantz

            Viola: Julia Mosely
            Cello: Katherine Graffam
            Bass: Katherine Graffam
            Flute: Harold Brown
            Frances Drinker

            Oboe: Roberta Barker
            Clarinet: Burchard Tainter
            Saxophone: Burchard Tainter
            Robert Rabassa

            Bassoon: Donald Curry
            Trumpet: Calvin Torrey
            French Horn: James Bennett
            Robert Miller
            Katherine Schmidt

            Trombone: James Bennett
            Donald Doane

            Tuba: James Bennett
            Percussion: George Bookataub
            Donna Trefry

            Harp: Deidre Carr
            Classical Guitar: Robert Sullivan

The Department of Music offers a number of music groups open to all students, a number of courses primarily for non-majors, and concentrated study in the areas of music history, music theory, performance, and music education. Students majoring in music may earn a baccalaureate degree either in Education (Bachelor of Science in Music Education) or in Arts and Sciences (Bachelor of Arts in Music). In addition, a minor in music is offered for students majoring in Elementary Education.

Students other than music majors or minors will be accommodated for applied music lessons if teacher time is available, but will be subject to a fee. Most teachers charge $60.00 for one credit or $120.00 for two credits. Certain other teachers demand a higher fee; any interested student should make inquiry at the Music Department office. This fee must be paid before lessons commence.

Audition Required

Admission criteria for degree programs in music, major and minor, will be based on the following elements:

A. The applicant's high school record, including recommendations, College Board and SAT scores.

B. An audition, including performance on the applicant's major instrument, and aural comprehension, rhythmic recitation, and sight singing tests which are administered to each applicant individually by a member of the theory staff.

C. A written standardized musical achievement test.

D. A standardized test of musical aptitude.
Advanced Standing

Students who desire to apply for advanced standing in music curricula should apply to the chairman of the department for a special examination.

CURRICULUM FOR MUSIC EDUCATION MAJORS

Special Requirements

All students are reminded that, in addition to meeting departmental requirements for a major leading to a baccalaureate degree, they must also meet the requirements of the school or college involved, as well as the University's General Education Requirements and the Physical Education Requirements. These general requirements are printed inside the front cover of this catalog. In addition to the General Education Requirements, Music Education majors will be required to take (a) a three-credit course in Educational Psychology and (b) Modern Philosophies of Education.

In addition to the regular curriculum, all music education majors will meet the following requirements:

1. Participation in at least two recitals a year, and presentation of a solo recital in the senior year (or junior year with special permission).
2. Fulfillment of minimum requirements in both voice and piano, regardless of major instrument.
3. Participation in at least two music organizations each semester. Where possible, a student will participate in both a vocal and instrumental ensemble.
4. Successful completion of seven semesters of major applied lessons.
5. Successful completion of recital class in each semester when registered for major applied lessons.

Piano Proficiency Requirement

Each student must successfully complete the piano proficiency requirement before the semester of student teaching. The student must enroll in applied piano each semester until the requirement is met. If the piano proficiency has not been met at the end of four semesters, the student will continue applied piano for no credit and at the student's own expense.

New students who feel prepared to meet the requirement may schedule an exam during the orientation period. Thereafter, exams will be offered at the end of each semester and may be taken whenever the student and the applied teacher feel that the student is qualified.

Requirements for the piano proficiency exam are as follows:

1. Be prepared to play all major and minor scales (2 octaves, hands together).
2. Play a prepared piece of the student's choice of at least the difficulty of a Sonatina by Clementi or Kuhlau.
3. Offer evidence of study of a representative selection of piano literature.
4. Sight read:
   a. Melody with chord symbols.
   b. Hymn style composition.

Voice Proficiency Requirement

Each student shall be required to successfully complete a voice proficiency requirement. Details of this requirement will be available in the Fall of 1974.

Professional Education

All Music Education majors are required to take the following professional education courses:

EDU 324  Student Teaching (12 credits)
EDU 350  Modern Philosophies of Ed. (3 credits)
EDPY  Any EDPY course (3 credits)
In addition to the basic 18 credit hours in professional education, Music Education majors will complete the following:

MUED 220  Woodwind Class
MUED 221  Brass Class
MUED 222  Percussion Class
MUED 320 and 321  String Class
MUED 322 and 323  Music Education Methods
MUED 420  Music Administration and Supervision

Student teaching is the culmination of a comprehensive pre-professional, required sequence of activities which includes the following:

1. One day of directed observation of music education in cooperating schools in surrounding areas. Freshman music education students are accompanied by Senior music student teachers.
2. Five hours of assisting classroom teachers in music during the Sophomore year. Music education students serve in a capacity similar to teacher aides.
3. Elementary and secondary methods courses during Junior year wherein students observe, plan, and teach using actual classroom situations.
4. Student-teaching in Senior year which encompasses both elementary and secondary as well as instrumental and vocal areas.

Area Specialization

The music content program consists of the following courses:

MUS 120, 121, 220, 221  History of Music
MUS 130, 131, 230, 231  Theory
MUS 140, 141, 240, 241, 340, 341, 440, 441  Solfeggio
MUS 142, 143, 242, 243, 342, 343, 442, 443  Instrumental and Vocal Conducting Ensembles
MUS 150, 151, 250, 251, 350, 351, 450, 451  Recital Class
MUS 344  Applied Music
MUS 345  Instrumental Conducting
MUS 420  Vocal Conducting
MUS 420  Orchestration

MUSIC EDUCATION CURRICULUM

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 120 and 121  History of Music I and II</td>
<td>6</td>
</tr>
<tr>
<td>MUS 130 and 131  Theory I and II</td>
<td>6</td>
</tr>
<tr>
<td>MUS 140 and 133  Solfeggio I and II</td>
<td>2</td>
</tr>
<tr>
<td>MUS 140 and 141  Instrumental and Vocal Conducting Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUS 142 and 143  Recital Class</td>
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</tr>
<tr>
<td>MUS 150 and 151  Applied Music</td>
<td>6</td>
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<tr>
<td>General Education Requirements</td>
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<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Sophomore Year</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 220 and 221  History of Music III and IV</td>
<td>6</td>
</tr>
<tr>
<td>MUS 230 and 231  Theory III and IV</td>
<td>6</td>
</tr>
<tr>
<td>MUS 240 and 241  Solfeggio III and IV</td>
<td>2</td>
</tr>
<tr>
<td>MUS 240 and 243  Instrumental and Vocal Conducting Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUS 242 and 243  Recital Class</td>
<td>1</td>
</tr>
<tr>
<td>MUS 250 and 251  Applied Music</td>
<td>6</td>
</tr>
<tr>
<td>MUED 220  Woodwind Class</td>
<td>2</td>
</tr>
<tr>
<td>MUED 221  Brass Class</td>
<td>2</td>
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<tr>
<td>MUED 222  Percussion Class</td>
<td>1</td>
</tr>
<tr>
<td>Ensembles</td>
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<tr>
<td>General Education Requirements</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>35</strong></td>
</tr>
</tbody>
</table>
The Music Education Curriculum requires a total of 137 hours.

CURRICULUM FOR BACHELOR OF ARTS IN MUSIC

The Bachelor of Arts degree with a major in Music is designed to provide the opportunity for a scholarly study of music to meet the needs of those who wish to obtain a liberal education with an emphasis on music, and those who plan to do graduate work in music. The aim of the program is to instill a thorough understanding of the various aspects of music and their relationship to contemporary society. Sufficient flexibility is built into the program to allow the individual student to establish areas of emphasis both in music and in the arts and sciences.

UMPG General Education Requirement

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>History of Music, I, II, III, IV</td>
<td>12</td>
</tr>
<tr>
<td>Theory I, II, III, IV</td>
<td>12</td>
</tr>
<tr>
<td>Solfeggio I, II</td>
<td>2</td>
</tr>
<tr>
<td>Seminar in Music History</td>
<td>3</td>
</tr>
<tr>
<td>Form and Analysis I, II</td>
<td>4</td>
</tr>
<tr>
<td>Counterpoint</td>
<td>2</td>
</tr>
<tr>
<td>Applied Music</td>
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<tr>
<td>Ensembles</td>
<td>4</td>
</tr>
<tr>
<td>Music Electives</td>
<td>9</td>
</tr>
</tbody>
</table>

The Bachelor of Arts in Music Curriculum requires a total of 124 hours: 124

Retention in the program will be based on all University requirements plus maintenance of a grade point average of 2.5 in music subjects.
CURRICULUM FOR A MINOR IN MUSIC EDUCATION

The Minor in Music Education program is designed to provide an opportunity for candidates for the degree of Bachelor of Science in Elementary Education who demonstrate interest and ability to continue music studies beyond the high school level and to equip them to successfully implement in their classrooms the planned programs recommended by Music Supervisors.

The Minor in Music Education is comprised of the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 100</td>
<td>Music History and Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>MUS 130, 131</td>
<td>Theory I and II</td>
<td>6</td>
</tr>
<tr>
<td>MUS 132, 133</td>
<td>Solfeggio I and II</td>
<td>2</td>
</tr>
<tr>
<td>MUED 200</td>
<td>Music for the Classroom Teacher</td>
<td>3</td>
</tr>
<tr>
<td>MUED 322</td>
<td>Elementary Music Methods and Materials</td>
<td>3</td>
</tr>
<tr>
<td>MUS 150, 151</td>
<td>Applied Music</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Ensembles</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>24</td>
</tr>
</tbody>
</table>

The Minor in Music Education Program requires a total of 24 hours.

COURSE DESCRIPTIONS

Music Courses Primarily for Non-Majors

MUS 100 Music Appreciation and History  
A survey of music from the Gregorian Chant to the modern times, covering musical practices of the Renaissance, Baroque, Classical, Romantic, and Contemporary periods. Representative works by the outstanding composers of each period. Open to all students.

MUS 110 Fundamentals of Music  
A background study of concepts and skills essential to an intelligent reading of music. The development of natural music abilities through participating in singing, rhythmic activities, and instrumental work. An appreciation of music through awareness of basic structures. Open to all students.

MUS 202 Music in America  
A survey of the important trends in music from Colonial days to the present. Emphasis will be placed on the role of the native American composer in the development of sacred music, concert music, jazz, musical comedy, and pop music.

MUS 203 Music in the Twentieth Century  
A study of trends in European and American music from the beginning of the century to the present with emphasis on the literature of the major composers.

MUS 211 Class Piano  
Practical class piano for the elementary teacher with little or no piano background. Course covers note reading, scales, accompaniment of simple songs, transposition, and sight reading. Open to all students.

Music Performance Groups Open to all Students

MUS 400 Chamber Orchestra  
Concert music, chamber music, and oratorio. Open to all students.

MUS 401 The Gorham Chorale  
A choral group of a hundred students from all departments; specializes in larger choral works with orchestral accompaniment; several campus performances and occasional tours.

MUS 402 University Concert Band  
Concert band for students with little or no prior band experience. Open to all students.

103
MUS 403  A Cappella Choir
Brown
A chorus of fifty members, open to all students by audition. At least one concert is presented on campus each semester, and usually several off campus. One-half credit hour

MUS 404  Brass Ensemble
Bowder
One-half credit hour

MUS 405  The Chamber Singers
Chamberland
A select group of twenty-five singers specializing in music from the Renaissance to the Contemporary. Extensive touring throughout the state. One-half credit hour

Music History and Theory

MUS 120  History of Music I
Staff
Medieval and Renaissance Periods: historical development and music practices from the Gregorian chant and early polyphony through the culmination of the madrigal in England. Musical examples of outstanding composers are played, analyzed, and discussed. Three credit hours

MUS 121  History of Music II
Staff
Baroque Period; continuation of MUS 120, from the establishment of opera in Italy and the rise of instrumental music, to the culmination of polyphony in the works of J. S. Bach. Three credit hours

MUS 130  Music Theory I
Bowder
Major and minor scales; intervals, triads, and chord connection; cadences; harmonization of soprano and bass lines utilizing primary triads. Three credit hours

MUS 131  Music Theory II
Bowder
Triads in first and second inversion; modulation; non-harmonic tones (passing, auxiliary, appoggiature, suspension, and anticipation); dominant seventh chord (root position inversion, regular and irregular resolutions). Three credit hours

MUS 132  Solfeggio I
Staff
A course in sight singing and ear training. Primarily for majors, but open to others with permission of the instructor. Two one-hour meetings per week. One credit hour

MUS 133  Solfeggio II
Staff
A continuation of MUS 132. One credit hour

MUS 220  History of Music III
Staff
Classical and Romantic periods; historical development and musical practices from the establishment of the sonata, string quartet, and symphony, through program music, music-drama, and the rise of nationalism in music. Representative works of outstanding composers are played, analyzed, and discussed. Three credit hours

MUS 221  History of Music IV
Staff
Contemporary Period; continuation of MUS 220, from Impressionism to recent tendencies. Melodic, harmonic, rhythmic, and structural features of the twentieth century American and European music and their relationship to tradition. Three credit hours

MUS 230  Music Theory III
Bowder
Diatonic seventh chords; modulation; expansion of non-harmonic tones; altered chords; Neapolitan sixth; augmented sixth chords; chromatic alterations; chorales and their harmonizations; composition in simple forms of the 18th and the 19th centuries. Three credit hours

MUS 231  Music Theory IV
Bowder
Contemporary techniques of composition; 20th century harmony, theory, and related studies. Three credit hours

MUS 232  Solfeggio III
Staff
An advanced course in sight singing and ear training. Two one-hour meetings per week. One credit hour

MUS 233  Solfeggio IV
Staff
A continuation of MUS 232. One credit hour
MUS 320 Seminar in Music History  
Cole  
A concentrated study of selected topics in Music History based on individual research.  
Prerequisites: History of Music, I, II, III, and IV.

MUS 330 Form and Analysis I  
Staff  
Study and analysis of music of the Classical, Romantic, and Contemporary periods with emphasis on homophonic forms and styles. Prerequisite: Theory II.  
Two credit hours

MUS 331 Form and Analysis II  
Staff  
Study and analysis of music of the Baroque and Contemporary periods with emphasis on contrapuntal forms and styles. Prerequisite: Theory II.  
Two credit hours

MUS 332 Counterpoint  
Bowder  
Tonal counterpoint. The process of invention and fugue as exemplified in the music of the Baroque era. Prerequisite: Theory III.  
Two credit hours

MUS 420 Orchestration  
Bowder  
A study of the nature of the various instruments. Practice in scoring for instrumental combinations, orchestra, and band.  
Three credit hours

MUS 460 Independent Study in Music  
Staff  
To provide juniors and seniors who have demonstrated critical and analytical capability an opportunity to pursue a project independently, charting a course and exploring an area of interest within their major field.  
One to three credit hours

Music Performance Courses

MUS 140 Instrumental Ensemble for Freshmen  
Staff  
Performance techniques on instruments of primary and/or secondary interest to each student. Principles of ensemble training are exemplified. The repertoire consists of selections from various periods and styles and is varied from year to year in order to cover a considerable range during the student's attendance. Restricted to freshmen.  
One-half credit hour

MUS 141 Vocal Ensemble for Freshmen  
Chamberland  
Emphasizing singing technique and interpretation and exploration of choral literature of various periods and styles. Principles of choral training are exemplified. The repertoire is varied from year to year so that the course covers a considerable range during a given student's attendance.  
One-half credit hour

MUS 142 Recital Class for Freshmen I  
Brown  
Performance in major field, stage deportment, and evaluation of performances. Restricted to freshmen.  
One-half credit hour

MUS 143 Recital Class for Freshmen II  
Brown  
A continuation of MUS 142.  
One-half credit hour

MUS 150 Applied Music for Freshmen I  
Staff  
May be taken in piano, voice, organ or any orchestra or band instrument. Normally one hour lesson per week in the major performance area (2 credits) and one half-hour lesson per week in the minor performance area (1 credit) in fulfillment of applied music requirements. Restricted to freshmen.  
One to five credit hours

MUS 151 Applied Music for Freshmen II  
Staff  
A continuation of MUS 150.  
One to five credit hours

MUS 240 Instrumental Ensemble for Sophomores  
Staff  
Performance techniques on instruments of primary and/or secondary interest to each student. Principles of ensemble training are exemplified. The repertoire consists of selections from various periods and styles and is varied from year to year in order to cover a considerable range during the student's attendance. Restricted to sophomores.  
One-half credit hour

MUS 241 Vocal Ensemble for Sophomores  
Chamberland  
Emphasizing singing technique and interpretation and an exploration of choral literature of various periods and styles. Principles of choral training are exemplified. The repertoire is varied from year to year so that the course covers a considerable range during a given student's attendance.  
One-half credit hour
MUS 242 Recital Class for Sophomores I
\hspace{1cm} Performance in major field, stage deportment, and evaluation of performances. Restricted to sophomores.
\hspace{1cm} Brown
\hspace{1cm} One-half credit hour

MUS 243 Recital Class for Sophomores II
\hspace{1cm} A continuation of MUS 242.
\hspace{1cm} Brown
\hspace{1cm} One-half credit hour

MUS 250 Applied Music for Sophomores I
\hspace{1cm} May be taken in piano, voice, organ or any orchestra or band instrument. Normally one hour lesson per week in the major performance area (2 credits) and one half-hour lesson per week in the minor performing area (1 credit), in fulfillment of applied music requirements. Restricted to Sophomores.
\hspace{1cm} Staff
\hspace{1cm} One to five credit hours

MUS 251 Applied Music for Sophomores II
\hspace{1cm} A continuation of MUS 250.
\hspace{1cm} Staff
\hspace{1cm} One to five credit hours

MUS 340 Instrumental Ensemble for Juniors
\hspace{1cm} Performance techniques on instruments of primary and/or secondary interest to each student. Principles of ensemble training are exemplified. The repertoire consists of selections from various periods and styles and is varied from year to year in order to cover a considerable range during the student's attendance. Restricted to juniors.
\hspace{1cm} Staff
\hspace{1cm} One-half credit hour

MUS 341 Vocal Ensemble for Juniors
\hspace{1cm} Emphasizing singing technique and interpretation and an exploration of choral literature of various periods and styles. Principles of choral training are exemplified. The repertoire is varied from year to year so that the course covers a considerable range during a given student's attendance.
\hspace{1cm} Chamberland
\hspace{1cm} One-half credit hour

MUS 342 Recital Class for Juniors I
\hspace{1cm} Performance in major field, stage deportment, and evaluation of performances. Restricted to juniors.
\hspace{1cm} Brown
\hspace{1cm} One-half credit hour

MUS 343 Recital Class for Juniors II
\hspace{1cm} A continuation of MUS 342.
\hspace{1cm} Brown
\hspace{1cm} One-half credit hour

MUS 344 Instrumental Conducting
\hspace{1cm} Practical conducting experiences; score reading, basic beat patterns, and interpretation.
\hspace{1cm} Staff
\hspace{1cm} Two credit hours

MUS 345 Vocal Conducting
\hspace{1cm} Organization, training, and directing of choruses and glee clubs in high schools and junior high schools. Study and practice in rehearsal techniques, problems of diction, and emphasis on repertoire and musical style.
\hspace{1cm} Chamberland
\hspace{1cm} Two credit hours

MUS 350 Applied Music for Juniors I
\hspace{1cm} May be taken in piano, voice, organ or any orchestra or band instrument. Normally one hour lesson per week in the major performing area (2 credits) and one half-hour lesson per week in the minor performing area (1 credit), in fulfillment of applied music requirements. Restricted to Juniors.
\hspace{1cm} Staff
\hspace{1cm} One to five credit hours

MUS 351 Applied Music for Juniors II
\hspace{1cm} A continuation of MUS 350.
\hspace{1cm} Staff
\hspace{1cm} One to five credit hours

MUS 440 Instrumental Ensemble for Seniors
\hspace{1cm} Performance techniques on instruments of primary and/or secondary interest to each student. Principles of ensemble training are exemplified. The repertoire consists of selections from various periods and styles and is varied from year to year in order to cover a considerable range during the student's attendance. Restricted to seniors.
\hspace{1cm} Staff
\hspace{1cm} One-half credit hour

MUS 441 Vocal Ensemble for Seniors
\hspace{1cm} Emphasizing singing technique and interpretation and an exploration of choral literature of various periods and styles. Principles of choral training are exemplified. The repertoire is varied from year to year so that the course covers a considerable range during a given student's attendance.
\hspace{1cm} Chamberland
\hspace{1cm} One-half credit hour

MUS 442 Recital Class for Seniors I
\hspace{1cm} Performance in major field, stage deportment, and evaluation of performances. Restricted to seniors.
\hspace{1cm} Brown
\hspace{1cm} One-half credit hour
MUS 443  Recital Class for Seniors II
A continuation of MUS 442.

MUS 450  Applied Music for Seniors I
May be taken in piano, voice, organ or any orchestra or band instrument. Normally one hour lesson per week in the major performing area (2 credits) and one half-hour lesson per week in the minor performing area (1 credit), in fulfillment of applied music requirements. Restricted to Seniors.

MUS 451  Applied Music for Seniors II
A continuation of either MUS 450 or MUS 351.

Music Education

MUED 200  Music for the Classroom Teacher
An activities course combining the study of music fundamentals with the teaching of music skills through sequential grade-to-grade development. This course has no prerequisites and is designed primarily for the non-music major. Three credit hours

MUED 220  Woodwind Class
Methods of teaching woodwind instruments; practical experience on various woodwinds; and elements of transposition. Two credit hours

MUED 221  Brass Class
Methods of teaching brass instruments including practical experience on the various instruments; elements of transposition. Three credit hours

MUED 222  Percussion Class
Practical experience on and methods of teaching percussion instruments. One credit hour

MUED 320  String Class — Violin
Class methods and materials in teaching violin. Fundamentals of violin, including bowing, tone production, intonation, and fingering techniques extended into third position. Two credit hours

MUED 321  String Class — Ensemble
String ensemble methods and materials for beginning strings. Fundamentals of violin, cello, and string bass. Rudiments of fingering, bowing, and tone production. Two credit hours

MUED 322  Elementary Music Methods and Materials
Study of methods and materials in present elementary school music education, including those of Kodaly and Orff. Three credit hours

MUED 323  Secondary Music Methods and Materials
Study of approved methods and materials of music education in junior and senior high schools. Continuation of MUED 322. Three credit hours

MUED 420  Music Administration and Supervision
Designed to present an integrated picture of philosophies of administration, and to resolve problems encountered in student teaching. Three credit hours
Philosophy

Professors MacLeod, (on sabbatical leave, Fall 1974), F. Schwanauer; Associate Professors Gavin (Chairman, on sabbatical leave, Spring 1975), Grange.

Courses in philosophy are designed primarily to provide students with sound principles of critical thinking, to help them acquire a knowledge of the development and problems of philosophic thought, and to lead them to formulate an intelligent view of the meaning and value of life in terms of their own experience.

The study of philosophy has traditionally been one which endeavors to give the broadest understanding possible of a true liberal education and has placed little emphasis on the vocational utility of such a study. However, students have found a philosophical background useful for all vocations.

The major in philosophy is designed to meet the following requirements: (1) Those who wish to derive the broadest liberal education through the study of philosophy, but have no professional interest in the field; (2) those who desire a broadly-based liberal education preparatory to graduate study in a field other than philosophy; for example: medicine, law, theology, or government; (3) those who, by reason of professional interest in philosophy, plan to do graduate work and teach in the field.

Each major in philosophy will arrange a program of courses in conference with the chairman. The program will be designed in terms of the student's interests, needs, vocational plans, and the year in which the student declares a major. The major will require 24 hours of courses beyond a PLY 100-level course.

Every major intending to pursue graduate study and teach in philosophy will be expected to take German or French through the intermediate level. German is preferred to French, although ideally both sets of courses should be taken.

In the senior year, the following are required: (1) A senior paper to be written in connection with participation in the Senior Tutorial. This paper should deal with material not previously studied, or should extend knowledge of a subject gained by attending courses. (2) A comprehensive oral examination based on the Senior Tutorial paper. (3) The Graduate Record Examination in philosophy, for those intending to go on to graduate school in philosophy.

Any introductory Philosophy course is a prerequisite to all other courses in philosophy.

COURSE DESCRIPTIONS

PLY 101 Introduction to Philosophy: Man and His Will  
Schwanauer  
Is there a human will at all? This course will concentrate on the issue of freedom vs. determinism. The importance of the human will insofar as it influences views of experience, politics, society, etc., will also be considered. Three credit hours

PLY 102 Introduction to Philosophy: The Myth of Certainty  
Gavin  
An examination of the supposed connection between technocracy, impartiality and objectivity. The history of philosophy will be utilized to trace the identification of true knowledge with certainty. Serious doubts will be raised as to whether this procedure is either feasible or beneficial to the human person. An analysis of twentieth century alternatives, including existentialism and pragmatism, will be undertaken. Three credit hours

PLY 103 Introduction to Philosophy: The Alienation of Man  
Grange  
Why does modern man picture himself as alienated from nature and his fellow man? How did the problem of alienation come about? What possibilities exist for overcoming it? This course will deal with these issues and attempt to suggest viable alternatives. Three credit hours
PLY 104 Introduction to Philosophy: Ways of Knowing  Mackensen
How much can we really know? Consideration will be given to some theories of knowledge and how they may be applied to science and human relations. The writings of some philosophers will be critically examined by way of illustration. Three credit hours

PLY 105 Introduction to Philosophy: Man and Morals  Pic'l
This discussion course, based on the theme of how one should live, is designed to actively engage the student in the critical examination and the justification of personal values within the context of possible alternative values suggested by Plato, Zen Buddhism, Kant, existentialism, and others. Three credit hours

PLY 200 Symbolic Logic  Schwonauer
Techniques of modern deductive logic; properties of formal systems; logical implications and paradoxes of language. Prerequisite: any PLY 100-level course. Three credit hours

PLY 210 Ethical Theories  Schwonauer
Critical evaluation of major ethical theories and systems. Extensive reading in original texts. Analysis of contemporary ethical issues. Prerequisite: any PLY 100-level course. Three credit hours

PLY 220 Aesthetics  Gavin
Inquiry into the question of whether aesthetic experience is intelligible, or emotional, or both; examination of various theories and interpretations, classic and contemporary. Prerequisite: any PLY 100-level course. Three credit hours

PLY 230 Philosophy of Religion  Staff
Analysis of the nature of religious experience, knowledge, and language. Special attention given to problems, classical and contemporary, exhibited in religious experience, and relevant to areas of common concern in the sciences, humanities, and philosophy. Prerequisite: any PLY 100-level course. Three credit hours

PLY 240 Political Philosophy  Staff
Critical evaluation of political philosophies, classical and contemporary; extensive reading in original texts; analysis of contemporary political issues. Prerequisite: any PLY 100-level course. Three credit hours

PLY 250 Philosophy of Science  Gavin
Nature of scientific explanation; relationship among facts, laws, and theories; clarification of methods and concepts in science, such as cause, determinism, teleology, theory, law, probability. Prerequisite: any PLY 100-level course. Three credit hours

PLY 290 Problems of Philosophy  Staff
Consideration of selected problems or systems of philosophical significance, including general problems of metaphysics, epistemology, axiology, specialized areas, etc. Prerequisite: any PLY 100-level course. Three credit hours

PLY 299 (see HIST 377)
This course meets the requirements for a major either in history or philosophy.

PLY 310 History of Ancient Philosophy  Gavin
Philosophic thought from the pre-Socrates to the late Hellenistic period, with major emphasis on Plato and Aristotle. Prerequisite: any PLY 100-level course. Three credit hours

PLY 320 History of Medieval Philosophy  Grange
The merger of the philosophic with the religious stream; ideas of Augustine, Thomas Aquinas, Duns Scotus, and others critically examined; determining cultural factors explored. Prerequisite: a PLY 100 course, PLY 310. Three credit hours

PLY 330 History of Early Modern Philosophy  Grange
Main currents of rationalism and empiricism are explored, as developed in major writings from Descartes to Hume. Prerequisite: Any PLY 100-level course. Three credit hours

PLY 340 History of Late Modern Philosophy  Schwonauer
Development of German idealism; emergence of social and scientific philosophies; contributions of Kant, Hegel, Schopenhauer, Nietzsche, Feuerbach, and others. Prerequisite: PLY 330. Three credit hours

109
PLY 350 American Philosophy
Gavin
History and background of the origin of philosophical ideas in America; particular emphasis given to Peirce, James, Royce, Dewey, Whitehead. Prerequisite: any PLY 100-level course.
Three credit hours

PLY 360 Existentialism
Grange
An examination of the historical development and basic themes of existentialism as found in the writings of its major representatives: Kierkegaard, Nietzsche, Heidegger, Jaspers, Buber, Marcel, and others. Prerequisite: any PLY 100-level course.
Three credit hours

PLY 370 Linguistic Analysis
Schwanauer
A historical approach to twentieth century linguistic philosophy. This course will begin with logical atomism, continue through the era of logical positivism, and end with ordinary language analysis. Extensive reading of primary sources and major commentators.
Three credit hours

PLY 398 Independent Study
Staff
Independent study undertaken under the mentorship of a professor in the department. Prerequisite: A minimum of two (2) philosophy courses plus written permission of the instructor involved. Credit hours to be arranged

PLY 400, 401, 402 Seminar in Philosophy
Staff
These numbers are used to indicate seminar courses dealing with a specified topic or person in philosophy. Topics or individual philosophers will change from year to year and may or may not be repeated. The prerequisite for any 400 level seminar course is two 300 level courses in Philosophy, or permission of the instructor. In the Fall of 1974 the following seminar will be given: PLY 400 Seminar: Nietzsche. Possible topics for Spring 1975 include: PLY 401 Seminar: Hegel; PLY 402 Seminar: Phenomenology. Three credit hours

PLY 410 Senior Tutorial
Staff
Designed to furnish senior philosophy majors with extensive training, under tutorial supervision, in analysis of a philosophical problem or system or philosopher, with a view to producing and presenting a senior paper for oral defense. Prerequisites: senior standing, advanced standing as a philosophy major, and permission of the department. Credit hours to be arranged
Physical Sciences and Engineering

Professors A. Smith, Sottery, M. Whitten; Associate Professors Armentrout (Chairman), Ayers, Grass, Hare, Hopkinson, Miller, Walkling; Assistant Professors Novak, Pendleton.

Courses offered by the Department of Physical Sciences and Engineering are grouped under the following headings:

- **ASTRONOMY**
- **CHEMISTRY**
- **EARTH SCIENCE** (including Meteorology, and Oceanography)
- **ENGINEERING**
- **GEOLOGY**
- **PHYSICAL SCIENCE**
- **PHYSICS**

A degree program in Earth Science is offered in the College of Arts and Sciences.

C.A.S. students who ultimately desire to major in Chemistry, Geology, Engineering, or Physics, can complete the first two years of work here and finish the third and fourth years at the Orono campus of the University of Maine.

A Science Area Major in Secondary Education, including a selection of both biological and physical sciences is coordinated by this department.

An Earth Science Area Major in Secondary Education is coordinated by the department also.

Students in the Kindergarten-Primary or Elementary programs of the School of Education may obtain an academic major requiring 30 credit hours of approved biological and physical science courses in the Science Area, but the Science Area Minor of 18 credit hours is more commonly selected by such students. The latter program is outlined below, immediately after the outline for the Secondary Education major program.

All students are reminded that, in addition to the necessity of meeting departmental requirements for a major leading to a baccalaureate degree, they must also meet the requirements of the school or college involved, as well as the University's General Education Requirements. These general requirements are printed inside the front cover of this catalog.

**THE EARTH SCIENCE MAJOR IN ARTS AND SCIENCES**

A four-year program is offered in Earth Science as a major in the College of Arts and Sciences. This program is designed to give Arts and Sciences students a working knowledge of the fundamental principles of the Earth Science disciplines. The Earth Science Major requires the completion of a minimum of 68 credit hours in addition to the University's General Requirements.

**REQUIRED COURSES FOR ALL EARTH SCIENCE MAJORS IN THE COLLEGE OF ARTS AND SCIENCES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 111</td>
<td>Physical Geology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 112</td>
<td>Historical Geology</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 111-112</td>
<td>General Chemistry or</td>
<td>8-10</td>
</tr>
<tr>
<td>CHEM 113-114</td>
<td>Chemical Principles</td>
<td>8-10</td>
</tr>
<tr>
<td>PHYS 111-112</td>
<td>Elements of Physics or</td>
<td>8-10</td>
</tr>
<tr>
<td>PHYS 121-122</td>
<td>General Physics</td>
<td>8-10</td>
</tr>
<tr>
<td>ASTR 100</td>
<td>Astronomy</td>
<td>3</td>
</tr>
<tr>
<td>MET 100</td>
<td>Meteorology</td>
<td>3</td>
</tr>
<tr>
<td>OCN 100</td>
<td>Oceanography</td>
<td>3</td>
</tr>
</tbody>
</table>

A minimum of 6 credits of Mathematics selected from: MS 120, 140, 152 or courses with second digits higher than 5.

37-41
Of the following courses, 31-33 credits are required: (Each major must take a minimum of 15 credits of 200 and 9 credits of 300 level courses. PSCI 498, Independent Study (1-3 credits) is required of all majors).

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 210</td>
<td>Observational Astronomy</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 151</td>
<td>Environmental Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>ESCI 200</td>
<td>Environmetal Science</td>
<td>3</td>
</tr>
<tr>
<td>ESCI 201</td>
<td>Conservation</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 114</td>
<td>Environmental Geology</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 201</td>
<td>Structural Geology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 203</td>
<td>Mineralogy</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 205</td>
<td>Geological Oceanography</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOL 301</td>
<td>Geomorphology (also GEOG 301)</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 302</td>
<td>Sedimentology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 310</td>
<td>Glacial and Pleistocene</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 310</td>
<td>Glacial and Pleistocene Geology</td>
<td>3</td>
</tr>
<tr>
<td>PSCI 310</td>
<td>History of Science</td>
<td>3</td>
</tr>
<tr>
<td>PSCI 498</td>
<td>Independent Study</td>
<td>1-3</td>
</tr>
</tbody>
</table>

Earth Science majors intending to pursue graduate work are urged to determine graduate school foreign language requirements. Students are also encouraged to consider concentrations in allied areas such as Biology, Chemistry, Computer Science, Economics, Geography, and Statistics if their interests are in the wider aspects of environmental science.

**REQUIREMENTS FOR A SCIENCE AREA MAJOR IN SECONDARY EDUCATION**

The Science Area Major in Secondary Education requires completion of a minimum of 50 credit hours and provides for a broad preparation in several fields. This major is intended primarily for those students planning to teach in grades seven through nine. Completion of this program and required courses in education, including those needed to meet the University's General Requirements, enables one to receive the State of Maine Secondary Science Area Certificate.

**Freshman Year**

Chemistry or Physics. Freshmen should take one of the following eight or ten credit sequences. At the end of the Sophomore year, the student should have at least eight hours of Physics and at least eight hours of Chemistry.

**CHEM** 111 and 112 General Chemistry 8
or
**CHEM** 113 and 114 Chemical Principles 10
or
**PHYS** 111 and 112 Elements of Physics 8
or
**PHYS** 121 and 122 General Physics 10

It is recommended that the six hour General Education Mathematics-Science requirement be met by taking six hours of Mathematics.

**Sophomore Year**

**BIO** 101 and 102 Biological Principles (3 credits) plus Biological Experiences (1 credit) to be taken together 4

**Freshman, Sophomore, Junior, or Senior Years**

**Group A — 12 Credit Hours Required**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 111</td>
<td>Physical Geology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 112</td>
<td>Historical Geology</td>
<td>3</td>
</tr>
<tr>
<td>ASTR 100</td>
<td>Astronomy</td>
<td>3</td>
</tr>
<tr>
<td>MET 100</td>
<td>Meteorology</td>
<td>3</td>
</tr>
</tbody>
</table>
Group B — 8 Credit Hours Required

BIO 215 and 216 Vascular Botany (3 credits) plus Vascular
Field Botany (1 credit) to be taken together 4
or
BIO 225 and 226 Non-vascular Botany (3 credits) plus Non-vascular Field
Botany (1 credit) to be taken together 4
BIO 209 and 210 Vertebrate Zoology 3
or
BIO 351 and 352 Invertebrate Zoology (3 credits) plus Survey of
Invertebrates (1 credit) to be taken together 4
Or other course(s) in Biology acceptable to the adviser 4

Group C — 3 Credit Hours Required

ESCI 202 Conservation 3
PSCI 310 History of Science 3
BIO 251 History of Biology 3

Electives

To complete the required 50 hours for the major, the student may choose from previously listed courses which have not been taken before and from the following electives:

ASTR 210 Observational Astronomy 3
BIO 103 and 104 Biological Diversity (3 credits) plus Survey of Animals
and Plants (1 credit) to be taken together 4
BIO 111 and 112 Human Anatomy and Physiology (3 credits)
plus Practical Anatomy and Physiology (1 credit)
to be taken together 4
BIO 201 Principles of Genetics 3
BIO 205 Evolution 3
BIO 292 Ornithology 2
BIO 311 and 312 Microbiology (3 credits) plus Microbiological
Laboratory (2 credits) to be taken together 5
BIO 331 and 332 Ecological Principles (2 credits) plus Field Ecology
(1 credit) to be taken together 3
BIO 372 Biological Techniques 2
BIO 381 and 382 Ichthyology (2 credits) plus Field Ichthyology
(2 credits) to be taken together 4
BIO 461 Cell Mechanisms 3
BIO 481 Cellular Biology 3
CHEM 151 Environmental Chemistry 3
CHEM 201 Organic Chemistry 4
CHEM 202 Introduction to Biochemistry 4
CHEM 251 and 261 Organic Chemistry (3 credits) plus Organic Chemistry
Laboratory (2 credits) to be taken together 5
CHEM 252 and 262 Organic Chemistry II 5
ESCI 200 Environmental Science 3
ESCI 201 Natural Science 3
GEOL 114 Environmental Geology 4
GEOL 201 Structural Geology 3
GEOL 203 Mineralogy 3
GEOL 205 or
OCN 205 Geological Oceanography 3
GEOL 301 Geomorphology (also GEOG 301) 3
OCN 100 Oceanography 3
PHYS 210 Introductory Modern Physics 4
PHYS 221 and 222 Intermediate Physics 8
PHYS 390 Independent Physics Laboratory 3

NOTE: In addition to the 50 hours of course work selected above, EDU 318, Teaching Science in the Secondary School, is required of all Science Area Majors in Secondary Education.
REQUIREMENTS FOR A SCIENCE AREA MINOR AND MAJOR
FOR STUDENTS IN THE KINDERGARTEN-PRIMARY
OR ELEMENTARY EDUCATION PROGRAMS

A Science Area Major or Minor consists of 30 hours or 18 hours respectively of courses elected from the following areas: Astronomy, Biology, Chemistry, Earth Science, Geology, Meteorology, Oceanography, Physics, Physical Science.

It is suggested that the students plan with their advisers a sequence of three introductory courses such as:

(1) PSCI 110 Elements of Physical Science
(2) ESCI 101 Earth Science
(3) BIO 101 Biological Principles

The additional courses should represent a variety of science areas and may be chosen from electives such as:

ASTR 100 Astronomy
ASTR 109 Intro to Astronomy
BIO 103 Biological Diversity
BIO 104 Survey of Animals and Plants
CHEM 101 Modern Chemistry I
CHEM 111 General Chemistry I
ESCI 200 Environmental Science
ESCI 202 Conservation
GEOL 111 Physical Geology
GEOL 112 Historical Geology
PSCI 310 History of Science
MET 100 Meteorology
OCN 100 Intro to Oceanography
PSCI 110 Elements of Physical Science
PHYS 100 Descriptive Physics

REQUIREMENTS FOR AN EARTH SCIENCE AREA
MAJOR IN SECONDARY EDUCATION

The Earth Science Area Major requires completion of a minimum of 50 credit hours. This major is intended primarily for those students planning to teach Earth Sciences in the ninth grade. Completion of this program, required courses in Education, and those needed to meet the University's General Requirements, enables one to receive the State Certification.

Suggested Earth Science Sequence For Secondary Education Majors

Freshman Year

GEOL 111 Physical Geology 3
or
GEOL 112 Historical Geology 3
Chemistry or Physics. Freshmen should take one of the following eight or ten credit sequences. At the end of the Sophomore year, the student should have eight to ten hours of Physics and eight to ten hours of Chemistry.

CHEM 111 and 112 General Chemistry 8
or
CHEM 113 and 114 Chemical Principles 8

and

PHYS 111 and 112 Elements of Physics 8
PHYS 121 and 122 General Physics 8

It is recommended that the six hour General Education Mathematics-Science requirement be met by taking six hours of Mathematics.
Sophomore Year

GEOL 203  Mineralogy  3
Chemistry or Physics, whichever subject has not been
taken in the Freshman year  8
Science Area Major Elective (List A)  3

Junior Year and Senior Year

Science Area Major Electives, (List A)  6
Science Area Major Electives, (List B)  16

List A (9 Hours Required)
ASTR 100  Astronomy  3
MET 100  Meteorology  3
OCN 100  Oceanography  3

List B (12-16 Hours Required)
ASTR 210  Observational Astronomy  3
CHEM 151  Environmental Chemistry  3
ESCI 200  Environmental Science  3
ESCI 201  Conservation  3
ESCI 390  Independent Study  1-3
GEOL 114  Environmental Geology  4
GEOL 201  Structural Geology  3
GEOL 205 or OCN 205  Geological Oceanography  3
GEOL 301  Geomorphology (also GEOG 301)  3
GEOL 302  Sedimentology  3
GEOL 310  Glacial and Pleistocene Geology  3
OCN 310  Applied Marine Service  4
PSCI 310  History of Science  3

NOTE: EDU 318 — Teaching Science in the Secondary School does not count in the
required 50 hours.
Astronomy

COURSES IN ASTRONOMY

ASTR 100  Astronony
A descriptive survey of modern astronomy. Topics include theories about the origin and development of the universe, stellar evolution, the solar system, galaxies, observational methods and recent discoveries. Planetarium sessions and optional evening observations with telescopes are included. No prerequisites. Offered Fall and Spring Semester.

Three credit hours

ASTR 210  Observational Astronomy
Star charts, atlases, binoculars, and telescopes are used to make observations of constellations, sun spot activity, the moon, the planets and their satellites, star clusters, nebulae, double and variable stars. Prerequisite: ASTR 100 or equivalent. Offered every fall.

Three credit hours

Chemistry

The field of Chemistry is concerned with the structure of matter and its transformations. The Chemistry curriculum is intended to prepare the student eventually to be a professional chemist. In order to accomplish this purpose the program must have sufficient breadth so that the graduate will be able to go into Chemistry fields, medicine, allied health areas, research, teaching, or graduate study.

Although at present this University does not offer a four-year major program in Chemistry, a four-year major in Applied Chemistry is currently being designed for the near future. In addition, courses in analytical and physical chemistry will be available upon the completion of the new science building on the Portland campus.

Students at present who wish to enter a standard chemistry major program should consult with the Department Chairman and plan to transfer into the Chemistry program at the Orono branch of the University in their junior or senior years.

Since chemistry is fundamental to so many areas, the Department intends to offer a wide choice of electives so that such students with interest in the fields of mathematics, physics, ecology, health, geology, or biological chemistry may have special programs tailored to help them attain their educational goals. A variety of career opportunities in the industrial field are open to students with a background in chemistry or who have completed a chemistry major. Some examples are process development, production, quality control, and sales. The opportunities to engage in research and college-level teaching are generally available only to the student who has pursued successful graduate study.

Instruction in chemistry is given by lectures, recitations, and supervised laboratory work which is an indispensable part of the training of professional chemists. While much laboratory work is individual in nature, students are encouraged to consult with one another regarding observations and conclusions.
C.A.I. Facility

Using the statewide university computing system, the Department of Physical Sciences has implemented an extensive facility of Computer Assisted Instruction modules for providing remedial assistance to students in freshman chemistry courses. These C.A.I. modules provide individualized and self-paced tutorial, drill and practice assistance to any student who wishes it. Interactive typewriter-like computer terminals located on both the Portland and Gorham campuses provide ready access to the computing facility; a knowledge of typing is not necessary, since most student responses consist of only a few letters and/or numbers. Further information, including a CAI User's Guide, is available from any CAPS (Computing and Data Processing Services) office or from Dr. Alan G. Smith of the Physical Sciences & Engineering Department.

COURSES IN CHEMISTRY

CHEM 101 Chemistry for Health Sciences I
An introduction to the following topics: measurement; matter and energy; elements and compounds; chemical formulas, equations, and reactions; atomic structure and chemical bonding; states of matter; solutions; chemical (including ionic) equilibrium; acids and bases; pH; organic chemistry; elementary biochemistry. (Recommended primarily for students of Nursing and the Allied Health Sciences. Is not recommended for Biology majors). Prerequisite: A previous study of Chemistry, though not required, will definitely be helpful. Lect. 3 hours, Rec. 1 hour, Lab 2 hours. Four credit hours

CHEM 102 Chemistry for Health Sciences II
A continuation of the studies initiated in CHEM 101. Recommended as a prerequisite for CHEM 201. Prerequisite: CHEM 101. Lect. 3 hours, Rec. 1 hour, Lab. 2 hours. Four credit hours

CHEM 111 General Chemistry I
A study of selected fundamental concepts and theories of chemistry. Atomic structure, periodic classification, chemical bonding, molecular structure, chemical reactions, and equilibria are discussed. Four credit hours

CHEM 112 General Chemistry II
A continuation of the topics presented in CHEM 111. Prerequisite: CHEM 111. Four credit hours

CHEM 113 Chemical Principles I
An intensive examination of modern chemistry, comprising structural theory (atomic and molecular levels), stoichiometry, chemical kinetics and equilibrium, colligative properties, elementary thermodynamics, ionic equilibria, and electrochemistry. A sound preparation in mathematics (logarithms, exponents, linear and quadratic equations) is essential for mastery of this course. The laboratory work includes qualitative and quantitative experiments in tended to illustrate lecture presentations. Recommended for students who plan further study in physical sciences or engineering. Prerequisite: At least three years of high school mathematics, and high school chemistry, or equivalent. Prior or concurrent registration in MS 152, or equivalent experience. Five credit hours

CHEM 114 Chemical Principles II
A continuation of the topics presented in CHEM 113. Prerequisite: CHEM 113. Five credit hours

CHEM 151 Environmental Chemistry
The role of chemistry and the chemical industry in creating many environmental problems; the application of chemistry to aid in the solution of environmental problems. Prerequisite: one semester of an introductory college-level chemistry course or one year of high school chemistry completed within the last three years. Three credit hours
CHEM 201  Brief Organic Chemistry

A brief introduction to nomenclature and reactions of those functional groups of organic compounds which are important to life systems. Models are employed to enhance the student's comprehension of molecular shapes and conformations and the laboratory work includes training in some of the basic techniques of chromatography and spectroscopic methods. Recommended as a prerequisite for CHEM 202. Prerequisite: a C grade or better in CHEM 102 or 112 or 114. Rec. 3 hours, Lab. 2 hours. Four credit hours

CHEM 202  Biochemistry

Chemistry of biologically important molecules, including carbohydrates, proteins, lipids, and nucleic acids, and the principles of the main metabolic pathways in living systems. Prerequisites: A grade of C or better in CHEM 201 or CHEM 252, and BIO 101 and 103 or with instructor's permission. Four credit hours

CHEM 251  Organic Chemistry I

A survey of the chemistry of carbon compounds, with extensive use of modern theories of structure and reaction mechanisms. Considerable emphasis will be placed on nomenclature; on the use of spectroscopic methods for structure determination, and on molecular geometry. Required for chemistry majors; recommended for premedical and predental students, and for majors in the biological sciences who will require subsequent course work in biochemistry. Prerequisites: a grade of C or better in CHEM 114 or 112 or 102. Three credit hours

CHEM 252  Organic Chemistry II

A continuation of the topics considered in CHEM 251. Prerequisite: CHEM 251. Three credit hours

CHEM 261  Organic Chemistry Laboratory I

An initiation to modern laboratory techniques used for the synthesis and study of organic compounds. The laboratory exercises introduce common syntheses, chemical spectroscopy, chromatographic methods, simple reaction kinetics, and organic qualitative analysis. Prerequisite: credit or concurrent registration in CHEM 251. Two credit hours

CHEM 262  Organic Chemistry Laboratory II

A continuation of the studies initiated in CHEM 261. Prerequisites: credit or concurrent registration in CHEM 252 and grade of C or better in CHEM 261. Two credit hours
Earth Science
COURSES IN EARTH SCIENCE

ESCI 200 Environmental Science
Miller
A study of basic relationships of plants, animals, and men to their physical and biotic environment. This includes a study of biomes, habitats, and communities interpreted in varying stages of succession or stratification as influenced by the limiting factors of their environment. Some emphasis is placed on species dynamics and population changes. Weekly field trips when weather permits. Two hours, lect., Two hours, lab. Each Semester.
Three credit hours

ESCI 201 Natural Science
Staff
A course primarily for teachers in the elementary school, it includes a variety of topics in the area of biology: insect metamorphosis, bird migration, fossil records, animal communities, plant communities, animal behavior, reproduction, survival foods, fungi and man, and related subjects. Emphasis is on obtaining an understanding and appreciation of the flora and fauna of New England. Three lectures.
Three credit hours

ESCI 202 Conservation
Miller
A study of man's use of the environment. Topics include the resources of mineral, soil, forests, water, air, wildlife, and man himself. Consideration is given to the issues and problems developing from the interaction of management of these resources. Weekly field trips when weather permits. Two hours, lecture, Two hours, lab. Spring Semester, each year.
Three credit hours

MET 100 Meteorology
Hare
A basic introduction to meteorological phenomena. The atmosphere; its characteristics, composition, and structure; cloud types; circulation of air; currents and winds; air masses. Analysis of weather reports, weather forecasting, and weather maps. Three hours, lecture, each semester.
Three credit hours

OCN 100 Introduction to Oceanography
Hare, Novak
Origin and extent of the oceans; nature of the sea bottom; causes and effects of currents and tides; chemical and physical properties of sea water; animal and plant life in the sea. Three hours, lecture. Each Semester.
Three credit hours

OCN 205 Geological Oceanography (also GEOL 205)
Novak
Shoreline erosion, transportation, and deposition; the origin and structure of the continental shelves and ocean basins. Coastal and oceanic processes; geomorphic development of the marine environment. Special emphasis on the evolution of the New England coast through examination of salt marshes, estuaries, and beaches. Prerequisite: Physical Geology or Oceanography or permission of the instructor. Three hours, lecture. Spring Semester, Odd years.
Three credit hours

OCN 310 Applied Marine Science
Staff
Applications of basic research techniques of the biological and physical sciences to the study of marine and estuarine ecosystems. Emphasis on field investigations of unspoiled and polluted coastal habitats (e.g. rocky shorelines, beaches, salt marshes, estuaries), their biological, physical and chemical components. Special considerations of man's impact on the coastal environment, contemporary problems of the Maine coast and alternatives to their solution. (Offered during summer session only) (Offered on P/F basis only.)
Four credit hours
Engineering

This University offers the first year of the program common to all Engineering majors, and the first and second years in Engineering Physics. These offerings are identical in all respects to corresponding programs at the University of Maine at Orono. Students who complete either one or two years here continue their studies at UMO.

ENGINEERING FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Subject</th>
<th>Fall Semester</th>
<th>Credit hours</th>
<th>Spring Semester</th>
<th>Credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 113</td>
<td>Chemical Princ.</td>
<td>5</td>
<td>CHEM 114</td>
<td>Chemical Princ.</td>
</tr>
<tr>
<td>GEE 101</td>
<td>Intro. to Eng. Design</td>
<td>2</td>
<td>GEE 102</td>
<td>Intro. to Eng. Design</td>
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<tr>
<td>GEE 105</td>
<td>Eng. Orientation</td>
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<td>GEE 106</td>
<td>Eng. Orientation</td>
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<tr>
<td>MS 152</td>
<td>Calculus A</td>
<td>4</td>
<td>MS 153</td>
<td>Calculus B</td>
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<tr>
<td>PHYS 121</td>
<td>General Physics</td>
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<td>PHYS 122</td>
<td>General Physics</td>
</tr>
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</table>

Total 17

ENGINEERING PHYSICS SOPHOMORE YEAR

<table>
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<tr>
<th>Subject</th>
<th>Fall Semester</th>
<th>Credit hours</th>
<th>Spring Semester</th>
<th>Credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEE 207</td>
<td>Computer Prog.</td>
<td>3</td>
<td>MEE 255</td>
<td>Statics and Strength</td>
</tr>
<tr>
<td>MEE 211</td>
<td>Humanities Elective</td>
<td>3</td>
<td>MS 330</td>
<td>Humanities Elective</td>
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<tr>
<td>MS 252</td>
<td>Calculus C</td>
<td>4</td>
<td>PHYS 210</td>
<td>Modern Physics</td>
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<tr>
<td>PHYS 221</td>
<td>Inter. Physics</td>
<td>4</td>
<td>PHYS 222</td>
<td>Inter. Physics</td>
</tr>
</tbody>
</table>

Total 17

COURSES IN ENGINEERING

GEE 101 Introduction to Engineering Design I

Principles of graphic science with illustrative exercises in multiview drawing using free-hand and instrumental techniques; lettering styles; charts and graphs. Two credit hours

GEE 102 Introduction of Engineering Design II

A continuation of GEE 101 which is prerequisite. Applications of graphic science with creative problems in descriptive geometry, pictorial drawing, engineering design, and mapping.

Two credit hours

GEE 105 Engineering Orientation I

A series of meetings involving lectures and discussions, with frequent use of audio-visual material to acquaint engineering freshmen with the nature of engineering and science.

One credit hour

GEE 106 Engineering Orientation II

A continuation of GEE 105.

One credit hour

GEE 207 Computer Programming

Numerical analysis and digital computer programming using FORTRAN. Theory and implementation of algorithms for zero-searching, solution of linear systems, interpolation, integration, differentiation and the solution of differential equations. Prerequisite: MS 252 (may be taken concurrently).

Three credit hours

MEE 211 Engineering Metallurgy

Methods of defining the microstructure of metals, phase diagrams, and mechanical properties. Thermal, mechanical, and chemical manipulation of microstructure. Prerequisites: Physics and Chemistry one year each.

Three credit hours
MEE 212 Thermal Engineering
Elementary thermodynamics, mechanical apparatus, power plant equipment; engineering calculations relative to heat, power, work, and mechanical and electrical energy. Prerequisites: Physics and Chemistry one year each. Three credit hours

MEE 252 Applied Mechanics, Dynamics
A study of motion of particles and rigid bodies; force, mass and acceleration; impulse and momentum, and simple harmonic motion. Prerequisites: MS 252 and MEE 255. Three credit hours

MEE 255 Statics and Strength of Materials
The basic principles of statics and their applications to strength of materials. Equilibrium of various systems including bridge trusses. Centroids and moments of inertia. Stresses and deformations of axially and transversely loaded members, connections, pressure vessels, shafts, beams, and columns. Prerequisites: MS 153 and PHYS 121. Three credit hours

ELE 201 Circuit Analysis I
Basic laws and theorems of electric circuits; solution of circuits represented by first and second order differential equations. Prerequisite: PHYS 122. (Not offered in 1974-75) Five credit hours

ELE 202 Circuit Analysis II
Phasor solution of a-c circuits and coupled circuits; balanced three-phase systems; introduction to complex frequency. Prerequisite: ELE 201. (Not offered in 1974-75) Three credit hours

ELE 209 Electrical Engineering Materials
A study of the principles of materials science with emphasis on electrical properties. Diffusion, oxidation, electrochemistry, energy bands, emission, thermal properties, conduction theory, semiconductor junctions, thermoelectricity, magnetic properties, dielectric properties, optical properties. (Not offered 1974-75) Three credit hours

ELE 212 Basic Electrical Laboratory
Use of techniques developed in ELE 201 and 202 for the analysis of circuits containing linear, non-linear, passive and active elements; includes analysis of simple electronic circuits and the use of the oscilloscope. Prerequisite: ELE 202 required concurrently. (Not offered 1974-75) Two credit hours
Geology

COURSES IN GEOLOGY

GEOL 111 Physical Geology  Miller, Novak
A study of the ever-changing earth by wind, water, volcanism, crustal movement, and glaciation. The identification of common rocks and minerals is included. Weekly field trips when weather permits. Two Hours Lecture. Two Hours Lab. Each Fall.
Three credit hours

GEOL 112 Historical Geology  Miller, Novak
Study of the earth's history in terms of physical, chemical, and biological change, from its origin to the present time. Focus upon the methods of determining chronology and conditions through fossils and structural characteristics. Two Hours Lecture. Two Hours Lab. Each Spring.
Three credit hours

GEOL 114 Environmental Geology  Novak
Application of the science of geology to environmental problems resulting from man's intense use of the earth and its natural resources. Prerequisite: GEOL 111 or permission of the instructor. Two 75 min. Lecture Sessions, One Two Hour Lab. Spring Semester, Even Years.
Four credit hours

GEOL 201 Structural Geology  Miller
This course is a study and interpretation of rock structure, intrusions, and deformation. Considerable time is spent in field study, geologic mapping, and bed rock interpretation. Some time is devoted to mineral and ore formations. Prerequisite: GEOL 111, or 112. Two Hours Lecture, Two Hours Lab. Fall Semester, Odd Years.
Three credit hours

GEOL 203 Mineralogy  Miller
An introduction to descriptive crystallography, and a study of the physical properties and chemical structures of common rock-forming minerals. Field trips and laboratory analysis are an important part of the course. A basic course in chemistry is desirable. Prerequisite: GEOL 111, or 112. Two Hours Lecture, Two Hours Lab. Fall Semester, Odd Years. (Not offered Fall 1974).
Three credit hours

GEOL 205 Geological Oceanography (also OCN 205)  Novak
Shoreline erosion, transportation, and deposition; the origin and structure of the continental shelves and ocean basins. Coastal and oceanic processes; geomorphic development of the marine environment. Special emphasis on the evolution of the New England coast through field examination of salt marshes, estuaries, and beaches. Prerequisite: Physical Geology or Oceanography, or permission of instructor. Three Hours Lecture. Spring Semester, Odd Years.
Three credit hours

GEOL 301 Geomorphology (also GEOG 301)  Novak
Description and interpretation of landform development in terms of geologic structure, process, and stage. Field trips. Prerequisite: GEOL 201 or permission of the instructor. Two Hours Lecture. Two Hours Lab. Spring Semester, Even Years.
Three credit hours

GEOL 302 Sedimentation  Novak
Source materials, mechanics of transport and dispersal, depositional environments, lithification and diagenesis of sediments. Analysis of common problems in applied field due to these phenomena. Prerequisite: GEOL 203. GEOL 301 recommended. Field trips. Two Hours Lecture. Two Hours Lab. Spring Semester, Even Years.
Three credit hours

GEOL 310 Glacial and Pleistocene Geology  Miller
Glacial processes, deposits and the stratigraphy of the Pleistocene Epoch. Emphasis on the erosional and depositional features of glacial events in Maine. Prerequisite: GEOL 111 or 112. Two Hours Lecture. Two Hours Lab. Spring Semester, Odd Years.
Three credit hours

122
Physical Science

COURSES IN PHYSICAL SCIENCE

PSCI 103 Science for Technology I
A one-semester course which attempts to tie chemical theory to the practical problems relating to Industrial Arts. Two hours lecture and two-hour lab per week. Offered Spring semester only.
Three credit hours

PSCI 104 Science for Technology II
A study of those areas of physics of special importance in the industrial arts area. The major portion of the course will deal with mechanics, electricity, and light. Laboratory experiments will be concentrated on basic concepts. Two-hours lecture and one two-hour lab. Offered Fall semester only.
Three credit hours

PSCI 110 Elements of Physical Science
A one-semester course designed to develop greater understanding of scientific principles and methods as they apply to areas of the physical sciences. An understanding of basic mathematics is assumed. Two one-hour lectures, one two-hour lab.
Three credit hours

PSCI 310 History of Science
A comprehensive survey of the historical development of science from earliest records to the present. Attention is given to the nature of science, methods of scientific discovery, the relation of science to technology, and the implications of both for society. Prerequisite: two years of science.
Three credit hours

PSCI 400 Science and Society
Readings and discussion concerning the relationships between science and society. The "Tactics and Strategy of Science" and the philosophical and social implications of present scientific theories are considered with the aim of promoting understanding of the role of science in modern life. The interaction between scientists and society, and the relationship between research and technology are also examined. Prerequisite: senior students, others by permission.
Three credit hours

PSCI 498 Independent Study in the Physical Sciences
To provide juniors and seniors who have demonstrated critical and analytical capability an opportunity to pursue a project independently, selecting a problem and exploring an area of interest in the physical sciences, bringing to it previous experiences and emerging with an intellectually sound, coherent synthesis, or technical creation reflecting a high caliber of performance.
One to three credit hours
Physics

Students contemplating majoring in Physics should realize that the University of Maine, through four-year programs, the first two years of which may be completed at UMPG, offers degrees both in Physics and in Engineering Physics. The Physics major is less structured than the Engineering Physics major.

Students wishing either of these programs should begin courses in Physics (PHYS 121-122), Chemistry (CHEM 113-114), and Mathematics (MS 152-153) in the Freshman year so as to avoid conflict in scheduling upper level courses later on.

An appropriate specimen curriculum for the Freshman and Sophomore years is shown under the ENGINEERING heading of this section of the catalog.

Students in either of these programs may complete their sophomore year on the Portland-Gorham campus, but must complete their last two years of work on the Orono campus.

REQUIREMENTS FOR A PHYSICS MINOR FOR SECONDARY EDUCATION

<table>
<thead>
<tr>
<th>Group</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>PHYS 111 and 112 Elements of Physics (4 credits each semester) to be taken as a two-semester sequence</td>
</tr>
<tr>
<td>B</td>
<td>3 or 4</td>
</tr>
<tr>
<td></td>
<td>PHYS 210 Introductory Modern Physics</td>
</tr>
<tr>
<td></td>
<td>PHYS 221 Intermediate Physics</td>
</tr>
<tr>
<td></td>
<td>PHYS 390 Independent Physics Laboratory</td>
</tr>
<tr>
<td>C</td>
<td>Elect sufficient courses so total credit hours of Groups A, B, and C is at least 18 hours.</td>
</tr>
<tr>
<td></td>
<td>ASTR 100 Astronomy</td>
</tr>
<tr>
<td></td>
<td>MET 100 Meteorology</td>
</tr>
<tr>
<td></td>
<td>OCN 100 Oceanography</td>
</tr>
</tbody>
</table>

In Group C, substitutions can be made which are acceptable to the departmental advisor.

COURSES IN PHYSICS

PHYS 100 Descriptive Physics

For the non-science student. A treatment in non-mathematical language of the more important topics in physics. Designed to develop an appreciation for the concepts, vocabulary, and methods of the science rather than a false sense of mastery. Lecture 3 hours.

Three credit hours

PHYS 105 Acoustics and Noise

A semi-descriptive course on sound, with emphasis on applications of interest to the scientist and non-scientist alike. Discussion will cover the questions: what is sound, how is it perceived, how is it measured, what are its benefits and liabilities? Particular topics may include: the ear and hearing, sound waves, musical acoustics, building acoustics, noise and the environment, legal aspects of noise, underwater sound, biological aspects of sound, and ultrasonics. Consideration will be given to the interests of the members of the class. Three hours of lecture and demonstration. Occasional laboratory or field experience will be provided. Prerequisite: a course in high school algebra.

Three credit hours

PHYS 111 Elements of Physics I

A laboratory course in which selected experiments in physics are used to demonstrate physical principles and make possible a deeper study of physical phenomena. Lectures, demonstrations, problem solving, films and filmstrips are employed to develop an understanding of mechanics, sound, optics, heat, electricity, and modern physics. Prerequisite: a course in high school algebra. Lecture, 3 hours, Lab. 3 hours.

Four credit hours
PHYS 112  Elements of Physics II
A continuation of topics covered in PHYS 111. Lecture 3 hours, Lab. 3 hours.
Four credit hours

PHYS 121  General Physics I
An introduction to the fundamental concepts of mechanics, sound and heat, using calculus
where necessary. Recommended for students who plan further study in science, mathematics,
or engineering. Prerequisite: prior or concurrent registration in MS 152 or equivalent
experience. Lecture 3 hours, Rec. 2 hours, Lab. 2 hours.
Five credit hours

PHYS 122  General Physics II
An introduction to the fundamental concepts of electricity, magnetism, light and atomic
physics, using calculus where necessary. Recommended for students who plan further study
in science, mathematics, or engineering. Prerequisite: PHYS 121 or equivalent. Lecture
3 hours, Rec. 2 hours, Lab. 2 hours.
Five credit hours

PHYS 210  Introductory Modern Physics
A development of some of the more important concepts of physics required for under­
standing the properties of the electron and atomic nucleus. Prerequisites: PHYS 112 or
PHYS 122, CHEM 112 or CHEM 114, and one year of calculus. Four credit hours

PHYS 221  Intermediate Physics I
An intermediate treatment of mechanics, heat, and wave motion to follow PHYS 121,
and PHYS 122. May be taken without laboratory for 3 credits with special permission of
the instructor. Prerequisites: PHYS 122 and CHEM 114 or equivalent and one year of
calculus. Lecture 2 hours, Rec. 2 hours, Lab. 2 hours.
Four credit hours

PHYS 222  Intermediate Physics II
A continuation of PHYS 221. Topics include electricity, magnetism and optics. Lecture
2 hours, Rec. 2 hours, Lab. 2 hours.
Four credit hours

PHYS 390  Independent Physics Laboratory
A laboratory research investigation of an approved topic in physics, using the facilities
of the University laboratories and/or those of industrial and professional laboratories. Pre­
requisite: consent of the instructor.
Three credit hours
REQUIREMENTS FOR THE MAJOR IN POLITICAL SCIENCE

a. Each major must complete a minimum of 36 hours in the Department.
b. Each major must complete POL 101 and 102.
c. Each major must take at least one course in four of following five offerings of the Department:

<table>
<thead>
<tr>
<th>Judicial Process</th>
<th>Political Theory</th>
<th>American Political System</th>
</tr>
</thead>
<tbody>
<tr>
<td>POL 283</td>
<td>POL 289</td>
<td>POL 210</td>
</tr>
<tr>
<td>POL 284</td>
<td>POL 290</td>
<td>POL 213</td>
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<td>POL 305</td>
<td>POL 292</td>
<td>POL 233</td>
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<table>
<thead>
<tr>
<th>International Politics</th>
<th>Comparative Political Systems</th>
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</tr>
</thead>
<tbody>
<tr>
<td>POL 239</td>
<td>POL 235</td>
<td>POL 251</td>
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<td>POL 273</td>
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<td>POL 275</td>
<td>POL 238</td>
<td>POL 357</td>
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<td>POL 387</td>
<td>POL 240</td>
<td>POL 358</td>
</tr>
<tr>
<td>POL 388</td>
<td>POL 332</td>
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</tr>
</tbody>
</table>

d. Each major is required to participate in at least one Seminar (POL 400, 401, 402, 403). In unusual cases students may, with departmental permission, substitute independent study for a Seminar.

Upper-level Political Science courses all require either POL 101 or 102 or the permission of the instructor.

In special cases the requirement of POL 101 may be waived if the student successfully completes an examination administered by the Department. Students with appropriate prior experience may, in special cases, be granted credit for one or more of the internship courses (POL 353, 354, 355). In rare cases the Department may also grant credit for other Political Science courses. Students who wish to obtain the POL 101 waiver or receive credit for other departmental courses should petition the Department through its Chairman.

All students are reminded that, in addition to their meeting departmental requirements for a major leading to a baccalaureate degree, they must also meet the requirements of the school or college involved, as well as the University's General Education Requirements. These general requirements are printed inside the front cover of this catalog.

COURSE DESCRIPTIONS

**POL 101 Introduction to American Government**  
The political institutions, processes, behavior, and problems of government in the United States are considered. The national government is emphasized. The constitution, Supreme Court, Congress, Presidency, political parties, public opinion, and interest groups are studied.  
Three credit hours

**POL 102 Man and Politics**  
This course introduces the student to modern political analysis. It centers on basic questions in the study of political behavior: how people learn about politics, what kind of political system they adopt and support, who does and who does not participate in politics, how political conflict is expressed and resolved in various societies. The course aims at familiarizing the student with major approaches or methods which political scientists have found helpful for understanding real political behavior.  
Three credit hours
POL 210  Power and Change in American Society  
This is an interdisciplinary course which examines groups in the United States who hold 
and wield power and groups who are powerless. Functional and dysfunctional aspects of 
the political, economic, and social systems are considered. Attempts at intervention to change 
the systems are examined through selected case studies.  
Fisher

Three credit hours

POL 213  State Government  
State constitutions, legislatures, governors, bureaucracies, and courts; relationships with 
other state, local, and federal governments; the problems and prospects for Maine. Pre­ 
requisite: POL 101 or 102.  
Peese

Three credit hours

POL 233  The American City  
The city in American political life; types of municipal governments; developments in 
tergovernmental relations; metropolitan area problems; the future of the city. Students 
will participate in a task force on a selected urban program. Prerequisite: POL 101 or 102. 
Fisher

Three credit hours

POL 234  Municipal Administration  
The management, financial control, and administration of modern American cities, with 
emphasis on administration of personnel and finance, the city plan, and line functions: 
public safety, transportation, health, welfare, and housing. Prerequisite: POL 233 and con­ 
sent of the instructor.  
Fisher

Three credit hours

POL 235  Democratic Governments of Europe  
An introduction to the parliamentary system, through a study of the governmental opera­ 
tions and politics of Britain, France, and the Federal Republic of Germany. Other topics 
covered: the Common Market and prospects for European integration; relationship of 
democratic Europe with Communist Europe. Prerequisite: POL 101 or 102.  
Roberts, Woshinsky

Three credit hours

POL 236  Communist Governments  
A survey of existing communist social systems is offered. The following topics will be 
considered: variation in political parties and state systems, the problem of nationalism, 
economic management, and cultural policy. Special attention will be given to a comparative 
survey of current communist ideology and the question of the “socialist commonwealth.” 
Prerequisite: POL 101 or 102.  
Roberts

Three credit hours

POL 237  The Politics of the Soviet Union  
An introduction to the USSR: Russian and Soviet political history; Marxism-Leninism; the 
party and state structures; the socialist economy; the impact of the regime on the individual. 
Roberts

Three credit hours

POL 238  Canadian Government and Politics  
An introduction to political life in Canada. Primary topics to be covered in the course: 
Canadian political culture, voting behavior, the parliamentary system, federalism, political 
parties, and interest groups. The place of Quebec and French-speaking Canadians within 
the Canadian political system will be given special emphasis. Prerequisite: POL 101 or 102. 
Woshinsky

Three credit hours

POL 239  Soviet Foreign Policy  
A survey of Soviet Foreign policy as a continuation of Tsarist policies; as a world move­ 
ment; the Comintern and the popular Front. Impact of World War II: the emergency of the 
USSR as a superpower. Post-Stalin modifications. Case studies in contemporary foreign 
problems, including relations within the Communist world.  
Roberts

Three credit hours

POL 240  The Politics of Developing Nations  
An examination of the thrust towards modernization in the “third world.” Economic 
development, relationships with the world community, the role of the military, and various 
theories about the nature of the relationship between the “third world” and the communist 
and non-communist industrial worlds are considered. POL 101 or 102 are recommended. 
(Not offered in 1974-75) 
Roberts

Three credit hours

POL 251  Public Administration  
An examination of national, state, and local bureaucracies, including their processes of 
decision making, communications, leadership, internal and external political relationships. 
A continuing question will be, “How can these institutions be made responsive to the 
public?” Prerequisite: POL 101.  
Peese

Three credit hours
POL 257 Political Parties
Development and present organization and operation of the American party system. Nature and function of major and minor parties, sectionalism, nominating system, presidential and congressional elections, the electorate, finance, interest groups. Prerequisites: POL 101 and 102. Three credit hours

POL 258 Public Opinion
The role of public opinion in American democracy: definition and measurement; sociological and psychological influences; mass media; linkage to government. Prerequisites: POL 101 and 102. (Not offered in 1974-75) Three credit hours

POL 273 International Relations I
This semester considers the nation-state system within the framework of international politics. The techniques used in expanding their influence—political, military, and economic—are examined as well as the restraints imposed by the system on their freedom of action. Three credit hour

POL 274 International Relations II
In this semester attention is focused on the future of world politics. Alternatives to the nation-state system—international and regional organization, the multinational corporation, international education for peace—are considered. Prerequisite: POL 273. Three credit hours

POL 275 United States Foreign Policy
A detailed evaluation of U.S. foreign policy focusing on such topics as: identification of U.S. policy; governmental agencies and personalities in the formulation and implementation of policy: the role of non-governmental influences. The course is designed to evaluate current policy goals and practices within the context of long-range goals. (Not offered in 1974-75) Three credit hours

POL 283 The American Judicial System
The role of the judiciary in American politics, with emphasis on the United States Supreme Court. A series of case studies will cover such topics as economic regulation, civil rights, reapportionment, and war powers. Attention will also be given to the impact of judicial philosophies on decision-making. Prerequisite: POL 101. Three credit hours

POL 284 American Civil Liberties
An analysis of judicial interpretations of Bill of Rights guarantees and their effects on political processes in the United States. Topics include church and state, freedom of speech and press, the rights of the accused and the convicted. Prerequisite: POL 283. Three credit hours

POL 289 Political and Social Thought I
An intensive study of ancient political and social philosophies. A textual criticism of the works of Plato and Aristotle is emphasized. Prerequisite: junior or senior standing. Three credit hours

POL 290 Political and Social Thought II
A study of selected political theories from Machiavelli to modern political philosophers. The basic approach is historical, but an attempt is made to relate theories of politics to the environments in which they developed. Prerequisite: junior or senior standing. Three credit hours

POL 292 American Political Thought
An examination of American historical and contemporary thinking on a variety of political topics including equality, revolution, liberty, property, war, and individualism. (Not offered in 1974-75) Three credit hours

POL 305 Comparative Judicial Behavior
A cross-national study of the social and psychological determinants of judicial decision-making. The course will also focus on the social effects of judicial decisions. Prerequisite: Consent of the instructor. (Not offered in 1974-75) Three credit hours
POL 332 Comparative Political Behavior
Woshinsky
This course will introduce students to major approaches and concepts in comparative politics. Emphasis will be placed on using theoretical concepts to understand practical politics in a variety of nations (primarily those modern industrial states of Western Europe and North America). Major topics for study: public opinion, political parties, legislative behavior, bureaucracy. Prerequisite: POL 235 or 236, or permission of the instructor.
Three credit hours

POL 353 Municipal Internship
Fisher
Provision may be made to gain professional experience in a local government. The course is open only to selected students. Readings and research reports are required.
Three to six credit hours

POL 354 State Internship
Staff
Provision may be made to gain professional experience in a department or agency of state government. The course is open to selected students. Readings and research reports are required. The state government internship is available under the Maine State Government Internship Program.
Three to six credit hours

POL 355 Congressional Internship
Staff
A first-hand study of the national legislative process and the function of the legislator. The student will be assigned to the staff of a Congressman or Senator in Washington, D.C., from about February 1 until the end of June. Readings and reports are required in addition to the staff work. Open to juniors on a competitive basis. Rules announced publicly each fall semester.
Six credit hours

POL 357 The American Presidency
Maiman, Peirce
This course examines the development of the modern presidency; the scope and exercise of presidential decision-making in domestic and foreign policy; and standards for assessing presidential "performance." Prerequisite: POL 101.
Three credit hours

POL 358 The American Congress
Woshinsky
The role of the national legislature in American politics is considered. The course undertakes a study of the men who reach Congress, the internal norms and procedures within Congress, and the effects of these procedures on national decision-making. Among topics covered are the committee system, leadership patterns in the Senate and the House, the public's influence on Congress, Congress and the Presidency, and Congressional policymaking in selected areas. Prerequisite: POL 101 or 102.
Three credit hours

POL 387 International Law
Peirce
An analysis from the political perspective of the sources, limitations and institutions of international law as they relate to the search for peace and world order. (Offered in alternate Fall semesters beginning in Fall 1974).
Three credit hours

POL 388 International Organization
Peirce
An analysis of the approaches to the problems of peace, economic and social justice at the international level. Emphasis on the United Nations system and its specialized agencies. (Offered in alternate Spring semesters beginning in Spring 1975.)
Three credit hours

POL 395 Independent Study I
Staff
A concentrated program of research or study on a particular subject of the student's selection. The topic will be chosen with the advice and under the direction of a faculty member. Admission by permission of the political science faculty.
Three to six credit hours

POL 396 Independent Study II
Staff
A concentrated program of research or study on a particular subject of the student's selection. The topic will be chosen with the advice and under the direction of a faculty member. Admission by permission of the political science faculty.
Three to six credit hours

POL 397 Independent Study III
Staff
A concentrated program of research or study on a particular subject of the student's selection. The topic will be chosen with the advice and under the direction of a faculty member. Admission by permission of the political science faculty.
Three to six credit hours
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Instructor</th>
<th>Prerequisite</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POL 400</td>
<td>Seminar in American Politics</td>
<td>Coogan</td>
<td>This seminar will explore the neglected literature on what has been thought of as the “non-political” branch of government. The organization and cultural environment of education will be examined critically. An attempt will be made to apply the analytical tools of political science to the study of educational decisions made by the community, its school board and school administrators. The course will attempt also to bring empirical knowledge to bear on the issues of community control, innovation, teacher militancy, racial and cultural problems, accountability, academic freedom and inequality in the distribution of resources. Prerequisite: Consent of the instructor.</td>
<td>Three credit hours</td>
</tr>
<tr>
<td>POL 401</td>
<td>Seminar in International Affairs</td>
<td>Peirce</td>
<td>A seminar which focuses on some aspect of international politics. Prerequisite: Consent of the instructor. (Not offered in 1974-75)</td>
<td>Three credit hours</td>
</tr>
<tr>
<td>POL 402</td>
<td>Seminar in Comparative Politics</td>
<td>Roberts</td>
<td>A study of some aspects of comparative political institutions and behavior. Prerequisite: Consent of the instructor. (Not offered in 1974-75)</td>
<td>Three credit hours</td>
</tr>
<tr>
<td>POL 403</td>
<td>Seminar in Judicial Process</td>
<td>Maiman</td>
<td>A seminar focusing on judicial institutions, personnel, and processes in the state of Maine. Students will study the existing literature on state court systems and conduct field research projects of their own. Prerequisite: Consent of the instructor.</td>
<td>Three credit hours</td>
</tr>
<tr>
<td>POL 404</td>
<td>Seminar in American Politics</td>
<td>Woshinsky</td>
<td>A study of some aspect of American political institutions and behavior. Prerequisite: Consent of the instructor. (Not offered in 1974-75)</td>
<td>Three credit hours</td>
</tr>
<tr>
<td>POL 501</td>
<td>Seminar in the Politics of Education</td>
<td>Coogan</td>
<td>This seminar will explore the neglected literature on what has been thought of as the “non-political” branch of government. The organization and cultural environment of education will be examined critically. An attempt will be made to apply the analytical tools of political science to the study of educational decisions made by the community, its school board and administrators. The course will attempt to bring empirical knowledge to bear on the issues of community control of the schools, innovation, teacher militancy, racial and cultural problems, accountability, academic freedom and inequality in the distribution of educational rewards and resources. A basic objective of the course will be to familiarize students with the tools of educational and political research. (Open to graduate students only.)</td>
<td>Three credit hours</td>
</tr>
</tbody>
</table>
Psychology

Professors Paradise, Saldanha (Chairman); Associate Professors Bishop, Hearns, Sanborn; Assistant Professor Gayton, Sytsma.

The Department of Psychology offers a four-year program for students majoring in psychology. It also includes courses for students majoring in allied fields as well as for students wishing an orientation to the field of psychology as part of their general education. Courses are designed to create an awareness of the fundamental principles of psychology, psychological research, and the means by which psychological knowledge is acquired. The emphasis is upon the scientific inquiry into basic phenomena and principles of behavior, not upon the development of professional skills.

All students are reminded that, in addition to their meeting departmental requirements for a major leading to a baccalaureate degree, they must also meet the requirements of the school or college involved, as well as the University's General Education Requirements. These general requirements are printed inside the front cover of this catalog.

The minimum requirement for a major in psychology is 32 hours (and not to exceed 15 hours), which must include the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 101</td>
<td>General Psychology (3 credits each semester) to be taken as a two-semester sequence</td>
<td>6</td>
</tr>
<tr>
<td>PSY 201</td>
<td>Statistics in Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 205</td>
<td>Experimental Methodology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 350</td>
<td>Psychology of Learning</td>
<td>4</td>
</tr>
</tbody>
</table>

Other courses offered by the department can be taken as electives to complete the major.

NOTE: These requirements are for students who enter the major in 1974-75. The requirements for students who declared their major prior to 1974-75 should be discussed with their advisor.

Psychology 101 and 102 should be elected no later than the sophomore year by students who plan to major in psychology. All majors are required to elect PSY 201 and PSY 205 no later than their junior year. PSY 201 may be taken concurrently with PSY 102. No grade of D will count toward fulfillment of the major.

The department recommends that the students who wish to take a more extensive program or who plan to enter graduate school elect, in consultation with their major advisor, further courses in psychology and also include in their programs study in related fields, such as mathematics, biology, philosophy, sociology, anthropology, and computer programming.

COURSE DESCRIPTIONS

**PSY 101 General Psychology I**
Paradise, Saldanha

An introduction to the study of behavior as a natural science. Among the topics covered are: methods of inquiry, physiological foundations of behavior, sensation and perception, motivation and emotion, learning and thinking. This course is a prerequisite for all courses in the department.

Three credit hours

**PSY 102 General Psychology II**
Paradise, Saldanha

A continuation of Psychology 101. It deals with complex psychological processes such as ability testing, personality, conflict, behavior disorders and therapy, and social and industrial behavior. Prerequisite: PSY 101.

Three credit hours
PSY 201  Statistics in Psychology

A general introduction to the techniques of descriptive, predictive, and inferential statistics. Emphasis is placed on measures of central tendency and variability, correlation, hypothesis testing, and simple analysis of variance. Prerequisite: PSY 101.

Three credit hours

PSY 205  Experimental Methodology

Emphasis on the principles, methods, and techniques of experimental psychology. Applications of general methodology and specific techniques to the design of experiments in behavioral research. Classroom exercises provide experience in experimental design.

Three credit hours

PSY 220  Development Psychology

A survey of individual growth from birth to death. Biological bases; cognitive, learning, and social response theories of childhood; adolescent problem solving; adult adjustment patterns. Prerequisites: PSY 101 and 102.

Three credit hours

PSY 223  Child Development

A systematic study of the behavior and psychological development of children during infancy, preschool and school age periods. Analysis of the genetic, prenatal, and postnatal influences on the physical, cognitive, and personality development. Implications of the research for practical application in dealing with children. Prerequisites: PSY 101 and 102.

Three credit hours

PSY 224  Adolescent Development

A systematic study of the behavioral and psychological development of the adolescent. The adolescent personality and problems of adjustment in relation to the family, the school and the community. Prerequisites: PSY 101 and 102.

Three credit hours

PSY 232  Psychology of Adjustment

A study of the development of personality patterns, modes of behavior, life styles, and coping mechanisms considered normal in this society. Consideration of their value to individual functioning. Prerequisites: PSY 101 and 102.

Three credit hours

PSY 235  Psychology of Women

Psychology of women and psychological literature relevant to men and women. Some topics include physiological and personality differences between the sexes, sex role development, role conflict, women and traditional therapy. NOTE: This course does not count toward major credit. Prerequisites: PSY 101 and 102.

Three credit hours

PSY 311  Industrial Psychology

Critical treatment of research methods in personnel selection and evaluation and current theories of individual behavior in complex organizations such as government and business. Prerequisites: PSY 101 and 102.

Three credit hours

PSY 320  Psychology of Personality

Consideration of current issues and findings in personality. Personality development. Current research in such areas as socialization, aggression, identification, values, morality, anxiety. Relates basic principles of perception, motivation, and learning to personality theory. Prerequisites: PSY 101-102.

Three credit hours

PSY 326  Mental Deficiency

The identification and description of various types and levels of mental retardation. Problems in assessment, treatment, and education of the retarded are also stressed. Prerequisite: PSY 220 or PSY 223.

Three credit hours

PSY 330  Social Psychology

The psychological principles which enter into the social behavior of the individual. Areas of consideration include perception, communication, attitude formation, interpersonal attraction, and group behavior. Prerequisites: PSY 101 and 102.

Three credit hours
PSY 332  Psychopathology
Bishop
The etiology, development, and manifestation of the major forms of mental illness with particular emphasis upon the neuroses and psychoses. Psychological, social, and biological factors which contribute to maladjustment are examined. Prerequisites: PSY 101 and 102 with a grade of C or better. Three credit hours

PSY 335  Deviations of Childhood
Bishop
Intensive readings and discussion of the etiology and manifestation of deviant patterns of behavior and functioning in children. Problems relating to the identification and management of such deviations are considered. Prerequisites: PSY 223 or 220 and permission of the instructor. Three credit hours

PSY 338  Theories of Personality
Bishop
A survey of the major contemporary approaches to the study of personality. Different theories are compared, their impact upon current thinking evaluated, and their research contributions assessed. Prerequisites: PSY 101 and 102 with a grade of C or better. Three credit hours

PSY 340  Behavior Modification
Sytisma
An introduction to the principles of operant conditioning with emphasis on the application of operant techniques in educational, correctional, and therapeutic situations. Prerequisites: PSY 101 and 102. Three credit hours

PSY 343  Psychological Test Theory
Bishop
The theoretical and statistical concepts underlying the development of various psychological tests. Individual and group tests of intelligence, personality, aptitude, and interest are examined and evaluated in terms of these concepts. Uses and abuses of psychological tests are considered. Prerequisite: PSY 201. Three credit hours

PSY 350  Psychology of Learning
Sytisma
Experimental findings on the fundamental principles that underlie the acquisition and retention of new behavior. Laboratory experience with techniques in the study of learning in animals and humans. Prerequisites: PSY 205 and 201. Four credit hours

PSY 351  Psychology of Motivation
Paradise
A survey of theory, research methods, and experimental findings related to the search for the determinants of human and animal behavior. The course requires a research paper on a topic of interest to the student, and the planning of an experiment growing out of that interest. Laboratory. Prerequisites: PSY 101 and 102. Three credit hours

PSY 360  Cognitive Processes
Paradise
Experimental findings and theoretical analyses of the acquisition, retention, and transfer of verbal behavior and a critical survey of theories and research on such topics as problem solving, creative thinking, reasoning, concept formation, decision making, thought and language, and related topics. Prerequisites: PSY 101 and 102. Three credit hours

PSY 361  Sensation and Perception
Hearns, Paradise
An examination of perceptual processes in selected sensory systems. Emphasis on experimental methodology, research findings, and theoretical interpretations. Prerequisite: PSY 201 and 205. Four credit hours

PSY 365  Physiological Psychology
Sytisma
Basic neuroanatomy, neurophysiology, and endocrinology, and the relationships between nervous system functioning and behavior. Physiological analysis of sensory function, motivation, and learning. Prerequisites: BIO 101 or BIO 111, PSY 101, 102. Three credit hours

PSY 366  Comparative Psychology
Sytisma
A survey of the principles and concepts of biological psychology. Understanding the physiological basis and species-typical behaviors, learning, and motivation, from a comparative approach. Prerequisites: PSY 101 and 102 and BIO 101 or BIO 111. Three credit hours

PSY 370  Engineering Psychology
Hearns
Behavior of individuals operating equipment; effects of control and display design, legibility, and physical dimensions; principles of error reduction and application to military, aerospace, and industrial areas. Prerequisites: PSY 101 and 102. Three credit hours
PSY 371 History and Systems of Psychology
Saldana
A survey of the history of psychological thought from its beginnings in Greek philosophy to modern times. Special attention will be given to the influence of philosophy and natural science on the development of contemporary psychology. The course concludes with a survey of the major systems. Prerequisites: PSY 101 and 102 and permission of the instructor.
Three credit hours

PSY 390 Selected Topics in Psychology
Staff
A critical in-depth investigation of one of various topics and issues in different areas of psychology (e.g., experimental, social, clinical, child-developmental, etc.). Each student is expected to complete a research project on the topic for the semester. Consult the Psychology Department for topics offered. Prerequisites: PSY 201, 205, and permission of the instructor.
Three credit hours

PSY 400 Research in Psychology I
Staff
This course is open to qualified majors in psychology who wish to engage in independent readings on selected topics or conduct research projects. With permission of departmental chairman.
Three credit hours

PSY 401 Research in Psychology II
Staff
This course is open to qualified majors in psychology who wish to engage in independent readings on selected topics or conduct research projects. With permission of departmental chairman. (Fall and Spring)
Three credit hours

PSY 490 Senior Seminar in Psychology
Staff
A seminar designed to bring together and synthesize the previous courses in the major sequence. Open only to qualified seniors and by permission of the instructor.
Three credit hours

PSY 521 Individual Psychological Testing
Bishop
Intensive training in the administration, scoring, and interpretation of the Stanford Binet form L-M and the Wechsler Intelligence Scales. Prerequisites: PSY 201 and 343 each with a grade of C or better and permission of the instructor. Open to graduate students only.
Four credit hours

PSY 522 Psychological Assessment of Children
Bishop
Intensive training in the use of psychological tests (e.g., WISC, WRAT, Bender) in the assessment of childhood deviations with particular emphasis upon interpretation of test results. Prerequisites: Open to graduate students only. PSY 521 and permission of the instructor. Rec 2, Lab 4.
Four credit hours
Social Welfare

Professor Romanyshyn (Chairman); Associate Professors Steinman (on leave, 1974-75); Assistant Professor Finklehor, Ladley (on leave, 1974-75), Kreisler; Visiting Lecturer T. Bailey.

The major in Social Welfare consists of an inter-disciplinary course of study which includes at least 15 hours of social sciences and humanities to be individually elected by the student and planned with the adviser. The program leads to a B.A. degree in Social Welfare and is approved by the Council on Social Work Education.

All students are reminded that, in addition to their departmental requirements for a major leading to a baccalaureate degree, they must also meet the requirements of the school or college involved, as well as the University's General Education Requirements. These general requirements are printed inside the front cover of this catalog.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>SWE 101</td>
<td>Introduction to the Human Services I</td>
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<tr>
<td>SWE 252 and 253</td>
<td>Methods of Social Work Practice I &amp; II</td>
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<tr>
<td>SWE 254 and 255</td>
<td>Community Laboratory in Social Welfare I &amp; II</td>
<td>VAR</td>
</tr>
<tr>
<td>SWE 350</td>
<td>Social Problems and Social Welfare Policy</td>
<td>3</td>
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<tr>
<td>SWE 351</td>
<td>Human Services and the Consumer</td>
<td>3</td>
</tr>
<tr>
<td>SWE 370</td>
<td>Human Development and Social Welfare</td>
<td>3</td>
</tr>
<tr>
<td>SWE 455</td>
<td>Social Welfare Research</td>
<td>3</td>
</tr>
<tr>
<td>SWE 456</td>
<td>Issues in Social Welfare and Social Work</td>
<td>3</td>
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</tbody>
</table>

24 + VAR

NOTE: Students must have a minimum of 10 hours of credit in SWE 254 and 255, combined. The above requirements are for students who enter the major in 1974-75. The requirements for students who began their major prior to this should be discussed with their advisors.

COURSE DESCRIPTIONS

SWE 101 Introduction to the Human Services I
An orientation to careers in the human services and an introduction to the organization and functions of community agencies and programs, through lecture, discussion, and volunteer experiences. Three credit hours

SWE 102 Introduction to the Human Services II
A continuation of SWE 101. Three credit hours

SWE 252 Methods of Social Work Practice I
An introduction to concepts and beginning skills for intervening with individuals, families, groups, neighborhoods, organizations, or communities with the goal of producing some level of social change consistent with the aspirations of both the system to be changed and the intervenor. Emphasizes theories of human and community development. Three credit hours

SWE 253 Methods of Social Work Practice II
A continuation of SWE 252. Three credit hours

SWE 254 Community Laboratory I
For Social Welfare majors: a required internship in a neighborhood or rural setting, or in an agency placement, designed to provide an opportunity to relate social work theory to practice. Variable credits ranging from 2 through 8 per semester. Prerequisites: SWE 101 ad 102; 252 and 253 (concurrent).

SWE 255 Community Laboratory II
A continuation of SWE 254.
SKE 299 Women — Social Change
Examines the ways our culture affects and is affected by women in the areas of physical and mental health throughout their lifespan, with specific emphasis on contemporary human services and how women are perceived. Prerequisite: SWE 101. Three credit hours

SWE 350 Social Problems and Social Welfare Policy
A critical examination of social welfare institutions and the social problems and social needs to which they are addressed. Prerequisite: SWE 350. Three credit hours

SWE 351 Human Services and the Consumer (Not offered 1974-75)
Study and critical evaluation of the bureaucracies, professions, and consumers of social work and other services. Prerequisite: SWE 350. Three credit hours

SWE 352 Methods of Social Work Practice III
An advanced course in social work theory and practice. Prerequisite: SWE 252 and 253. Two credit hours

SWE 353 Methods of Social Work Practice IV
A continuation of SWE 352. Two credit hours

SWE 354 Community Laboratory III: Community Organization in Field Practice
An advanced field experience in human services. Prerequisites: SWE 254 and 255. Credits: variable

SWE 355 Community Laboratory IV
A continuation of SWE 354. Kreisler Credits: variable

SWE 364 Comparative Social Welfare Systems
A study of social welfare programs in advanced industrial and in developing societies; in market and non-market economies and in democratic and authoritarian political systems. Prerequisite: SWE 350 or permission of instructor. Three credit hours

SWE 365 Social Work with Minority Groups (Not offered 1974-75)
An exploration of issues in social welfare policy and social work practice as they are related to the status of minority groups and their movement for self-determination. Prerequisites: SOC 371 and six hours of social welfare. Three credit hours

SWE 370 Human Development and Social Welfare
A study of the implications of research and theory related to human development for social welfare policy and social work practice. Prerequisites: PSY 220 and at least six hours of social welfare courses. Three credit hours

SWE 374 Aging and Social Policy: A Cross-Cultural View
This course will examine the similarities and the differences in how both simple and complex societies treat the process of aging. With this perspective, the course will then look at the position of older Americans in relation to various social institutions and at the origin and implementation of social policies affecting them. Prerequisite: SWE 101 or permission of instructor. Three credit hours

SWE 375 Developmental Services to the Aging
A study of policy, administration, and implementation of human services to older people with a focus on a developmental view of aging. Prerequisite: SWE 101 or permission of instructor. SWE 374 recommended but not required. Three credit hours

SWE 380 Child Welfare
A study of the process of growing up under handicapping social conditions and the implications for social services and institutional change. Prerequisite: six hours of social welfare courses. Three credit hours

SWE 385 Self-Assessment
This course will help students to understand how family and background have influenced their development and the formation of their own lifestyles, values, and career goals. Prerequisite: Permission of the instructor. Three credit hours

SWE 397 Department Projects
Individual or group projects, requiring independent study of some aspect of social welfare, to be selected by students in consultation with faculty. Prerequisite: department permission. Three credit hours
SWE 455 Social Welfare Research  T.B.A.
A study of the implications of social welfare research for social policy and social work practice. Prerequisite: at least six hours of social welfare courses. Three credit hours

SWE 456 Issues in Social Welfare and Social Work  Romanyszyn
Senior seminar for social welfare majors that seeks to integrate class and field experience. Open to others with permission only. Should be taken in students' final semester, if possible. Three credit hours

SPECIAL SOCIAL WELFARE DEPARTMENT PROGRAMS

1. Student Organization
A social welfare student organization is a major vehicle for student participation in departmental affairs.

2. Training, Research and Consultation
Under a Federal grant the Social Welfare Department sponsors a Para-Professional Skill Training Program under the direction of Robert Philbrook. Faculty also provide a variety of research consultation and training functions for community agencies.

3. Programs and Activities
Social Welfare students and faculty are involved in a great many community service and social action projects. These are an integral part of our attempt to offer learning experiences which simultaneously contribute to the development of the students as well as service to the community.
Over 150 students are involved in a variety of community projects. Among these are an annual conference on the handicapped, an annual spring festival for senior citizens, social action in the realm of women's issues and the field of gerontology, the development and operation of drop-in centers for youth, organizing workshops for training volunteers, etc.

In addition all students in the Department perform community services in a wide variety of community and social agencies. These include:

Abilities and Goodwill
Boys' Training School
Bureau of Vocational Rehabilitation
COMBAT, INC.
Community Counseling Center
Cumberland-York Senior Citizens Council
Day-One Drug Rehabilitation Center
Department of Health and Welfare
Holy Innocents Homemaker Service
Huckleberry House
Jewish Home for the Aged
Maine Medical Center
Neighborhood Joint Planning Council
Osteopathic Hospital
Pharoli's House
Pineland Center
Portland Housing Authority
Portland Public Schools
Probation and Parole
PROP Headstart-Child Development Center
SEARCH
South Portland Housing Authority
Swetser Children's Home
WE WHO CARE
York-Cumberland Housing Development Corp.
Youth-In-Action
Sociology

Professor Lacognata; Associate Professors Anspach (Chairman), Giguere, Monsen; Assistant Professors Fullam, Grzelkowski, Humphries (on leave 1974-75); Visiting Assistant Professor Lehman.

The Department of Sociology offers a major in Arts and Sciences.

All students are reminded that, in addition to their meeting departmental requirements for a major leading to a baccalaureate degree, they must also meet the requirements of the school or college involved, as well as the University's General Education Requirements. These general requirements are printed inside the front cover of this catalog.

REQUIRED COURSES

The minimum requirement for a major in the department is 36 hours of sociology, which must include the following:

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>SOC 101</td>
<td>Introduction to Sociology</td>
<td>3</td>
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<tr>
<td>SOC 300</td>
<td>Sociological Theory</td>
<td>3</td>
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<tr>
<td>SOC 301</td>
<td>Statistical Methods for Social Research</td>
<td>4</td>
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<tr>
<td>SOC 302</td>
<td>Methods of Social Research</td>
<td>4</td>
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<tr>
<td>SOC 400</td>
<td>Theory Construction</td>
<td>3</td>
</tr>
<tr>
<td>SOC 401</td>
<td>Senior Seminar</td>
<td>3</td>
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</tbody>
</table>

In addition, each major is required to take at least one course from each of the following areas, plus two elective courses from within the Discipline:

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>SOC 310</td>
<td>Social Processes</td>
<td>3</td>
</tr>
<tr>
<td>SOC 330</td>
<td>Social Institutions</td>
<td>3</td>
</tr>
<tr>
<td>SOC 350</td>
<td>Units of Social Life</td>
<td>3</td>
</tr>
<tr>
<td>SOC 370</td>
<td>Social Problems</td>
<td>3</td>
</tr>
</tbody>
</table>

In addition to the 36 required hours of sociology, the sociology major must also take six hours above the introductory level in one of the following:

- Anthropology
- Biology
- Criminal Justice
- Economics
- Geography
- History
- Mathematics
- Philosophy
- Political Science
- Psychology
- SCO GIS (Interdisciplinary Studies)
- Social Welfare

COURSE DESCRIPTIONS

SOC 101 Introduction to Sociology

The fundamental concepts, principles, and methods of sociology; analyzes the influence of social and cultural factors upon human behavior; evaluates effect of group processes, social classes, stratification, and basic institutions on contemporary society.

Three credit hours

SOC 300 Sociological Theory

A critical examination of the sociological theories of such people as Marx, Weber, and Durkheim; and contemporary theorists such as Parsons and Merton. Prerequisite: SOC 101 and two other SOC courses.

Three credit hours

SOC 301 Statistical Methods for Social Research

Emphasis on the uses of statistics in the organization, interpretation, and presentation of research data. Measures of association and correlation; testing of hypotheses, probability and sampling. Includes one hour per week of laboratory exercises. Prerequisite: SOC 101.

Four credit hours
SOC 302 Methods of Social Research  
Monsen  
Conceptualization and research design; data collection and data analysis; logic of inquiry and research techniques. Includes one hour per week of laboratory exercises. Prerequisites: SOC 101.  
Four credit hours

SOC 310 Social Change  
Giguere  
Analysis of sociocultural factors related to social change and the dynamics of the change process. Prerequisite: SOC 101.  
Three credit hours

SOC 311 Sociology of Adolescence  
Anspach  
The social behavior of adolescents, the development of adolescent culture, and the involvement of adolescents in the various social systems and the class structure of society. Prerequisite: SOC 101.  
Three credit hours

SOC 312 Social Stratification  
Anspach  
Systematic analysis of social differentiation and evaluation. Theories of and research in the structure and function of class, caste, and ethnic stratification. Prerequisite: SOC 101.  
Three credit hours

SOC 313 Human Ecology  
Staff  
Spatial distribution of human beings and related activities and social processes; contemporary ecological problems. Prerequisite: SOC 101.  
Three credit hours

SOC 314 Social Control  
Staff  
Examination and comparison of major societal control mechanisms. Emphasis on institutions of social control and their role in establishing and maintaining social order. Prerequisite: SOC 101.  
Three credit hours

SOC 315 Personality and Social Systems  
Anspach  
A sociological examination of theories and research in some major areas relating personality and social systems; attitudes and behavior; socialization; social perception; a bureaucratic structure and personality; etc. Emphasis on issues involved in relating two theoretical levels of analysis. Prerequisite: SOC 101.  
Three credit hours

SOC 316 Sociology of Sex Roles  
Staff  
An examination of sex roles in a socio-political and cultural context focusing on the sexual division of labor in American Society. Prerequisite: SOC 101.  
Three credit hours

SOC 330 Sociology of the Family  
Anspach, Giguere  
A sociological approach to the study of the family, including the structure of social relationships, the modern American family as a social institution, the cultural background of the family, and the impact of social change. Prerequisite: SOC 101.  
Three credit hours

SOC 331 Sociology of Education  
Lacognata  
A study of theory and research on the educational institution, with emphasis upon the multiple and changing functions of the formal education in industrial societies. Prerequisite: SOC 101.  
Three credit hours

SOC 332 Industrial Sociology  
Staff  
Social factors involved in the development of industry; social consequences of technological change; social organization within industry; problems encountered within the social structure(s) of industry. Prerequisite: SOC 101.  
Three credit hours

SOC 333 Sociology of Medicine  
Staff  
Attention is given to the relationship between sociocultural factors and the occurrence of disease and the social systems which are developed in the treatment and prevention thereof. Prerequisite: SOC 101.  
Three credit hours

SOC 334 Sociology of Religion  
Staff  
Religion as a social institution. Attention is given to the social correlates of religion and the functions of religion in society. Prerequisite: SOC 101.  
Three credit hours

SOC 335 The Sociology of Prisons  
Lehman  
An examination of American prisons focusing on techniques of social control in relation to social structure, mediation of social conflict, and problems of crime. Prerequisite: SOC 101.  
Three credit hours
### SOC 336 Sociology of Law

An examination of the interrelationships between law and society, focusing on law, custom, and morality as well as law in relation to social goals. Specific examples of how law functions in the context of the social structure will be used to highlight the major theoretical models used traditionally in this area. Prerequisite: SOC 101.

Three credit hours

### SOC 350 Sociology of Urban Life

A descriptive and analytical approach to the study of city life. Emphasis is placed on environment, social organization, the ecological processes, population areas, housing, and maladjustment. Prerequisite: SOC 101.

Three credit hours

### SOC 351 The Individual and the Community

Analysis of the function and the structure of the community. Emphasis on the ways in which individuals and groups are affected by community dynamics. Group processes, leadership, programmed planning, and development are stressed. Community project. Prerequisite: SOC 101.

Three credit hours

### SOC 352 Population Dynamics

General demographic theories, especially those concerning population growth. Population distribution and density; age, sex, and ethnic composition. Emphasis on fertility, mortality, and migration and their influence on population change. Prerequisite: SOC 101.

Three credit hours

### SOC 353 Collective Behavior and Social Movements

Unstructured social behavior, e.g. crowds, mobs, riots. The rise and development of social movements emphasizing structuring and institutionalization. Prerequisite: SOC 101.

Three credit hours

### SOC 354 Small Group Analysis

Communication and interaction patterns within small groups are identified and analyzed. Course involves observation of and participation in such interaction. Prerequisite: SOC 101.

Three credit hours

### SOC 355 Social Structure and Politics

The sociological analysis of politics with a cross-national emphasis, including the social basis of mass political behavior. Conceptual focus will be around consensus and conflict, bureaucratization and the institutionalization of interest groups, social movements, and political parties. Prerequisite: SOC 101.

Three credit hours

### SOC 356 Social Organization

An examination of selected institutions in modern society; analysis of social roles, processes, and structures within typical organized groups, such as industrial, military, religious, and fraternal organizations; discussion of bureaucracy, decision-making, social conflict; the implications of cultural and technological change. Prerequisite: SOC 101.

Three credit hours

### SOC 357 Formal Organization

Examination of the nature and types of formal organizations, the relationships between them and the larger social context of which they are a part, and their internal structure. Prerequisite: SOC 101.

Three credit hours

### SOC 358 Sociology of Rural Life

Significance of rural society in American culture. The impact of forces of change, including population movement. The significance of changes in the institutions of family, religion, education, and stratification. Prerequisite: SOC 101.

Three credit hours

### SOC 361 Sociology of Franco-Americans

An analysis of the culture, institutions, and social structure of Americans of French-Canadian descent in the Northeast United States. Prerequisite: SOC 101.

Three credit hours
SOC 370 Social Problems
Staff
The application of a sociological frame of reference to selected contemporary issues. Emphasis is placed on guiding the student toward a general understanding of why and how problems develop, how particular social groups are affected by them, and what is involved in dealing with them. Specific problems considered vary from term to term, and from section to section. Descriptions of current topics are available in the Sociology Department office. Students should consult these descriptions before registering for the course. The course may be taken only once for credit. Prerequisite: SOC 101. Three credit hours

SOC 371 Race and Culture Conflict
Fullam
Analysis of factors involved in group conflict, with emphasis on minority groups in culture-conflict situations. Prerequisite: SOC 101. Three credit hours

SOC 372 Juvenile Delinquency
Lehman
The problem of adolescents in modern society. Discontinuities of teenage roles; influence of various subcultures on patterns of behavior. Prerequisite: SOC 101. Three credit hours

SOC 373 Criminology
Lehman
An analytical survey of the structure and operation of the American criminal justice system as an institution embedded in a social, political, economic and cultural context, with emphasis upon the use of historical and comparative materials. Prerequisite: SOC 101. Three credit hours

SOC 373 Criminology
Humphries
The social and cultural factors in the causation of crime among adults; organized crime as a social phenomenon in American life; specific types of criminal careers; legal and judicial aspects of crime. Prerequisite: SOC 101. Three credit hours

SOC 374 Sociology of Mental Health and Mental Illness
Anspach
An examination of theory and research in the mental health field. Particular attention on the influence of culture on the definition of illnesses, the relationship between social factors and illness, and the social context of treatment. Prerequisite: SOC 101. Three credit hours

SOC 375 Social Disorganization
Fullam
The origin and causes of socially disapproved behavior. Ways in which society interprets and copes with the deviant. Study of the major forms of social disorganization; specific social problems are considered, such as suicide, crime, drug addiction, alcoholism, prostitution, mental illness, divorce, group conflict. Prerequisite: SOC 101. Three credit hours

SOC 380 Seminar in Social Thought
Lacognata
Analyses of contemporary social issues, ideas, and attitudes characterizing American society. Independent library research projects to be emphasized in concert with seminar dialogues. Prerequisites: junior and seniors only and permission of instructor. Three credit hours

SOC 397 Department Projects I
Staff
Independent reading and/or research for juniors and seniors. Apply to department chairman. Prerequisite: 15 hours in sociology. Two or three credit hours

SOC 398 Department Projects II
Staff
Continuation of independent reading and/or research for juniors and seniors. Apply to department chairman. Prerequisite: SOC 397. Two or three credit hours

SOC 400 Theory Construction
Monsen
The vocabulary and logic of theory construction; from assumptions and isolated propositions to systematized theory. The course aims at enabling the student to understand the utility of theory and its relevance for empirical research. Prerequisite: senior standing in sociology. Three credit hours

SOC 401 Senior Seminar
Staff
Focusing on synthesis, the seminar is meant to provide the sociology major with an overall view of his discipline and its perspective as well as an opportunity to consider current issues and the future of sociology. Prerequisite: senior standing in sociology. Three credit hours
Theatre

Associate Professors Rootes, Stump; Assistant Professors Duclos, Power, Steele (Chairman).

Undergraduates desiring to major in Theatre/Communications may do so in either the Bachelor of Arts program of the College of Arts and Sciences, or under programs leading to the degree of Bachelor of Science in the School of Education. All students are reminded that, in addition to meeting departmental requirements for a major, they must also meet the University’s General Education Requirements.

Students desiring a concentration in Communication are referred to the catalog entry under the Communication Department for a description of Communication courses and Allied Areas for majors emphasizing Communication.

REQUIREMENTS FOR THEATRE/COMMUNICATIONS MAJORS
IN THE COLLEGE OF ARTS AND SCIENCES

Theatre/Communications majors desiring a Bachelor of Arts degree are required to complete 36 hours of Theatre and/or Communications courses, which are to include THE 101 (Introduction to Theatre) or COM 102 (Introduction to Communications). At least 18 additional hours must be selected from courses designated THE and/or COM. To complete this major the remaining 15 hours or less may be selected from Allied Areas or from courses at the 200 level or above in any department, school or college, with the faculty adviser’s permission. Students are reminded that prerequisites to courses in Allied Areas must be satisfied as prescribed by the appropriate Department, College or School.

REQUIREMENTS FOR THEATRE/COMMUNICATIONS MAJORS
IN SECONDARY EDUCATION

Theatre/Communications majors desiring a secondary education credential are required to follow the above program in Theatre and Communication courses and specialized requirements in the School of Education where applicable.

REQUIREMENTS FOR MINORS

Theatre/Communications minors are required to complete 18 hours of courses designated THE and/or COM, to include THE 101 or COM 102.

ALLIED AREAS FOR MAJORS EMPHASIZING THEATRE

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<th>Prerequisites</th>
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<td>ARTS 142</td>
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<td>ARTS 152</td>
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<td>Art core courses</td>
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<td>ARTS 363</td>
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DANCE

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<tr>
<td>Shakespeare I</td>
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<td>ENG 243</td>
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<td>ENG 242</td>
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<tr>
<td>Shakespeare II</td>
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<td>Greek Epic, Tragedy, and Comedy</td>
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### FOREIGN LANGUAGES AND CLASSICS

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<tr>
<td>The Tragic Hero in Ancient Literature</td>
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<td>FRE 264</td>
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<tr>
<td>Avant-Garde Theatre in France</td>
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<td>FRE 303</td>
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<td>French Theatre in the 20th Century</td>
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### HISTORY

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<td>HIST 102</td>
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<td>Western Civilization II</td>
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### MUSIC

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<td>MUS 100</td>
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<tr>
<td>Music Appreciation and History</td>
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<td>MUS 202</td>
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<td>Music in America</td>
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<tr>
<td>MUS 401</td>
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<tr>
<td>Gorham Chorale</td>
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<td>MUS 403</td>
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<td>MUS 405</td>
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<td>The Chamber Singers</td>
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<td>MUS 142</td>
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<td>MUS 143</td>
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<td>MUS 242</td>
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<tr>
<td>MUS 342</td>
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<tr>
<td>Recital Class for Juniors I</td>
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<tr>
<td>MUS 443</td>
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### PHILOSOPHY

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### EDUCATION

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<tr>
<td>EDU 311</td>
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<td>Advanced Production of A-V Material</td>
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<td>EDU 449</td>
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<tr>
<td>Photography for Classroom Use</td>
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### INDUSTRIAL ARTS

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<td>IA 313</td>
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<td>Electrical Construction</td>
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<td>IA 130</td>
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<td>Graphic Communication</td>
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<td>IA 241</td>
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<tr>
<td>Graphic Arts Technology</td>
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<td>IA 444</td>
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<td>IA 342</td>
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<tr>
<td>Photographic Reproduction</td>
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<td>IA 363</td>
<td>3</td>
<td>IA 260 or</td>
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<td>Wood Science</td>
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### COURSE DESCRIPTIONS

#### THEATRE

**THE 100 Research (Staff)**

A lecture course designed to acquaint students with the sources and methods of scholarly research. Course will provide students with basic knowledge to carry out projects in secondary and primary research, from conception to execution. Research project required. Three credit hours
THE 101 Introduction to Drama  
A lecture discussion course designed to provide students with a conception of the structural elements of dramatic literature. The course consists of a survey of Greek medieval, Elizabethan, French neo-classic, and 18th, 19th and 20th Century plays.  
Three credit hours

THE 120 Acting I: Fundamentals of Acting  
A course designed to introduce the student to basic skills of acting through the use of mime, improvisation, and role playing. Emphasis made on internal preparation for developing a role and on external techniques for projecting that role.  
Three credit hours

THE 130 Theatre Workshop I  
A course designed to give students practical application of theatre practices in the fields of acting, design, scene construction, costuming, properties, lighting, management, and directing. A laboratory course.  
One credit hour

THE 131 Theatre Workshop II  
A continuation of THE 130. Prerequisite: THE 130.  
One credit hour

THE 132 Theatre Workshop III  
A continuation of THE 131. Prerequisite: THE 131.  
One credit hour

THE 133 Theatre Workshop IV  
A continuation of THE 132. Prerequisite: THE 132.  
One credit hour

THE 134 Introduction to Theatre Production  
A basic course providing background and experience in play production including such topics as play analysis and selection as influenced by cast and faculty options, rehearsal schedules, blocking action and related stage business. Practicum required.  
Three credit hours

THE 135 Stage Craft  
A lecture-discussion-performance course in technical theatre encompassing scene design, stage craft, properties, and similar topics relevant to technical direction.  
Three credit hours

THE 170 Public Speaking  
An introductory course in the fundamentals of public discourse. Primarily a lecture-performance course, students will learn the basics of informative, persuasive, and entertaining speaking, as well as the processes of problem-solving and informative discussion. Emphasis is upon conception, analysis, structure, and modes of proof.  
Three credit hours

THE 220 Acting II: Voice for the Actor  
Designed as a practicum course to develop the actor's voice allowing him to understand the vocal mechanism and the methods in which it can be used to create articulate speech projection and dialect. Prerequisite: THE 120.  
Three credit hours

THE 274 Journalistic Drama Criticism  
This course will provide the student with a comprehensive analysis of the role of the writing critic in Professional, Community, Educational, and Amateur theatre. Stress will be placed upon the critic's options in making judgments and upon development of a workable writing style. A minimum of five plays will be seen from which reviews will be generated. Prerequisite: THE 134.  
Three credit hours

THE 290 Oral Interpretation  
A course in the assimilation and analysis of literary material (poetry, prose, drama), with emphasis on the techniques used in written material aloud to an audience. Designed to stimulate an understanding and responsiveness to literature and to develop the ability to convey to others, through oral reading, an appreciation of that literature.  
Three credit hours

THE 320 Acting III: Contemporary Acting Methods  
Designed to broaden the basic skills of the actor in achieving theatrical effectiveness through an individualized examination of the actor's problems with heavy emphasis placed upon contemporary techniques. Student will become acquainted with the principles established by Stanislavsky, Strasberg and Ball. Prerequisites: THE 120, THE 220.  
Three credit hours
THE 330 Stage Lighting
Introduction to stage lighting design, elements of electricity, color, light sources, instrumentation, and control systems. Student will participate in lighting projects in practicum. Prerequisites: THE 134 and THE 135. Three credit hours

THE 331 Scene Design
Lecture and practicum in stage scenic design. Emphasis on the visual art and drafting of designs. Prerequisites: THE 134 and THE 135. Three credit hours

THE 332 Fundamentals of Directing
Designed to train directors in theatrical organization and rehearsal techniques. Embraces composition, picturization, movement and rhythm. Course involves both contemporary theory and practical application. Prerequisites: THE 101, 120, 134, 135, 220 and 320; Senior or Junior with permission. Three credit hours

THE 335 Playwriting
A lecture-practicum course designed to acquaint the student with playwriting principles. Emphasis is placed on the one-act play form. Students will be required to complete a series of creative exercises culminating with the writing of a one-act play. Prerequisites: THE 101 and THE 361 or 362 or 363. Three credit hours

THE 340 History of the Theatre I
A study of the development of the drama, the physical theatre, and the modes of production from the ancient Greek period through to 1640. Three credit hours

THE 341 History of the Theatre II
A study of the development of the drama, the physical theatre, and the modes of production from the Restoration to the present. Three credit hours

THE 361 Late 19th Century Drama of the Western World
This course is designed to acquaint the theatre major and non-major with a broad range of dramatic literature of the early 19th century. Representative plays of Ibsen, Strindberg, Chekov, Shaw, and others will be studied which exemplify the literary, social, political, and philosophical aspects of the age. Prerequisites: THE 101 or 340 or 341. Three credit hours

THE 362 20th Century Drama of the Western World
This course is designed to acquaint the theatre major and non-major with a broad range of dramatic literature of the 20th century. Representative plays of O'Neill, Odets, Anouilh, Brecht, Sarte, Wilder, Miller, Beckett, Osborne, Chayefsky, and others will be studied which exemplify the literary, social, political, and philosophical aspects of the age. Prerequisites: THE 101, 340, and 341. Three credit hours

THE 363 Contemporary Avant-Garde Drama
This course is designed to acquaint the student of theatre with the new voices in contemporary dramatic literature. Focus is upon such playwrights as Beckett, Genet, Pinter, Albee, LeRoi Jones, and representative plays from "Off-Off Broadway" Theatre. Prerequisites: THE 101, 340 and 341. Three credit hours

THE 433 Project I
Investigation of special topics, or execution of special projects which fall within the purview of theatre. Students may select an inter- or intra-departmental committee of three professors to approve, assist, and oversee the project. Prerequisites: Juniors and Seniors only; precise definition of project and unanimous permission of committee. Three credit hours

THE 434 Project II
A continuation of THE 433. Three credit hours

THE 450 Dramatic Theory
A study of the development of comedy and tragedy through readings in classic and modern criticism. Includes melodrama and farce, and the merging of all modes in the modern theatre. Consideration of leading philosophical theories and their bearings on the theatre. Prerequisites: THE 101, 340 and 341. Three credit hours

THE 460 American Drama
A study of the drama in the United States. A brief history of early American Playwrights followed by a close study of major figures, with O'Neill as the center. Others: Maxwell, Anderson, Robert Sherwood, Tennessee Williams, Arthur Miller, and Edward Albee. Three credit hours
School of Business and Economics

JOHN W. BAY, Dean

Department of Associate Business Administration: Associate Professors S. Andrews, Annett, McKee (Chairman), Taylor; Instructor Gold.

Department of Business Administration: Professors Findlay (Chairman), Fitzpatrick (on leave, Fall Semester, 1974), Waters; Associate Professors Emanuelson, Hall, Jogolinzer (on leave, 1974-75); Assistant Professors B. Andrews, Chandler, Gramling, Hodson, Manck; Lecturer Plowman.

Department of Economics: Professor Durgin; Associate Professors Bay, McMahon, Witherill; Assistant Professor Bien (Chairman).

The School of Business and Economics offers a number of different programs to meet student needs. The School offers a two-year program in Business Administration leading to an Associate of Science in Business Administration degree. Four-year undergraduate programs are available in three areas of study: Accounting, Business Administration, and Economics. Upon successful completion of one of these fields the degree of Bachelor of Science in Business Administration or Economics is awarded. The School also provides a graduate program leading to the degree of Master of Business Administration.

TWO-YEAR ASSOCIATE OF SCIENCE PROGRAM IN BUSINESS ADMINISTRATION

This program is designed to serve two purposes: to prepare students who wish to complete their education in two years for employment in junior management position in several different careers; and to provide a sound foundation for those students who perform well and who wish to transfer to the four-year business administration program at this University or at another institution.

While the program emphasizes business, it contains some courses in liberal studies such as English composition, literature, communications, public speaking, human relations, and mathematics. Options within the associate program include Management-Accounting; Hotel, Motel, and Restaurant Management; and Real Estate (offered only in CED).

The Hotel, Motel, and Restaurant Management option is a cooperative and coordinated two-year Associate Degree program developed jointly by Southern Maine Vocational-Technical Institute and the Department of Associate in Business Administration at the University. The program draws upon the core business curriculum of this University, the culinary arts curriculum of SMVTI, and industry advisors for the program. The program is flexible and will respond to the developing needs of the hospitality and tourist industry in Maine. The program is designed to allow Maine people to assume positions of responsibility in the industry. Graduates would be prepared for such diverse jobs as motel managers, food and beverage managers, stewards, reservations managers, restaurant managers, convention and special events coordinators, hotel innkeepers, general managers, and other supervisory or mid-management positions.

Students may enter the Hotel, Motel, and Restaurant Management program at either SMVTI or UMPG. If admitted to the UMPG program, the student, upon successful completion of sixty (60) credit hours, will receive an Associate of Science degree in Business Administration with a major in Hotel, Motel, and Restaurant Management. UMPG students take approximately three semesters at UMPG and one semester at SMVTI.
THE THREE OPTIONS OFFERED
IN THE
ASSOCIATE DEGREE PROGRAM

Upon completion of one of the following 60-hour programs with a grade point average of 2.0, a student will be awarded the degree of Associate of Science in Business Administration.

Graduates are equipped for employment at the junior management level in many fields of business. Some fields of business that graduates have entered are sales, retailing, banking, finance, management trainee programs, and accounting. Students who have a 3.0 cumulative average at the end of the first year or a 2.4 cumulative average at the end of their second year may transfer to the four-year business administration program.

Any high school graduate may apply for admission to the two-year program. A college preparatory course is not required. Applicants should complete the regular University of Maine application form and specify the Associate in Business Administration program. Candidates must also complete the College Entrance Examination Board's general Scholastic Aptitude Test.

Students admitted to the Associate Degree Program pursue one of the following options during their two years:

Management-Accounting Option

**First Year**

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<td>ECON 11 and ECON 12</td>
<td>Principles of Economics</td>
<td>6</td>
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<tr>
<td>ENG 11</td>
<td>Composition</td>
<td>3</td>
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<tr>
<td>ENG 120</td>
<td>Introduction to Literature</td>
<td>3</td>
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<tr>
<td>BUS 95</td>
<td>Business and Society</td>
<td>3</td>
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<tr>
<td>COM 150</td>
<td>Business Communication</td>
<td>3</td>
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<tr>
<td>or THE 170</td>
<td>Public Speaking</td>
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<tr>
<td>MS 10 and MS 11</td>
<td>Elementary and Intermediate Algebra or</td>
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<td>or MS 109 and MS 110</td>
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**Second Year**

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<td>BUS 60</td>
<td>Marketing</td>
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<td>BUS 43</td>
<td>Problems of Small Business</td>
<td>3</td>
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<tr>
<td>BUS 64</td>
<td>Business Law</td>
<td>3</td>
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<td>BUS 90</td>
<td>Human Relations in Business</td>
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<tr>
<td>or BUS 67</td>
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<td>BUS 15</td>
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<td>or BUS 20</td>
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<td>BUS 16</td>
<td>Intermediate Accounting</td>
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<td>or BUS 21</td>
<td>Business Finance II</td>
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<td>BUS 30</td>
<td>Investment Management</td>
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Students who wish to take MS 109/110 or MS 211/212 in the second year, they may be used as substitutes for BUS 43 and ENG 19. Students who desire to take one or two Real Estate courses may substitute these for BUS 64 or 67; or BUS 16 or 21 or 30.
### Real Estate Option—Offered Only in CED

#### First Year

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<td>ENG 11</td>
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<td>ENG 120</td>
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<td>BUS 80</td>
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<tr>
<td>COM 150 or THE 170</td>
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**Principles of Accounting** .......................... 6
**Principles of Economics** .............. .......... .... ........... .. 6
**Composition** .............................................. 3
**Introduction to Literature** ....................... 3
**Business Law** .............................................. 3
**Business Communication** ........................... 3
**Public Speaking** .........................................
**Elementary and Intermediate Algebra or Linear Systems** .............................. 6

#### Second Year

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<td>BUS 90</td>
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**Industrial Management** .............................................. 3
**Marketing** ......................................................... 3
**Real Estate Law** .................................................... 3
**Real Estate Practice** ............................................... 3
**An Introduction to Appraising Real Property** .......................... 3
**Expository Writing** .................................................. 3
**Problems of Small Business** ........................................ 3
**Introduction to Computers in Business** ............................. 3
**Human Relations in Business** ....................................... 3

One of the Following courses:

- BUS 95  
- BUS 15 or 16  
- BUS 20  
- BUS 64  
- BUS 67

**Business and Society** ............................................. 3
**Intermediate Accounting** .......................................... 3
**Business Finance I** ................................................... 3
**Retailing** ............................................................
**Sales Management** ..................................................

### Hotel, Motel, and Restaurant Management—Option

#### First Year

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<td>BUS 95</td>
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<td>MS 10 and MS 11 or MS 109 and MS 110</td>
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**Principles of Accounting** ..................... 6
**Principles of Economics** .................... 6
**Composition** .............................................. 3
**Public Speaking** ......................................... 3
**Expository Writing** .................................... 3
**Business and Society** ................................... 3
**Elementary and Intermediate Algebra or Linear Systems** .............................. 6

#### Second Year

**Industrial Management** .............................................. 3
**Marketing** ......................................................... 3
**Problems of Small Business** ........................................ 3
**Business Finance I** ................................................... 3
**Human Relations in Business** ....................................... 3

**Taken at SMVTI—Fall Semester**

- Front Office ..................................................... 3
- Hotel Orientation .................................................. 3
- Food Fundamentals ................................................ 3
- Food and Beverage Control ....................................... 3
- Seminar in Management ............................................ 3

**Spring Semester at Portland Campus**

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<td>BUS 20</td>
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<td>BUS 93</td>
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**Industrial Management** .............................................. 3
**Marketing** ......................................................... 3
**Problems of Small Business** ........................................ 3
**Business Finance I** ................................................... 3
**Human Relations in Business** ....................................... 3

Upon completion of the 60 hour program with a grade point average of 2.0, a student will be awarded the degree of associate of science in business administration.
FOUR-YEAR UNDERGRADUATE PROGRAMS IN BUSINESS AND ECONOMICS

The primary objective of the undergraduate program in Business Administration is to develop the student's abilities to assume the responsibilities of business management. The program is aimed at providing the broad training necessary for successful business management in a rapidly changing economy. No attempt is made to provide detailed specialized training in particular business tasks. The program aims, rather, at developing skills and attitudes of mind that will enable the student to cope successfully with the changing problems of business management in the years ahead. The program is implemented in three general phases: First, the student acquires broad training in the arts and sciences for the necessary foundation upon which the student's future education will build. Second, the student pursues a program of study designed to provide an understanding of the major functional areas common to most business operations and a knowledge of certain fields which are particularly relevant to the study of business management. This is referred to as the "core" program and includes basic courses in accounting, introduction to computers, economics, finance, business law, marketing, and management. Third, the student undertakes to acquire a deeper knowledge of the selected major field. This is accomplished by taking 18 credit hours beyond the core program.

The undergraduate program in economics is designed to prepare students broadly for careers such as civil service, law, management, public affairs, and labor relations. Economics is a social science and as such must be studied in the perspective of a broad training in the liberal arts and sciences. Many students who plan to attend graduate and professional schools will find the undergraduate economics program to be valuable training for advanced academic work. Within the economics program, courses are available in such fields as: microeconomic analysis, money and banking, macroeconomic analysis, international trade, comparative economic systems, public finance, and the social control of business.

In addition to the traditional four-year programs in accounting, business administration, and economics, the following options are available to the student:

COOPERATIVE EDUCATION PROGRAM

The School of Business and Economics offers a Cooperative Education Program in which students, while working in business or industry, may earn a maximum of 15 academic credits. The program consists of seven academic periods and three alternating related work experiences. This program combines the efforts of employers and educators in forming a meaningful educational experience in a wide range of areas which include management, accounting, production and marketing. Firms engaged in the Cooperative Education Program represent fields such as banking, public utilities, retailing and public accounting. Its primary value is educational, although it does provide the opportunity for students to earn money for college expenses. Students who desire further information should contact the Director of Cooperative Education, School of Business and Economics.

SMALL BUSINESS INSTITUTE

The School of Business and Economics, and The Small Business Administration, a government agency, jointly sponsor a program, The Small Business Institute, whereby Juniors and Seniors provide management counseling to small area businesses. Under the program the students, working as a team, counsel and advise, in cooperation with a faculty adviser and representatives of the SBA, various actual businesses within Southern Maine.

The program provides an opportunity for relevant practice application of academic principles. Students may be involved in consulting in areas such as accounting, finance, management and marketing.

The course is offered as "Applied Study" and carries three hours of academic credit. Preference is given to Seniors, but Juniors are considered. Interested students should contact Mr. Donald Annett, Project Director.
JOINT PROGRAMS WITH THE SCHOOL OF EDUCATION AND DEPARTMENT OF MATHEMATICS

In cooperation with the School of Education, the School of Business and Economics offers (1) an Economics Major and Economics Minor leading to the degree of Bachelor of Science in Education for students in the School of Education who wish to prepare themselves to teach economics in public and private schools, and (2) a Social Science Area Major with Concentration in Economics leading to the degree of Bachelor of Science in Education for students in Secondary Education wishing to prepare themselves to teach economics in secondary school in addition to other social sciences including history, geography, and political science. This latter program is described in the section of the catalog dealing with the department of Geography-Anthropology, where other Social Science Area majors are listed.

In cooperation with the Mathematics Department, a minor in mathematics is available on an optional basis to all Economics Majors. The optional Mathematics Minor is: 21 credit hours (not to include statistics courses), with 12 of the credit hours in MS 152, 153, and 252. The remaining 9 credit hours are to be selected from the following: MS 290, 352, 354, 366, 380, 460; CS 260.

GENERAL GRADUATION REQUIREMENTS OF THE SCHOOL OF BUSINESS AND ECONOMICS FOR ALL CANDIDATES FOR A B.S. DEGREE

All students are required to complete 120 hours.

To be eligible for a B.S. degree in the 4-year programs in the School of Business and Economics, the student must have attained a cumulative grade point average of 2.0 or better:

a. For all courses taken in 4-year programs at the University, and
b. For all 4-year courses in business and economics.

ADDED REQUIREMENTS FOR A BACHELOR OF SCIENCE DEGREE IN BUSINESS ADMINISTRATION

A. General Foundation Courses
   Twelve hours of Humanities (Area 1, inside front cover)
   Six hours of Fine and Applied Arts (Area 2)
   Twelve hours of Social Sciences (Area 4)
   Six hours from Area 5: General. (See inside front cover.)
   Twelve hours of Mathematics (Area 3) as noted below:
   - MS 109 Linear Systems
   - MS 110 Elementary Mathematical Analysis
   - MS 211 Probability
   - MS 212 Statistics

B. Core Requirements in Business and Economics
   48 credit hours
   - ECON 101 Principles of Economics I
   - ECON 102 Principles of Economics II
   - One 300 level ECON course
   - BUS 101 Introductory Accounting
   - BUS 320 Business Finance
   - BUS 340 Elements of Industrial Management
   - BUS 360 Marketing
   - BUS 380 Business Law
   - BUS 385 Business Economics
   - BUS 390 Introduction to Computers in Business

30 credit hours
C. Major Field Requirements  

Accounting Major  

**BUS 301** Intermediate Accounting I  
**BUS 302** Intermediate Accounting II  
**BUS 305** Cost Accounting  
**BUS 310** Advanced Accounting  
**BUS 410** Auditing  

Elect either:  
**BUS 311** Advanced Accounting  
**BUS 313** Federal Tax Reporting  

Business Administration Major  

**BUS 102** Financial and Management Accounting  
**BUS 330** Investment Management  
**BUS 370** Managerial Marketing  
**BUS 450** Business Management and Policy  
Six hours of Business or Economics Electives  

D. Electives  

---  

**ADDED REQUIREMENTS FOR A BACHELOR OF SCIENCE DEGREE IN ECONOMICS**  

A. General Foundation Courses  

<table>
<thead>
<tr>
<th>Course Sequence</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Six hours of Humanities (Area 1)</td>
<td>18</td>
</tr>
<tr>
<td>Six hours of Fine and Applied Arts (Area 2)</td>
<td>18</td>
</tr>
<tr>
<td>Six hours of Social Sciences (Area 4)</td>
<td>18</td>
</tr>
<tr>
<td>Twelve hours of Mathematics (Area 3) as noted below:</td>
<td>36</td>
</tr>
<tr>
<td>MS 109 Linear Systems</td>
<td></td>
</tr>
<tr>
<td>MS 110 Elementary Mathematical Analysis</td>
<td></td>
</tr>
<tr>
<td>MS 211 Probability</td>
<td></td>
</tr>
<tr>
<td>MS 212 Statistics</td>
<td></td>
</tr>
</tbody>
</table>

(An optional, more rigorous mathematics sequence is available to those students who desire it. MS 152, MS 153, and MS 252 will substitute for MS 109 and MS 110. Students will still be required to take MS 211 and MS 212. Students who only wish to take MS 152 and MS 153 can substitute those two courses for MS 109 and MS 110. They still must take MS 211 and MS 212. An optional minor in mathematics is also available.)  

It is recommended that students who have writing deficiencies take either ENG 001, Writing Laboratory, or ENG 100, College Writing. Students having difficulty in or communication should take THE 170, Public Speaking.  

B. Course Requirements in Economics and Business  

<table>
<thead>
<tr>
<th>Course Sequence</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fifteen hours of core requirements:</td>
<td>36</td>
</tr>
<tr>
<td><strong>ECON 101</strong> Principles of Economic I</td>
<td></td>
</tr>
<tr>
<td><strong>ECON 102</strong> Principles of Economics II</td>
<td></td>
</tr>
<tr>
<td><strong>ECON 301</strong> Macroeconomic Analysis</td>
<td></td>
</tr>
<tr>
<td><strong>ECON 302</strong> Microeconomic Analysis</td>
<td></td>
</tr>
<tr>
<td><strong>BUS 101</strong> Introductory Accounting</td>
<td></td>
</tr>
</tbody>
</table>

Completion of at least 21 additional hours in economics courses, which may include BUS 383, or HIST 338. ECON 150 and ECON 201 are not applicable for major credit in business and economics.
REQUIREMENTS FOR AN ECONOMICS MAJOR
OR AN ECONOMICS MINOR
FOR STUDENTS IN THE SCHOOL OF EDUCATION

Criteria For Admission And Retention Of Students

Admission to the Education program by the School of Education plus a minimum of "C" grades in Economics courses.

Secondary Education — Economics Major

Requirements and Content | Credit Hours
--- | ---
ECON 101 and 102 Principles of Economics | 6
MS 120 Statistical Inference | 3
ECON 301 and 302 Intermediate Micro and Macro Theory | 6
ECON 350 Comparative Economic Systems | 3
EC ED 300 Economic Concepts and Resource

Materials for Educators | 3

Addition Economic Electives | 15

Total | 36

Secondary Education — Economics Majors will do practice teaching in the field of economics, if possible, and will meet all other requirements of the University and the School of Education.

Elementary and Secondary Education — Economics Minor

ECON 101 and 102 Principles of Economics | 6
ECON 201 Current Economic Problems | 3
ECON 350 Comparative Economic Systems | 3
EC ED 300 Economic Concepts and Resource

Materials for Educators | 3

Addition Economic Electives | 6

Total Credits | 21

Economics Minors will also meet all other requirements of the University and the School of Education.

MASTER OF BUSINESS ADMINISTRATION

Since the fall of 1964 the School of Business and Economics has offered a master's degree in Business Administration. The M.B.A. program is designed to give students a broad preparation in business administration upon which men and women may build executive careers. To this end, the curriculum is designed to give each student a proper orientation toward business, to develop skills in using tools of analysis, to provide an understanding of the functional areas of business, and to develop a capacity for understanding and adapting to technological and social change. Candidates who enter with no previous college work in business will typically need from one to one and one-half years to complete undergraduate prerequisites in business administration. The graduate work may be completed in one calendar year.

Requirements for the M.B.A. degree consist of undergraduate foundation courses of thirty-three semester hours, which are apportioned in the areas of business administration, economics, and mathematics as listed below. These courses must be completed prior to the completion of the first twelve hours of graduate courses. This stipulation means that a
student may take some graduate courses prior to completing the undergraduate work in cases where the prerequisites for specific graduate courses are satisfied. The graduate program comprises thirty hours of graduate courses, including twenty-one hours of required core courses and nine hours of electives, selected from the many offerings of the M.B.A. program.

Most of the courses are offered in the evening to facilitate students whose career or family responsibilities prevent their attending a day program. The course offerings and scheduling are directed to these students. Entry in the M.B.A. program is possible at the beginning of either semester or the summer session. There is no thesis requirement, but research and writing are required throughout the graduate program. These writings often develop from solutions to case problems which are used in many of the courses.

ADMISSION

Application for admission to the M.B.A. program should be made to the Dean of the Graduate School. Admission to this program requires the recommendation of the M.B.A. Graduate Admissions Committee at the University, and the approval of the Dean of the Graduate School.

To be admitted, an applicant must have received a baccalaureate degree or its equivalent and must show promise of ability to pursue advanced study and research. This requirement is determined by the M.B.A. Graduate Admissions Committee using the test score (ATGSB), previous college or university work, and the letters of recommendation. All applicants for the M.B.A. program must submit scores obtained on the Admission Test for Graduate Study in Business (ATGSB) which is administered by the Educational Testing Service, Princeton, New Jersey.

For regular admission, the minimum ATGSB test score and undergraduate grade point average (GPA) from an accredited school are 450 and 2.5 (4.0 system) or 450 and 2.75 for the junior, senior years. A weighted average of the ATGSB score and the GPA may be used with a minimum total of 950 points based on the following formula: 200 times the undergraduate GPA (4.0 system) plus the ATGSB score; or at least 1000 points based on the formula: 200 times upper-division GPA (4.0 system) plus the ATGSB score. Conditional admission (described below) may be possible for applicants whose scores are below those prescribed for regular admission.

An application is not complete until all the required transcripts, ATGSB scores, and letter of recommendation are on file in the Office of the Graduate School. Applications should be received by the Graduate School at least six weeks before the date of registration for the semester or summer session in which the applicant wishes to begin his study. All application material becomes the property of the University.

Status

An applicant’s admission status will be one of the following:

Regular. Granted to students who have a record of high scholarship in their academic field and about whom there is no question of ability to carry on graduate study. If the applicant has not completed all of the required undergraduate courses, the applicant will be advised in the letter of acceptance that these courses must be completed prior to completing twelve hours of graduate credit.

Conditional. Students whose academic record does not show high scholarship, but are deemed by the Graduate Admissions Committee to show promise of success in the M.B.A. program, may be admitted on a conditional basis. Conditional basis admission may also be used under other circumstances. The letter of acceptance will contain the conditions which must be met before the student can be re-classified as Regular. If the applicant has not completed all of the required undergraduate courses, the applicant will be advised in the letter of acceptance that these courses must be completed prior to completing twelve hours of graduate credit.

Special. This status is assigned to those in the general category of Non-degree Students. Special status is obtained by submitting a request to the Graduate Admissions Committee with supporting evidence of ability to perform graduate level work. Students granted this
status will receive a grade but credit will not normally be granted towards the M.B.A. degree at the University.

**Transient.** A person enrolled in any other graduate program at the University or another school may enroll in graduate business administration courses if the required prerequisite courses have been taken. A request for transient status shall be made to the chairman of the M.B.A. program.

**MASTER OF BUSINESS ADMINISTRATION**

**Undergraduate Courses Required**

- Accounting (6 hours)
- Business Law (3 hours)
- Calculus (3 hours)
- Economics (9 hours)
- Finance (3 hours)
- Management (3 hours)
- Marketing (3 hours)
- Statistics (3 hours)

Candidates for the M.B.A. degree must complete twenty-one hours of required graduate courses and nine hours of graduate elective courses prior to the completion of their formal graduate degree program.

**Required Graduate Courses**

- BUS 510 Operations Research
- BUS 520 Industrial Relations
- BUS 530 Senior Executive Decision Making
- BUS 540 Managerial Accounting
- BUS 550 Managerial Economics
- BUS 560 Financial Management
- BUS 570 Marketing Management

**Elective Graduate Courses**

- BUS 523 Collective Bargaining
- BUS 527 Human Relations in Industry
- BUS 533 Production Management
- BUS 537 Organizational Behavior in Business
- BUS 553 Business Cycles and Forecasting
- BUS 569 Investment Management
- BUS 573 Market Research and Management
- BUS 583 Business Logistics
- BUS 593 Independent Readings and Research in Business and/or Administration

For further information and applications, telephone 773-2981, Extension 206, or write:

Chairman, M.B.A. Program  
School of Business and Economics  
University of Maine at Portland-Gorham  
96 Falmouth Street, Portland, Maine 04103

**MBA GRADE POLICY**

In order to receive graduate degree credit for a course, a student must be registered in the graduate program as a graduate student. Generally, graduate credit will not be granted retroactively for graduate work which was taken as a special student.

A grade of “I” (deficient), a temporary grade given when the student, because of extraordinary circumstances, has failed to complete required work, must be completed and a grade submitted in the semester following the semester in which the “I” grade was received. An “I” which is not removed during this period becomes an “F”.
Withdrawal from a course may be made during the first five weeks of a semester without the course appearing on the transcript. During the second five week period a "W" (withdrawn) grade is given. After the end of the first ten weeks, a student may obtain an approved withdrawal but the grade of "WP" (withdraw passing) or "WF" (withdraw failing) is given. The "WF" grade is treated as an "F" in grade point average computation. The last day to withdraw from a course is the last day of classes.

All courses completed for the MBA must be passed with a minimum grade of "C". A grade of "C" will carry graduate degree credit. However, no student will be allowed to apply more than six hours of "C" grades towards any requirements of the MBA taken after being admitted to the program.

No graduate student may repeat the same course after receiving a grade of "C" or "B" in a course to improve his grade point average.

If a student receives a grade of "D" in a required course, the student must retake the course over again. If a "D" grade is received in an elective course, the student may or may not elect to retake the elective course. Whether the course is required or an elective, the "D" grade will be included in the student's grade point average. If the course is repeated, the student must pass the course with a minimum grade of "C". When a course with a "D" grade is repeated, the new grade as well as the original "D" grade is figured in the grade point average.

The basis for automatic dismissal is:

- The equivalent of three "Cs" or below.
- The equivalent of two "Ds" or one "F".

A student enrolled on a conditional basis must obtain a grade point average of 3.0 or better by the time of completion of fifteen hours of graduate courses. At this point, the student must also have satisfied the condition under which the student was admitted to the program. If one or the other of these requirements is not met, the student will be dismissed from the program. If at any time during the first fifteen hours the conditional student's grade point average falls below 3.0, the student will be placed on probation. The probational status must be removed within one academic year or by the completion of fifteen hours of graduate courses, whichever comes first, or the student will be dismissed from the program.

A regular student whose grade point average falls below 3.0 will be automatically placed on a probational status. The student will have nine semester hours in which to bring the grade point average back to the required 3.0. Students who fail to do this, will be dismissed from the program.

A student who has completed the program of study must have a grade point average of 3.0 to receive the M.B.A. degree. Any student whose grade point average falls below 2.0 at any time will automatically be dismissed from the program. Since the grade for a single course cannot be considered an average, this rule will be applied when the student's grades for not less than two courses have become available.

### Transfer of Credit

A student enrolled in the graduate business administration program may, after completing nine hours of graduate credit, apply to have graduate course credit transferred from other institutions. Generally courses taken while enrolled as a graduate student at other institutions will be accepted when work is "B" grade or better in courses corresponding to those offered by the University and if applicable to the student's program of study.

If students relocate from the Portland area, they may apply to continue their program at another graduate school of business and have the degree granted by the University. In any case involving transfer credit, a minimum of eighteen (18) hours must be taken at the University in order to obtain the M.B.A. degree from the University. All requests for transfer credit must be approved by the graduate admissions committee. When credit transfer is requested to complete any part of the M.B.A. program at the University it must be requested and approved prior to the enrolling in another graduate school of business and not after the course has been completed.
DESCRIPTI ONS OF COURSES
IN THE ASSOCIATE DEGREE PROGRAM

BUS 11 Principles of Accounting I  
McKeil  
An introduction to accounting concepts, principles, and practices. Emphasis on the preparation and interpretation of statements for financial and management uses as well as the measurement of assets, liabilities, equity, revenues, and expenses. Three credit hours

BUS 12 Principles of Accounting II  
McKeil  
An introduction to the accounting for partnerships, corporations, and manufacturing. Emphasis on analysis and interpretation of accounting data for management planning and control. Prerequisite: BUS 11. Three credit hours

BUS 15 Intermediate Accounting I  
Hall  
An intensive study of accounting theory including financial statements, the accounting for corporate capital, cash receivables, and current liabilities. Prerequisite: BUS 11 and BUS 12. Three credit hours

BUS 16 Intermediate Accounting II  
Hall  
The study of accounting theory including investments, inventories, property, plant and equipment, long-term debt, intangible assets. Prerequisite: BUS 11 and BUS 12. Three credit hours

BUS 20 Business Finance I  
Gold  
A study of the promotion, organization, and financing of the single proprietorship, partnership, and corporation. Such topics as funds flows, cash budgeting, and capital budgeting are examined. Prerequisites: ECON 11, ECON 12, and BUS 11. Three credit hours

BUS 21 Business Finance II  
Gold  
An in-depth examination of selected topics in finance with advanced cases and problems used to relate these topics to the theories and principles developed. Cost of capital and other tools are developed for use in the decision-making process. Prerequisite: BUS 20. Three credit hours

BUS 22 Real Estate Law  
Staff  
A study of real property law in general and Maine law in particular. Land titles, acquisition and transfer, methods of ownership, rights of husband and wife, easements, fixtures, land descriptions, mortgages, deeds, taxes, contracts, legal elements of brokerage relationship, and other legal applications are covered. This subject provides the first half of an approved course of study for those who wish to prepare for the State of Maine Real Estate Broker's License Examination. (Offered through C.E.D. only). Three credit hours

BUS 23 Real Estate Practice  
Staff  
This course reviews the basic functions of the practicing real estate broker. Discussed are such topics as listing and sales procedures, financing, introduction to appraising, construction, taxation, advertising, state regulations on office operation, and real estate mathematics. This course is approved as the second part of an approved course of study for those who wish to be eligible to take the State of Maine Real Estate Broker's License Examination. (Offered through C.E.D. only). Three credit hours

BUS 24 An Introduction to Appraising Real Property  
Staff  
This is an intensive course covering all real property appraising concepts and the technical skills employed in their applications to residential property. The course is designed for the beginning appraiser, real estate broker, lender, builder, and assessor. Included is a summary introduction to real estate economics and urban land studies. This is the first of three courses accepted by the Society of Real Estate Appraisers for credit toward a professional designation. (Offered through C.E.D. only). Three credit hours

BUS 30 Investment Management  
Gold  
Provides the planning and management of investment programs for all types of investors. Evaluates the various media of investments in terms of their risks and profits. The functions of the stock market and its behavior are examined. Prerequisites: ECON 11, ECON 12, BUS 11, and BUS 12. Three credit hours

BUS 40 Elements of Industrial Management  
Annett, Taylor  
A comprehensive survey of all phases of the management of industrial and business enterprises. The influence of industrial relations is interspersed with the treatment of management's technical problems. Prerequisites: ECON 11 and ECON 12. Three credit hours
BUS 43 Problems of Small Business  Annett
Aspects of management that are uniquely important to small firms, in the interest of developing an understanding of the economic and social environment in which the small concern functions. Practice in decision-making on the same types of problems that small businessmen face. Problems relevant to small business operations in Maine will be stressed. Prerequisite: BUS 11. Three credit hours

BUS 60 Marketing  Gold
Problems of distribution for representative industrial and consumer goods, including merchandising policies, selection of distribution channels, price policies, and advertising and sales promotion methods. Prerequisites: ECON 11, ECON 12, and BUS 11. Three credit hours

BUS 64 Retailing  Taylor
Study of the retail distribution structure and of the problems involved in successful store operation under current conditions. Prerequisite: BUS 60. Three credit hours

BUS 67 Sales Management  Taylor
Analysis of the problems facing marketing management in formulating sales policy and in managing the sales organization. Prerequisite: BUS 60. Three credit hours

BUS 80 Business Law  Emanuelsen
This course, an introduction to the study of business law, includes origins of the law, its nature and classification; contract law and the laws of agency and personal property are comprehensively dealt with. Three credit hours

BUS 90 Introduction to Computer in Business  B. Andrews
The role of the computer as an aid in managerial decision making. Computer operation and programming fundamentals including flow charting and program writing in one of the common computer program languages emphasizing business applications. Three credit hours

BUS 93 Human Relations in Business  Annett
Introduction to the behavioral sciences, emphasizing typical behavioral problems faced in business by employees and management. The laboratory method of teaching, involving the student in role playing and analyzing collected data, is supplemented with lectures, case analysis, and outside reading. Three credit hours

BUS 95 Business and Society  Taylor
An examination of the significant relationships between business and the social, political, and economic environment of our society for the purpose of evaluation of goals, values, ethics, and practices in the business world. Historical development of business and capitalism is covered. The industrial and commercial structures and functions in our society are described. Social relationships internal to the firms are explored. Special problems concerning mass production, automation, and employment are discussed along with other current and future issues and problems related to business and our society. Three credit hours

ECON 11 Principles of Economics I  McKeil
A theoretical analysis of the basic characteristics, institutions, and operational activities of a modern capitalistic economy which is involved in the transformation of scarce economic resources into the goods and services demanded by consumers. Topics discussed include inflation, unemployment, government monetary and fiscal policy to achieve full employment, and economic growth. Three credit hours

ECON 12 Principles of Economics II  McKeil
A theoretical analysis of the firm, and its role in the transformation of scarce economic resources into the goods and services demanded by consumers. Special attention is focused on the development of a market mechanism for the exchange of goods, services, and resources within a capitalistic economy. Topics discussed include consumer preferences and consumer behavior, production theory and production costs, the monopoly firm, and resource pricing. Three credit hours

ENG 11 Composition  Staff
Intensive practice in expository writing, with reading of illustrative material. Students in the ABA program will complete ENG 11 on a pass-fail basis or receive credit by examination. Three credit hours
ENG 19 Expository Writing  
Training in clear expository writing of formal reports, business communications, and related material.  
Three credit hours

ENG 120 Introduction to Literature  
(See English Department course offerings)

MS 10 Elementary Algebra  
(See Mathematics Department course offerings)  
Three credit hours

MS 11 Intermediate Algebra  
(See Mathematics Department course offerings)  
Three credit hours

MS 109 Linear Systems  
(See Mathematics Department course offerings)

MS 110 Elementary Mathematical Analysis  
(See Mathematics Department course offerings)

MS 211 Probability  
(See Mathematics Department course offerings)

MS 212 Statistics  
(See Mathematics Department course offerings)

COM 150 Business Communications  
(See Communication Department course offerings)

THE 170 Public Speaking  
(See Theatre Department course offerings)

UNDERGRADUATE COURSES IN THE FOUR-YEAR PROGRAM IN BUSINESS ADMINISTRATION

BUS 101 Introductory Accounting  
Findlay, Gramling, Hodson  
An introduction to accounting principles and concepts. Emphasis is placed on the preparation of financial statements and the accounting for assets, liabilities, equities, revenue, and expenses.  
Three credit hours

BUS 102 Financial and Management Accounting  
Findlay, Gramling, Hodson  
(This course is designed for non-accounting majors.) It deals with the uses of accounting data for financial and management control. Emphasis is placed on the basic concepts associated with the corporate form of organization, manufacturing operations, cost determinations and controls, analysis of financial statements, changes in financial position, consolidated financial statements, and income tax considerations. Prerequisite: BUS 101.  
Three credit hours

BUS 190 Personal Finance  
Fitzpatrick  
Dealing with the problems of managing personal finances, primary emphasis is placed on methods of measuring and evaluating expenditures to assure optimal benefit from the income. It includes an evaluation of typical occupations and incomes; of life insurance with the various types, investments and mutual funds; of the borrowing of money and use of credit; of taxes and estate plannings. The course work will be a series of readings with brief case problems in each of the major areas. (When taken by business or accounting majors, this course will give elective credit)  
Three credit hours

BUS 301 Intermediate Accounting I  
Findlay, Gramling, Hall  
An intensive study of accounting theory including financial statements, the accounting for corporate capital, cash, receivables, and current liabilities. Prerequisite: BUS 101.  
Three credit hours

BUS 302 Intermediate Accounting II  
Findlay, Gramling, Hall  
The study of accounting theory including investments, inventories, property, plant and equipment, long-term debt, intangible assets. Prerequisite: BUS 101.  
Three credit hours

BUS 305 Cost Accounting  
Hodson  
The principles and methods of job order costing and process costing, including analysis and allocation of factory overhead. A study of joint and by-product costs. Methods and management use of standard costs. Management decision-making through the use of direct costing and cost volume-profit analysis. Prerequisite: BUS 101.  
Three credit hours
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Instructor</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 306</td>
<td>Advanced Cost Accounting</td>
<td>Staff</td>
<td>Devoted primarily to a detailed study of management uses of cost data. In addition, budgets, forecasting, and capital budgeting are discussed. Prerequisites: BUS 101 and BUS 102.</td>
<td>Three credit hours</td>
<td></td>
</tr>
<tr>
<td>BUS 310</td>
<td>Advanced Accounting I</td>
<td>Hall</td>
<td>A study of accounting principles and theory related to changes in financial position; partnerships; consignment and installment sales; and receiviships. Prerequisites: BUS 301 and BUS 302.</td>
<td>Three credit hours</td>
<td></td>
</tr>
<tr>
<td>BUS 306</td>
<td>Advanced Cost Accounting</td>
<td>Staff</td>
<td>A study of accounting principles and theory related to home office and branch accounting; consolidations, mergers, parent and subsidiary accounting; governmental and institutional accounting; estates and trusts. Prerequisites: BUS 301 and BUS 302.</td>
<td>Three credit hours</td>
<td></td>
</tr>
<tr>
<td>BUS 313</td>
<td>Federal Tax Reporting</td>
<td>Staff</td>
<td>Federal tax laws as they affect individuals, partnerships, corporations, and related topics. Prerequisite: BUS 101. (Offered in 1974-75 only by the Continuing Education Division)</td>
<td>Three credit hours</td>
<td></td>
</tr>
<tr>
<td>BUS 320</td>
<td>Business Finance</td>
<td>Fitzpatrick</td>
<td>This course deals with the promotion, organization, and financing of the single proprietorship, partnership, and corporation. It also utilizes advanced cases and problems related to the above topics. Prerequisites: ECON 101 and ECON 102; BUS 101 and BUS 102 or BUS 301.</td>
<td>Three credit hours</td>
<td></td>
</tr>
<tr>
<td>BUS 330</td>
<td>Investment Management</td>
<td>Fitzpatrick</td>
<td>Provides the planning and management of investment programs for all types of investors. Evaluates the various media of investments in terms of their risks and profits. The functions of the stock market and its behavior are examined. Prerequisite: BUS 320.</td>
<td>Three credit hours</td>
<td></td>
</tr>
<tr>
<td>BUS 340</td>
<td>Elements of Industrial Management</td>
<td>Waters</td>
<td>A comprehensive survey of all phases of the management of industrial and business enterprises. The influence of industrial relations is interspersed with the treatment of management's technical problems. Prerequisites: ECON 101 and ECON 102.</td>
<td>Three credit hours</td>
<td></td>
</tr>
<tr>
<td>BUS 346</td>
<td>Personnel Management</td>
<td>Chandler</td>
<td>The selection, training, and management of personnel in private and public business. Designed for the student interested in administration, office management, or personnel work in education, business, engineering, public service, and other fields. Prerequisite: BUS 340.</td>
<td>Three credit hours</td>
<td></td>
</tr>
<tr>
<td>BUS 348</td>
<td>Industrial Relations</td>
<td>Chandler</td>
<td>A study of industrial relations patterns in the U.S. Major focus is on the relationship between management and organized labor, and the bargaining, administration, and interpretation of contracts. The problem of dispute settlement and a comparison of methods used in the U.S. and abroad. Attention is also given to industrial relations in unorganized firms and in the Civil Service. Prerequisite: BUS 340 or BUS 346.</td>
<td>Three credit hours</td>
<td></td>
</tr>
<tr>
<td>BUS 352</td>
<td>Dynamics of Organization and Behavior</td>
<td>Chandler</td>
<td>An analysis of business organization and the problems of administrators in an interpersonal setting. Primary emphasis is on the findings of behavioral sciences which are particularly relevant to human relations and adjustment problems in modern organizations. Motivation, leadership, and organization theory as related to work and productivity, and associated topics are also covered. Prerequisite: BUS 340 or BUS 348. (Not offered in 1974-75)</td>
<td>Three credit hours</td>
<td></td>
</tr>
<tr>
<td>BUS 360</td>
<td>Marketing</td>
<td>Monck</td>
<td>Problems of distribution for representative industrial and consumer goods, including merchandising policies, selection of distribution channels, price policies, and advertising and sales promotion methods. Prerequisites: ECON 101 and ECON 102.</td>
<td>Three credit hours</td>
<td></td>
</tr>
</tbody>
</table>
BUS 363 Advertising
The place of advertising in the marketing program. Business cases are analyzed to determine those situations in which advertising may be profitably employed to stimulate primary and selective demand for industrial and consumer goods and services. Prerequisite: BUS 360.
Three credit hours

BUS 368 Sales Management
An analysis of the problems facing marketing management in formulating sales policy and in managing the sales organization. Prerequisite: BUS 360. (Not offered in 1974-75)
Three credit hours

BUS 370 Managerial Marketing
A managerial approach emphasizing the integration of marketing, as an organic activity, with other activities of the business firm. Study is directed toward recognition and appreciation of the problems encountered by top marketing executives in modern business, with a consideration of the policies and procedures that may be followed in their solution. By case analysis and consideration of current marketing literature, students are provided opportunities for development of abilities in solving marketing management problems. Prerequisites: BUS 360 and MS 212.
Three credit hours

BUS 373 Marketing Research
A consideration of marketing research as a tool in the solution of problems in production and distribution. Emphasis on problem formulation, exploratory research, research design, basic observational and sampling requirements, data analysis, interpretation, and sampling. Prerequisites: BUS 360 and MS 212.
Three credit hours

BUS 380 Business Law
This course, an introduction to the study of business law, includes origins of the law, its nature and classification; contract law and the laws of agency and personal property are comprehensively dealt with. Prerequisite: (Junior-Senior status)
Three credit hours

BUS 385 Business Economics
Application of economic analysis to concrete business situations. Emphasis on developing the student's ability to apply economic analysis to the solution of problems faced by business management. Prerequisites: ECON 101 and 102, BUS 101, and MS 110.
Three credit hours

BUS 390 Introduction to Computers in Business
The role of the computer as an aid in managerial decision making. Computer operation and programming fundamentals including flow charting and program writing in one of the common computer program languages emphasizing business applications.
Three credit hours

BUS 391 Electronic Data Processing Systems for Business and Industry
A more in-depth examination of the role of the computer as an aid in managerial decision making. Programming the computer, determination of the user's systems requirements, and applications to typical but varied business operations. Prerequisite: BUS 390.
Three credit hours

BUS 395 Cooperative Education—Business Administration I
The student has the opportunity to relate academic knowledge to practical experience in the business world. The University makes arrangements with certain institutions and/or industries to employ students to fill specific jobs on a semester basis. The student's work is in a related field, and the work experience increases in difficulty and responsibility as the student progresses through the academic curriculum. The work experiences are approved in advance by the faculty. Open to Sophomores, Juniors, and Seniors in the School of Business and Economics with permission.
Five credit hours

BUS 396 Cooperative Education—Business Administration II
Open to Sophomores, Juniors, and Seniors in the School of Business and Economics with permission.
Five credit hours

BUS 397 Cooperative Education—Business Administration II
Open to Juniors and Seniors in the School of Business and Economics with permission. Prerequisites: BUS 395 and 396.
Five credit hours

BUS 410 Auditing
A study of auditing philosophy and theory relative to the examination of financial statements and other data. Internal control; auditing standards and procedures; and the legal and ethical responsibilities of the independent auditor. Prerequisites: BUS 301 and BUS 302.
Three credit hours
BUS 421 Investment Analysis  
A study of the various methods of predicting the price action of stocks and the stock market. It is based upon technical and theoretical methods of forecasting. It is primarily concerned with the Point and Figure technique. Prerequisite: BUS 320. (Not offered in 1974-75) Three credit hours

BUS 422 Topics in Investment  
An in-depth study of each of the major topics investments. The course is based upon assigned readings, research, and discussion. Prerequisite: BUS 320. (Not offered in 1974-75) Three credit hours

BUS 450 Business Management and Policy  
Fitzpatrick
Administrative practice at the higher levels of business management through case analysis and discussion. The course attempts to coordinate the background of business majors in the formulation and administration of sound business policy. Prerequisites: BUS 101 and BUS 102; or BUS 301, BUS 340, and BUS 360. Three credit hours

BUS 490 Independent Readings and Research in Business  
Fitzpatrick
Selected topics in the various areas of accounting, finance, management, and marketing may be studied and researched on an independent basis. (Not for graduate credit.) Prerequisites: Senior standing and permission of the instructor. One to six credit hours

BUS 491 Applied Study  
Staff
This course is designed to allow the student to apply the concepts of Business Administration, Economics and Accounting to operational problems in the field. Assignments are arranged by the School of Business and Economics in conjunction with agencies such as the Small Business Administration for an off-campus consultative experience in a business firm or other appropriate institutional setting. Prerequisites: Open to qualified Juniors and Seniors with approval. Three credit hours

UNDERGRADUATE COURSES IN THE FOUR-YEAR PROGRAM
IN ECONOMICS

ECON 101 Principles of Economics I  
Staff
A theoretical analysis of the basic characteristics, institutions, and operational activities of a modern capitalistic economy which is involved in the transformation of scarce economic resources into the goods and services demanded by consumers. Topics discussed include inflation, unemployment, government monetary and fiscal policy to achieve full employment, and economic growth. Three credit hours

ECON 102 Principles of Economics II  
Staff
A theoretical analysis of the firm and its role in the transformation of scarce economic resources into the goods and services demanded by consumers. Special attention is focused on the development of a market mechanism for the exchange of goods, services, and resources within a capitalistic economy. Topics discussed include consumer preferences and consumer behavior, production theory and production costs, the monopoly firm, and resource pricing. Three credit hours

ECON 150 Elementary Economics  
McMahon, Witherill
An introduction to economic theory and practice as it applies to the U.S. economy, surveying both macroeconomic (national) and microeconomic (industrial) concepts. Topics discussed include the characteristics of the free enterprise system, income and employment determination, government involvement in economic activity, money and banking, the market mechanism, competition and monopoly, and antitrust policy. For non-majors. Three credit hours

ECON 201 Current Economic Problems  
Witherill
An in-depth study and application of economic principles to some of the outstanding economic issues of society. These include: the economics of pollution control; problems of the city—including transportation, metropolitan organization, and finance; and problems of labor —such as automation and unemployment. (Not for major credit in either Economics or Business Administration.) Prerequisite: ECON 101. Three credit hours

ECON 301 Macroeconomic Analysis  
Bay
A theoretical analysis of the basic forces that cause inflation, growth, and fluctuations in economic activity. The effects on employment and other factors are thoroughly treated. Stabilization policies are examined and evaluated. Prerequisites: ECON 101 and ECON 102. Three credit hours
ECON 302 Microeconomic Analysis  
Bien  
Price, income, and employment theory as tools in the study of economics. Prerequisites: ECON 101 and ECON 102.  
Three credit hours

ECON 310 Money and Banking  
Bay  
An extensive examination of the operation and performance of the American banking and financial system. Includes a study of monetary theory and policy. Debt management and present international monetary problems are discussed briefly. Prerequisites: ECON 101 and ECON 102.  
Three credit hours

ECON 320 Labor Economics  
Chandler  
A discussion of labor in an industrial society serves as background for an examination of the origins and structure of the labor movement, the theories of the labor movement, the theories of wages and labor's income, the process of collective bargaining in industrial relations, and the development of labor legislation and social security laws. Prerequisites: ECON 101 and ECON 102. (Not offered in 1974-75)  
Three credit hours

ECON 330 Social Control of Business  
McMahon  
Public policy toward business; government powers and private rights; government aids; regulation of competition and monopoly; public enterprise. Prerequisites: ECON 101 and ECON 102.  
Three credit hours

ECON 350 Comparative Economic Systems  
Durgin  
The structures and operating principles of the major contemporary economic systems are examined and compared. Prerequisite: ECON 101.  
Three credit hours

ECON 351 Economic Systems of the Soviet Union  
Durgin  
A study of the development, institution, and structure of the Soviet economy. Emphasis on current theories and problems of central planning. Prerequisites: ECON 101 and ECON 102.  
Three credit hours

ECON 360 Economic Development  
Witherill  
The theories and practices of interregional and international economic development. Special attention is given to development problems of emerging nations. Prerequisite: ECON 101.  
Three credit hours

ECON 370 International Trade  
Bien  
The principles and practices of international trade and finance are thoroughly treated. Special emphasis is given to current trends in the international economy and to United States commercial policy. Prerequisites: ECON 101 and ECON 102.  
Three credit hours

ECON 380 Public Finance and Fiscal Policy  
McMahon  
Public expenditure theory; principles of taxation; the federal budget and alternative budget policies; federal tax policy; fiscal policy for stabilization; federal debt. Prerequisites: ECON 101 and ECON 102.  
Three credit hours

ECON 381 State and Local Government Finance  
McMahon  
Development of the federal system; fiscal performance; intergovernmental fiscal relations; state and local revenue systems; budgetary practices; state and local debt. Prerequisites: ECON 101 and ECON 102.  
Three credit hours

ECON 390 Environmental Economics  
Staff  
A study of the economic principles that underlie the role of the environment in the private and public sectors of the economy, with particular emphasis on environmental issues in the Maine economy. (Offered only in Lewiston-Auburn in 1974-75)  
Three credit hours

ECON 490 Independent Readings and Research in Economics  
Staff  
Selected topics in the various areas of economics may be studied and researched on an independent basis. (Not for graduate credit.) Prerequisites: Senior standing and permission of the instructor.  
One to three credit hours

ECED 300 Economic Concepts and Research Materials for Educators  
Witherill  
A study of the simplification of economics concepts for presentation at elementary and secondary grade levels; also the study and preparation of various resource materials used in presenting economic concepts at these levels. Prerequisite: Permission of the instructor. (Not offered in 1974-75)  
Three credit hours
MASTER OF BUSINESS ADMINISTRATION

GRADUATE COURSES

(Offered in 1974-75 only by the Continuing Education Division)

BUS 510  Operations Research

This course deals with the formulation and solution of optimization models for business decision making and economic resource allocation. Major emphasis on mathematical programming models, including linear programming fundamentals, simplex methods, duality theory, sensitivity analysis and parametric programming and postoptimality analysis, goal programming, linear programming under uncertainty, dynamic programming, allocation problems (assignment, transportation models, transportation simplex methods), network flows, integer programming, nonlinear programming, polygonal approximations, and gradient methods. Emphasis also on applications in accounting, finance, economics, marketing, and production management. Prerequisites: one course in statistics and one in calculus.

B. Andrews

Three credit hours

BUS 520  Industrial Relations and Personnel Management

A comprehensive investigation of the changing pattern of industrial relations in the United States. Major emphasis is on the human, social, and economic aspects of employer-employee relationships in both union and non-union settings. Provides an understanding of and appreciation for the crucial importance of the development of sound and flexible personnel policies by top management. Among the areas considered are: the changing nature of the labor force; wages, salaries, and fringe benefits; hours of work; and the impact of technological change on the work force. Prerequisite: one course in management or industrial relations.

Chandler

Three credit hours

BUS 523  Collective Bargaining

Discusses the major issues and problems in the collective bargaining process. Provides the business manager with the knowledge of sound collective bargaining attitudes and techniques necessary to achieve a responsible and mature attitude in his relationship with employee representatives. To this end, major focus is on the development of the union movement in this country, the changing nature of public policy toward collective bargaining, and the public responsibility of both unions and management. In addition, attention is given to the specific tools of collective bargaining, including strikes, lockouts, grievance procedures, arbitration, mediation, and bargaining strategies and techniques. Prerequisite: BUS 520.

Chandler

Three credit hours

BUS 527  Human Relations in Industry

This course is designed to acquaint the student with the complex system of interdependent human, social, technical, and organizational forces which underlie the feelings, action, and relationships of people in organizations. Such subjects as leadership theory, organizational theory, individual and group behavior, and communication theory are presented. Prerequisite: Six hours in business subjects.

Waters

Three credit hours

BUS 530  Senior Executive Decision Making

Administrative practice at the higher levels of business management, with major emphasis on long range executive planning of profit, sales, production, social goals and objectives, and of strategies and policies to achieve these objectives. Coordinates all executive activities, viewed as tools for use in developing administrative competence, in the formulation of business policies at the decision-making level. Prerequisite: BUS 510 or equivalent.

Plowman

Three credit hours

BUS 533  Production Management

Decision models will be introduced with emphasis on statistical inference and decision theory, queuing theory, inventory theory, simulation, game theory, and Markovian decision models. Application areas include Product R & D investment models, capacity investment decision models, facility design models, line-balancing models, system maintenance models, and production system operating models. Prerequisite: BUS 510. (Not offered in 1974-75)

Staff

Three credit hours

BUS 537  Organizational Behavior in Business

Emphasis on the importance of the influence process, motivational settings, and the structural backgrounds of organizational status and social relations. Analysis through case discussion and readings will develop a conceptual framework for improving individual decision-making ability with respect to individual, group, and intergroup problems. Prerequisite: One course in management. (Not offered in 1974-75)

Staff

Three credit hours
BUS 540 Managerial Accounting
Findlay
Development, analysis, and interpretation of accounting data and financial statements for managerial control, coordination, and decision-making; emphasis upon accounting as a tool of management. Topics are developed by utilization of case studies, problems, and reference material. Prerequisite: Six semester hours in accounting.

BUS 550 Managerial Economics
Durgin
Application of economic analysis to the management of business enterprises. Designed to develop the student's ability to understand and use some of the important economic concepts, tools, and methods, relevant to operations and decisions within a business firm. Particular attention is given to the analysis of market demands, price policy, cost structures and production functions, capital budgeting, planning, and financing. Prerequisite: Nine semester hours in economics and a course in introductory calculus.

Three credit hours

BUS 553 Business Cycles and Forecasting
Bay
A theoretical analysis of the basic forces that determine fluctuations in the level of income. Stabilization policies are examined and evaluated. Basic forecasting techniques for the over-all economy and for certain major sectors are explored. Prerequisites: six hours in economics and a course in introductory calculus.

Three credit hours

BUS 560 Financial Management
Fitzpatrick
A consideration of management decisions in the administration of corporate funds. Specific areas covered include capital budgeting, inventory control, working capital management, and the cost of capital. The side effects of taxation, depreciation methods, and earnings retention policies are noted. Current capital structure patterns are analyzed and evaluated. Prerequisite: One course in finance.

Three credit hours

BUS 563 Investment Management
Fitzpatrick
Emphasizes analysis and valuation procedures required to determine the investment quality of specific securities. Sets forth criteria for the formulation of a sound investment policy and the selection of investment media to implement it. Develops the techniques of continuing portfolio management and the task of periodic reappraisal. Prerequisites: One course in finance. (Not offered in 1974-75)

Three credit hours

BUS 570 Marketing Management
Waters
This course is organized to give the graduate student an opportunity to develop and test, through the case method, a number of marketing policies and strategies. Furthermore, the student will read and discuss the current literature in the field of marketing reviewing current marketing practices and predictions for the balance of the century. Prerequisite: One course in marketing.

Three credit hours

BUS 573 Market Research and Analysis
Monck
A study of the procedure and applications of market research. Such areas as the organization and operation of a research department, survey methods, experimentation, measurement of potential demand, and the analysis of distribution costs are considered. Emphasis on developing the student's ability to apply these and other techniques toward the solution of marketing problems. Prerequisites: BUS 570 and one course in statistics.

Three credit hours

BUS 583 Business Logistics
Plowman
Explores in-depth the need for and means of centralization of decision-making to accomplish effective senior executive control of the chain of logistic activities from point of completion of manufacturing or other form utility creating process to delivery at the point of use or consumption. Interdisciplinary relationships with cybernetics, econometrics, operations research, computer-facilitated information analysis, purchasing (materials management) and the customer relations aspect of marketing (physical distribution) reviewed in their role as logistics sub-systems or building blocks. Prerequisite: BUS 510. (Not offered in 1974-75)

Three credit hours

593 Independent Readings and Research in Business and/or Administration
Staff
Selected topics in the area of Business and/or Administration may be studied and researched on an independent basis. Prerequisites: Permission of the instructor and the chairman of Graduate studies in Business is required.

One to three credit hours
School of Education

HARLAN A. PHILIIPPI, Dean

Elementary Education Department: Professors Neuberger, Stearns; Associate Professors M. Costello (Chairman), Fickett, O'Donnell; Assistant Professors Allen, Cuprak, Hayes, Morris, Pine; Instructor Edwards.

Secondary Education Department: Professors Cobb, Rhoades, Soule; Associate Professors Hackett, Walker (Acting Chairman); Assistant Professors Crosby, Hudson, Littlefield; Instructors Bemis, O. Rogers.

Foundations Department: Professors Southworth, Philippi; Associate Professors Chronister (Chairman), Malik, Milbury, C. Smith, J. Whitten; Assistant Professors Colucci, Davis, Kaple, LaPointe, Massey, D. Moore, Whiteside.

Department Industrial Education and Technology: Professors Berry, Mitchell (Chairman); Associate Professors Carter, Faulkner, Morrill, Slocum; Assistant Professor Nanny; Instructors W. Moore, Zaner.

Center for Alternative and Experimental Education: Professor Downey; Assistant Professor Lyons.

BACCALAUREATE PROGRAMS IN TEACHER EDUCATION

The School of Education concerns itself with direct preparation of school teachers and with providing professional courses for students in any college of the University who wish to meet teacher certification requirements.

All curricula and programs require four years for completion. Upon graduate, the student receives the Bachelor of Science degree and the proper teaching certificate. The University prepares teachers in the following course programs:

Kindergarten-Primary, Elementary

The Kindergarten-Primary curriculum qualifies students to teach in kindergarten through grade eight, with emphasis on kindergarten through grade three. A detailed description of this program is provided on the following pages of this section of the catalog.

The Elementary curriculum qualifies graduates to teach grades kindergarten through eight with emphasis on grades four through six. A detailed description of this program is provided on the following pages of this section of the catalog.

Both Elementary Majors and Kindergarten-Primary Majors are required to complete a basic core of courses which meet the General Education Requirements and which are especially adapted to meet the general educational needs of teachers of children at the elementary or kindergarten-primary levels.

Secondary (7-12)

The Secondary curriculum qualifies graduates to teach grades seven through twelve in the fields of biology, economics, English, French, general science, history, mathematics, theatre/communications, and social studies. Specific pre-professional courses which students in the Secondary Curriculum must include in their 30-hour General Education core, together with a listing of required and limited-elective courses in the Professional Education Curriculum for Secondary Majors, are provided on the following pages of this section of the catalog. The academic major, minor, and area-concentration programs are provided by the appropriate departments of the College of Arts and Sciences, and descriptions of those programs will be found under the relevant departmental headings of that portion of the catalog devoted to the College of Arts and Sciences.

Secondary Education students with majors or minors in English, History, or the Social Sciences area must achieve at least six credits with grades of B or better in such majors or minors. No grades of D will count toward fulfillment of the major or minor requirements. No required course may be repeated more than once.
Art

Graduates of the program are qualified to teach or supervise art in all grades of the public schools. All information about the Art Education curriculum is provided under the Art Department heading in the section of the catalog dealing with the College of Arts and Sciences.

Music

The aim of the Music Education Program is to develop individual potential in the areas of musicianship and scholarship as well as to present the most recent trends in the field of music education. Upon satisfactory completion of the four-year program, graduates receive a Bachelor of Science degree with a major in Music Education and are certified by the State of Maine to teach music in grades one through twelve. The program qualifies graduates to teach or supervise all phases of vocal and instrumental music. All information about the Music Education curriculum is provided under the Music Department heading in the section of the catalog dealing with the College of Arts and Sciences.

Industrial Arts

The Industrial Arts curriculum prepares teachers for the teaching of industrial arts in elementary and secondary schools. It is the only college program in the State of Maine in this specialized field. A detailed description of this program is provided on the following pages of this section of the catalog.

Vocational-Technical Education

This is a part-time evening and summer program leading to a B.S. degree with a major in Vocational-Technical Education or in Technology. A detailed description of this program is provided on the following pages of this section of the catalog.

PHYSICAL EDUCATION REQUIREMENTS FOR ALL EDUCATION MAJORS

Students in the School of Education are required to complete one year of Physical Education which may not be applied toward the General Education Requirements. A student may be excused from this requirement by the Dean of Education on the basis of one or more of the following exemption criteria:

1. A student entitled to veteran's benefits.
2. A student who will be 30 years of age or over upon graduating.
3. A student who has a written medical excuse from the University Health Service.
4. A student enrolled in CED and not matriculated in the day program. However, if a student changes from CED status to day-college status, the Physical Education requirements must be completed unless other exemptions are applicable.
5. The Dean of the School may waive the Physical Education requirements for other reasons reflecting unusual circumstances.
6. Successful completion of a Physical Education proficiency examination.

A carbon copy of the letter exempting the student will be sent to the student, faculty adviser, and registrar.

Pass-Fail Option

An undergraduate in the School of Education may register for a total of 18 hours of pass-fail credits in addition to possible pass-fail credits for Student Teaching and the related seminar. Required courses in the Core Curriculum and the student's major may not be taken pass-fail; and only one course in the minor may be taken pass-fail.

Independent Study

Junior and Senior students may elect independent study in their major for one to six credits. Normally, no more than three credits may be earned in a semester.

The student submits an independent study application which includes a detailed description of the proposed program of study. Permission of the instructor and approval by the department chairman and the dean are required.

The approved independent study form is filed with the registrar during the registration period.
PROGRAMS FOR ELEMENTARY MAJORS AND KINDERGARTEN-PRIMARY MAJORS

Both Elementary Majors and Kindergarten-Primary Majors are required to complete the following basic core of courses which meet the General Education Requirements and which are especially adapted to meet the general educational needs of teachers of children at the elementary or kindergarten-primary levels.

Core Requirements for Elementary and Kindergarten-Primary Majors

<table>
<thead>
<tr>
<th>Basic Core:</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities</td>
<td>ENG 120—Introduction to Literature, or ENG 200—Topics in Literature, plus one course in a foreign language, Philosophy, English, Comparative Literature, or Classics.</td>
</tr>
<tr>
<td>Fine and Applied Arts</td>
<td>Any electives from Art (ARTH or ARTS prefixes), Music, Dance, or Theatre</td>
</tr>
<tr>
<td>Science</td>
<td>Electives.</td>
</tr>
<tr>
<td>Mathematics</td>
<td>MS 131, MS 231, and MS 232. A Mathematics elective will be substituted if MS 131 is passed through a proficiency test.</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>Electives from Anthropology, Political Science, Psychology, Sociology, History, Geography, Economics, Communication.</td>
</tr>
<tr>
<td>Interdisciplinary Courses</td>
<td>(Or any academic courses in addition to the major or minors)</td>
</tr>
<tr>
<td>Physical Education</td>
<td>The equivalent of one complete year (two semesters)</td>
</tr>
</tbody>
</table>

Professional Education for Kindergarten-Primary and Elementary Education Majors

Each student in the Kindergarten-Primary or Elementary Education Program is required to complete a minimum of 37 credit hours in professional education, as follows:

- EDU 150 and 151 Pre-Professional Experiences
- EDU 200 Studies in Foundations of Education
- *EDU 300 or 301 Curriculum
- *EDU 302 or 303 Reading
- *EDU 304 or 305 Teaching Mathematics
- *EDU 308 Teaching Elementary Science
- *EDU 333 Human Growth and Development
- EDU 336 Children's Literature
- EDU 324 Student Teaching

*These education courses must be completed prior to student teaching.

Additional Requirements for Kindergarten-Primary and Elementary Education Majors

In addition to the general and professional requirements, each Kindergarten-Primary and Elementary Education Major is required to complete at least one approved major of 30 credits OR two approved minors of 18 credits each. At least one minor must be in an academic area, and the other minor may be either in an academic, education, or a physical education area.

Courses taken to meet the General Education requirements may also be included to meet the requirements for majors and minors.
Descriptions of the courses in the approved programs for 30-credit majors and 18-credit minors are located under the appropriate department headings of the College of Arts and Sciences, School of Education, or Division of Physical Education.

Approved programs:

College of Arts and Sciences

**Majors:**
- English
- History
- Mathematics
- Science
- Social Science
- Economics

**Minors:**
- English
- Geography
- History
- Mathematics
- Music
- Science
- Social Science

School of Education

**Major:**
- Language-Communications

**Minors:**
- Language-Communications
- Learning Disabilities

Division of Physical Education

**Major:**
- None

**Minor:**
- Physical Education
- Leadership

Students should consult with an adviser when selecting courses to complete a major or minor.

Economics Minor

An academic minor in Economics may be fulfilled by completing the following courses.

**Required Courses:**
- ECON 101 Principles of Economics I
- ECON 102 Principles of Economics II
- ECON 201 Current Economic Problems
- ECON 350 Comparative Economic Systems
- ECED 300 Economic Concepts and Resource Materials

**Elective Courses:**

6 hours of electives from any of the remaining Economics courses.

(NOTE: This is a 21 hour minor.)

English Major and Minor

An English major of 30 credits or a minor of 18 credits consists of courses elected from the English course offerings.

French Minor

A French minor consists of 12 credits above the FRE 200 level. (18 credits including Intermediate French I and II.)

**Required Courses:**
- FRE 201 or 202 French Composition I, II
- FRE 203 or 204 French Conversation I, II
- FRE 231 Introduction to French Literature I
Elective Courses:

- FRE 205 Phonetics
- FRE 232 Introduction to French Literature II
- FRE 401 or 402 Advanced French Grammar I, II

Students should also take the professional course FLED 301—The Teaching of Foreign Languages.

Geography Minor

A Geography minor consists of the following sequence of courses.

Required Courses:

- GEOG 101 Principles of Geography

At least one course in regional geography from:

- GEOG 201 World Geography
- GEOG 310 Geography of Asia
- GEOG 311 Geography of North America

Elective Courses:

12 hours of electives from any of the remaining Geography courses.

History Major and Minor

A History major of 30 credits or a minor of 18 credits consists of courses elected from the History course offerings.

Mathematics Major and Minor

A Mathematics major of 30 credits or a minor of 18 credits may be fulfilled by successfully completing the courses MS 131, MS 231, and MS 232. The remaining credits necessary to complete a program may be selected from courses which have MS code numbers of 120 or above.

Music Education Minor

The minor in Music Education is designed to provide an opportunity for students who demonstrate interest and ability to continue music studies beyond the high school level and to equip them to successfully implement music programs in the classrooms.

The minor in Music Education is comprised of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 100</td>
<td>Music History and Appreciation</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Music History Elective</td>
<td>3</td>
</tr>
<tr>
<td>MUS 130-131</td>
<td>Theory I and II</td>
<td>6</td>
</tr>
<tr>
<td>MUS 132-133</td>
<td>Solfeggio I and II</td>
<td>2</td>
</tr>
<tr>
<td>MUED 200</td>
<td>Music for the Classroom Teacher</td>
<td>3</td>
</tr>
<tr>
<td>MUED 322</td>
<td>Elementary Music Methods and Materials</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Ensembles</td>
<td>2</td>
</tr>
<tr>
<td>MUS 150-151</td>
<td>Applied Music</td>
<td>2</td>
</tr>
</tbody>
</table>

The minor in Music Education Program requires a total of 24 hours.
Science Area Major and Minor

A Science Area major or minor consists of 30 hours or 18 hours respectively of courses elected from the following areas: Astronomy, Biology, Chemistry, Earth Science, Geology, Meteorology, Oceanography, Physics, Physical Science.

It is suggested that the students plan with their advisers a sequence of three introductory courses such as:

1. PSCI 110 Elements of Physical Science
2. GEOL 111 Physical Geology
3. BIO 101 Biological Principles

The additional courses should represent a variety of science areas and may be chosen from the following recommended electives:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 100</td>
<td>Astronomy</td>
</tr>
<tr>
<td>BIO 103</td>
<td>Biological Diversity</td>
</tr>
<tr>
<td>BIO 104</td>
<td>Survey of Animals and Plants</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>CHEM 151</td>
<td>Environmental Chemistry</td>
</tr>
<tr>
<td>ESCI 200</td>
<td>Environmental Science</td>
</tr>
<tr>
<td>ESCI 202</td>
<td>Conservation</td>
</tr>
<tr>
<td>ASTR 210</td>
<td>Observational Astronomy</td>
</tr>
<tr>
<td>GEOL 112</td>
<td>Historical Geology</td>
</tr>
<tr>
<td>PSCI 310</td>
<td>History of Science</td>
</tr>
<tr>
<td>MET 100</td>
<td>Meteorology</td>
</tr>
<tr>
<td>OCN 100</td>
<td>Introduction to Oceanography</td>
</tr>
<tr>
<td>PHYS 100</td>
<td>Descriptive Physics</td>
</tr>
<tr>
<td>PHYS 111</td>
<td>Elements of Physics</td>
</tr>
<tr>
<td>ESCI 201</td>
<td>Natural Science</td>
</tr>
</tbody>
</table>

Social Science Major and Minor

A Social Science major of 30 credits and minor of 18 credits consists of courses selected from the following areas: History, Sociology, Political Science, Anthropology, Geography, and Economics. Psychology courses may not be included in this program.

Language Communications Major and Minor

Options

A. 30 hour concentration (major)
   1. One course from each of the following sections.
   2. Fifteen (15) hours of electives from any of the five sections that may include six hours of independent study.

B. 18 hour concentration (minor)
   1. One course from each of the first three sections.
   2. Nine (9) hours of electives from any of the sections that may include three (3) hours of independent study.

Section No. 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 302</td>
<td>Primary Reading</td>
</tr>
<tr>
<td>EDU 303</td>
<td>Elementary Reading</td>
</tr>
<tr>
<td>EDU 306</td>
<td>Secondary Reading</td>
</tr>
<tr>
<td>EDU 321</td>
<td>Atypical Reading Patterns</td>
</tr>
<tr>
<td>EDU 322</td>
<td>Remedial Reading</td>
</tr>
</tbody>
</table>

Section No. 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 102</td>
<td>Introduction to Communication</td>
</tr>
<tr>
<td>COM 171</td>
<td>Interpersonal Communication</td>
</tr>
</tbody>
</table>
Section No. 3

EDU 312 Teaching of Language Arts in the Elementary School
ENG 381 Modern Grammar
ENG 382 Introduction to Linguistics
ENG 368 Introduction to Speech Correction Methods

Section No. 4

ARTS 141 Design I
ARTS 151 Drawing I
EDU 310 Preparation of Classroom Materials
MUED 200 Music for the Classroom Teacher
MUS 211 Classroom Piano

Section No. 5

EDPY 331 Group Dynamics
EDPY 335 Educational Psychology

Learning Disabilities Minor

A Learning Disabilities minor of 18 credit hours consists of the following sequence of courses:

Required:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Learning Disabilities</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor Stages of Learning</td>
<td>3</td>
</tr>
<tr>
<td>Concept Development</td>
<td>3</td>
</tr>
<tr>
<td>Atypical Reading Patterns</td>
<td>3</td>
</tr>
<tr>
<td>Emotional Problems of the Exceptional Child</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education for the Atypical Child</td>
<td>3</td>
</tr>
<tr>
<td>Practicum in Learning Disability Problems</td>
<td>3-6</td>
</tr>
<tr>
<td>Introduction to Speech Correction</td>
<td>3</td>
</tr>
<tr>
<td>Psycholinguistics</td>
<td>3</td>
</tr>
</tbody>
</table>

Physical Education Leadership Minor

A Physical Education minor of 18 credits may be completed by successfully completing the following required courses:

Required:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDPE 298 First Aid and Safety</td>
<td>2</td>
</tr>
<tr>
<td>EDPE 310 Human Growth and Development Lab</td>
<td>1</td>
</tr>
<tr>
<td>EDPE 304 Methods and Materials for Teaching Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>EDPE 401 Practicum in Physical Education Leadership</td>
<td>3</td>
</tr>
</tbody>
</table>

A minimum of 9 credits are to be successfully completed from the following courses:

Elective Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDPE 216 Analysis of Human Movement</td>
<td>3</td>
</tr>
<tr>
<td>EDPE 306 Movement Education in the Elementary School</td>
<td>3</td>
</tr>
<tr>
<td>EDPE 309 Rhythms and Motor Activities</td>
<td>3</td>
</tr>
<tr>
<td>EDPE 300 Camp Leadership</td>
<td>3</td>
</tr>
<tr>
<td>EDPE 308 Physical Education for the Atypical Child</td>
<td>3</td>
</tr>
<tr>
<td>EDPE 398 Independent Study in Physical Education</td>
<td>1-3</td>
</tr>
</tbody>
</table>
ALTERNATIVE INTERN PROGRAMS

A full year teaching internship is a cooperative teacher education program for Kindergarten-Primary and Elementary Education Majors that the School of Education shares with participating school districts. Interns earn up to 36 academic credits while teaching in local schools for a full school year. They receive courses on-site taught by university and public school personnel as well as being assigned to classroom teachers who help interns integrate theory and practice.

Exchange programs with two colleges in England are also available. Students may elect to complete a semester of study, including student teaching, through this option.

Other General Requirements:

Students majoring in the Kindergarten-Primary or Elementary Education programs must achieve a grade point average of at least 2.5 in their professional educational requirements (EDU courses) prior to Student Teaching. No grades of D will count toward the fulfillment of the professional requirements.

Students must achieve a grade point average of 2.5 in their selected majors and/or minors. No more than one D will count toward fulfillment of the major and minor programs.

PROGRAMS IN SECONDARY EDUCATION

The secondary curriculum qualifies graduates to teach grades seven through twelve in the fields of biology, economics, English, French, general science, history, mathematics, theatre/communications, and social studies. The academic major, minor, and area-concentration programs are provided by the appropriate departments of the College of Arts and Sciences, and descriptions of those programs will be found under the relevant departmental headings of that portion of the catalog devoted to the College of Arts and Sciences. The Social Science Area program is described in the subsection dealing with the Geography-Anthropology Department, and the Science Area program (including both physical and biological sciences) is described in the section during with Physical Sciences and Engineering.

Students in the School of Education may also obtain an academic major or minor in Economics, as described in this catalog in the section dealing with the School of Business and Economics.

General Education Requirements for Secondary Majors

As part of the thirty-hour general education core required of all students, and described on the inside front cover of this catalog, students of Secondary Education must meet the following specific pre-professional requirements:

A. A three-credit course in either ENG 120 Introduction to Literature or ENG 200 Topics in Literature.
B. Three credit-hours in psychology.

Departmental courses in the student’s major area may not be applied towards fulfillment of the general education core requirements.

Professional Education Curriculum for Secondary Majors

Students may elect one of two patterns to complete this part of their program.

PATTERN A

Professional Studies

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 150-151</td>
<td>Pre-Professional Experiences</td>
<td>4</td>
</tr>
<tr>
<td>EDU 200</td>
<td>Foundations of Education</td>
<td>3</td>
</tr>
<tr>
<td>EDU 333</td>
<td>Human Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>EDU 315</td>
<td>Methods of Teaching in the Secondary School or a Methods course in a specific discipline</td>
<td>3</td>
</tr>
<tr>
<td>EDU 324</td>
<td>Student Teaching</td>
<td>12</td>
</tr>
</tbody>
</table>

Total 25
PATTERN B

Professional Studies

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 150-151</td>
<td>Pre-Professional Experiences</td>
<td>4</td>
</tr>
<tr>
<td>EDU 200</td>
<td>Foundations of Education</td>
<td>3</td>
</tr>
<tr>
<td>EDU 333</td>
<td>Human Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>EDU 315</td>
<td>Methods of Teaching in the Secondary School or a Methods course in a specific discipline</td>
<td>3</td>
</tr>
<tr>
<td>EDU 324</td>
<td>Student Teaching</td>
<td>6</td>
</tr>
</tbody>
</table>

Plus three semester-hours of electives from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 150</td>
<td>Pre-Professional Field Experiences</td>
</tr>
<tr>
<td>EDU 314</td>
<td>Introduction to Secondary Education</td>
</tr>
<tr>
<td>EDU 306</td>
<td>Secondary Reading</td>
</tr>
<tr>
<td>EDU 310</td>
<td>Preparation of Classroom Materials</td>
</tr>
<tr>
<td>EDU 313</td>
<td>Maine School Law</td>
</tr>
<tr>
<td>EDU 319</td>
<td>Measurement and Evaluation</td>
</tr>
<tr>
<td>EDU 323</td>
<td>Independent Study in Education</td>
</tr>
<tr>
<td>EDU 327</td>
<td>Seminar in Secondary Education</td>
</tr>
</tbody>
</table>

Total 22

COURSES IN EDUCATION

EDU 150-151  Pre-Professional Experiences  Staff
Required for all freshmen education majors, this two-semester course will be an exploratory opportunity designed to assist students in maximizing their educational experience and to look at their future options. Each student will be assigned to a committee for advising, resources and evaluation (C.A.R.E.). Such questions as “Do I really want to teach?” “Are there other options for education majors?” “How can I test out my potential—whether it is right for me—early enough to change direction?” will be explored. (Pass-Fail only.)

Two credit hours

EDU 152  Pre-Professional Field Experiences  Staff
An exploratory introduction to education through direct involvement with youth in public schools or educative agencies. At least two hours per week of field work, including seminars as necessary, in the school setting. An elective primarily for sophomores with enrollment limited according to transportation and available opportunities. Transportation not provided. (Pass-Fail only.)

Two credit hours

NOTE: A student, with permission, may continue this course for subsequent semesters under course code numbers EDU 153, and 154.

EDU 200  Studies in Educational Foundations  Chronister, Colucci
This course offers a multi-disciplinary and open-ended approach to the study of education. Topics and resource units (social, historical, and philosophical in perspective) have been selected and prepared to allow students the freedom to explore, both independently and in group settings, educational issues, questions, and concerns. Students enrolled in this course will be placed in a learning environment designed (1) to elicit critical thinking, (2) to examine assumptions and beliefs regarding education, and (3) to test personal commitment to education. Open to sophomores and others who have not met requirements of an introductory course in Foundations, such as the previously offered course in American School. No prerequisites.

Three credit hours

EDU 300  Primary Curriculum: Methods and Materials  Pine
A core course which analyzes curriculum, methods, and materials from kindergarten through third grade, with special attention to language arts and social studies. Topics include programming, types of curricula, evaluation, development of units, lesson planning, grouping, sociometric procedures, reporting to parents, analysis of textbooks, and audiovisual techniques. Observation, participation, and supplementary guest speakers. Includes preprofessional experiences.

Three credit hours
**EDU 301 Elementary Curriculum: Methods and Materials**  
M. Costello, Morris  
A basic course which emphasizes language arts and social studies in the intermediate grades. Includes programming, types of curricula, evaluation, development of units, lesson planning, grouping, sociometric procedures, reporting to parents, analysis of textbooks, and audio-visual techniques. Observations and resource speakers are included. Includes pre-professional experiences.  
Three credit hours

**EDU 302 Primary Reading**  
O'Donnell  
This course introduces and analyzes the basic components of the developmental primary reading program. Students are encouraged to formulate instructional goals which must be considered in planning balanced reading activities. The topics include: individual differences in reading readiness; word perception and vocabulary development; reading interests; the directed reading-thinking activity; oral reading; diversifying comprehension requirements; and diagnosis of reading competence. Special attention given to research and innovations with emphasis on the applied use of concepts, practices, and materials. Includes pre-professional experiences.  
Three credit hours

**EDU 303 Elementary Reading**  
Fickett, D. Small  
This course will involve the relationship of reading skills to the typical learner, the materials used to teach him, the processes that are common approaches, and various kits used as vehicles. The student also will be exposed to the classroom, both as an observer and a participant in teaching a reading lesson.  
Three credit hours

**EDU 304 Teaching Primary School Mathematics**  
Staff  
Techniques for teaching mathematics in primary grades. Includes preparation and laboratory use of materials, analysis of current textbooks, and exposure to experimental programs. Includes preprofessional experiences. Prerequisite MS 232.  
Three credit hours

**EDU 305 Teaching Elementary School Mathematics**  
Allen  
Developing techniques for teaching mathematics to intermediate grade pupils. Major consideration will be given to the philosophy of teaching mathematics, comparing various curricula of the subject, developing organized lessons, using techniques for evaluating the aims of the lessons, and exploring ways to enrich the mathematics curriculum. Field experiences in the public schools will be an integral part of the course. Prerequisite: MS 232.  
Three credit hours

**EDU 306 Secondary Reading**  
Walker  
This course places emphasis upon developmental, corrective, adaptive, and remedial readings. Methods of teaching reading in the secondary school and reading instruction as it applies to the content areas.  
Three credit hours

**EDU 308 Teaching Elementary Science**  
Neuberger  
Problems and methods of teaching science and health. Current practices and teaching materials are emphasized and evaluated. Includes preprofessional experiences.  
Three credit hours

**EDU 309 Selection and Utilization of Education Media**  
Milbury  
A course designed to orient the pre-service and the in-service teacher to current trends in instructional media. Instruction will be directed to proper selection and utilization of the latest available equipment and materials. There will be provision for associated laboratory work. Class limited to 30.  
Three credit hours

**EDU 310 Preparation of Classroom Instructional Materials**  
Davis, Milbury  
A lecture-laboratory series which involves students in the creation of instructional materials. Techniques include the dry mounting of flat pictorial materials, cloth backing of pictorial materials, professional quality lettering, rudimentary photography and processing (including use of the darkroom), and the production by several techniques of transparent projectuals. Classes limited to 18. No prerequisite: Lab fee $7.50.  
Three credit hours

**EDU 312 Teaching Language Arts in Elementary School**  
Costello  
Recent methods and materials basic to the teaching of communication skills. Topics include spelling, handwriting, listening, creative expression, oral and written reporting. Use of tapes, records, filmstrips, and recent language arts books for the elementary school. Opportunities to work with children in local schools.  
Three credit hours
EDU 313 Maine School Law
A review and interpretation of those statutes which directly affect the teacher. The case-study method is employed to cover such topics as certification, employment, tenure, dismissal, professional rights and responsibilities of the teacher, liability, curriculum, requirements, attendance and classification of pupils, church-state relationship, and pupil control.
Three credit hours

EDU 314 Introduction to Secondary Education
Secondary Curriculum will be an effort to model a teaching-learning process that emphasizes that each person learns only what that individual needs and wants to know. Thus the student will be presented with a number of behaviors that might be perceived as appropriate for a teacher and permitted to select those objectives and methods of achieving these objectives that most closely meet individualized needs. The student will consider philosophy, objectives, motivation, learning theory, evaluation, methods, school administration and organization, school law, et al.
Three credit hours

EDU 315 Teaching English in the Secondary School
A methods course for English majors preparing to enter secondary teaching, Grades 7-12. Students are familiarized with current developments in the "new English" as evidenced by recent theory and practice. Practical applications include special projects in the teaching of language, literature, composition, and reading. Students are given opportunities for firsthand observation of secondary English classrooms in the greater Portland area; workshops and conferences with visiting junior and senior high school teachers; tutorial assignments as University "Writing Laboratory" aides; and mastery of basic skills in the use of audiovisual equipment before actual classes.
Three credit hours

EDU 316 Introduction to Learning Disabilities
This course is designed to expose the prospective teacher to typical learning problems that manifest themselves in typical, as well as atypical, classrooms.
Three credit hours

EDU 317 Teaching Social Studies in the Secondary School
The course deals with the role of the social studies teacher as an agent of change, prompting sensitivity, procedure, method, and concern. It presents new concepts, methods, and materials in the professional dimensions of social studies instruction.
Three credit hours

EDU 318 Teaching Science in the Secondary School
History of science education, methods and materials in the teaching of science, curricular trends, emphasis on behavioral objectives. May include student demonstrations, opportunity for observation and participation in secondary schools. Students concentrating in biology are strongly urged to take EDU 330, Teaching Biology in the Secondary School, in place of this course. Prerequisite: junior or senior standing.
Three credit hours

EDU 319 Measurement and Evaluation
Construction, selection, and use of educational achievement tests, including diagnostic and survey instruments. Skill in writing essay and objective types is developed. An inquiry into the validity and reliability of typical standardized tests. Elements and uses of statistics; tabulation of data; measures of central tendency, variability, and correlation.
Three credit hours

EDU 320 Kindergarten Development
Students are involved with curricula, materials, methods, and philosophies of contemporary and conventional kindergarten and early childhood programs. An emphasis is upon the practical, as well as the theoretical.
Three credit hours

EDU 321 Atypical Reading Patterns
The purpose of this course is to give the prospective teacher added depth with the typical as well as the atypical reader. Special areas of emphasis will be speech and reading, dyslexia, Frostig materials, and Vallett materials. Includes preprofessional experiences.
Three credit hours

EDU 322 Remedial Reading
An empirical approach, relating class discussions to clinical observation. Methods by which the teacher copes with individual difficulties are explored. Testing and diagnostic work are studied and applied to subject-groups.
Three credit hours
EDU 323 Independent Study in Education  
Rhoades, Staff  
To provide juniors and seniors who have demonstrated critical and analytical capability an opportunity to pursue a project independently, charting a course and exploring an area of interest within their major field, bearing upon it previous course experiences and emerging with an intellectually sound, coherent synthesis, or an artistic or technical creation reflecting a high caliber of performance.  
Credit hours to be arranged

EDU 324 Student Teaching  
Staff  
Full-time student teaching during the senior year is provided under supervision in off-campus situations for all who meet prerequisites. Students are assigned to Elementary or Secondary schools or other educative agencies for one half semester. It is recommended that all Elementary students pursue two quarters consecutively. For the 1973-74 school year, Secondary Education students on the Gorham Campus will be permitted to take two quarters while Portland students will take one. During the other quarter, students usually enroll in a full time program of courses. This provides opportunity to teach according to choice in a different situation each quarter. Opportunities include Kindergarten-Primary, Elementary, Secondary, Art, Music, Industrial Arts, Theatre/Communications, and Trade and Industry. Prerequisites vary according to major field of study. See curriculum listings in the catalog.  
Six or twelve credit hours

EDU 325 Seminar in Primary Education  
Pine, Staff  
Consideration of such critical problems in primary education as school law in relation to the primary teacher; grouping and individual differences; basic organization of student teaching; the primary teacher in relation to community, school, and state. Faculty members from special areas as well as visiting lecturers participate.  
Two or three credit hours

EDU 326 Seminar in Elementary Education  
M. Costello, Staff  
A study of issues in elementary education: school law; professional and ethical procedures; organization of student teaching; and teacher relationships with schools, community, and state. Visiting lecturers participate. Prerequisite: enrollment in EDU 324 Student Teaching.  
Two or three credit hours

EDU 327 Seminar in Secondary Education  
Littlefield, Staff  
A group discussion concerned with student teachers’ questions and answers.  
Two credit hours

EDU 328 Teaching Family Life and Sex Education  
Bemis  
A philosophical, physiological, and methodological approach to family life and sex education in the schools. Major topics dealing with human sexuality will be discussed. Perspectives, methods and materials, program planning, and curriculum development will be included.  
Three credit hours

EDU 330 Teaching Biology in the Secondary School  
Dorsey  
A course designed primarily for students preparing to teach biology in the secondary school. Emphasis is placed on advances in the secondary biology curricula, notably the Biological Sciences Curriculum Study approaches. A major portion of the course work is devoted to the laboratory exercises and techniques which typify the investigative approach of these curricula. Simulated situations in the teaching of biology will be employed.  
Three credit hours

EDU 336 Children’s Literature  
Morris  
This course emphasizes a creative, interdisciplinary approach to children’s books, an understanding of the interests and developmental tasks of the child, and, by precept and example, a presentation of methods of individualizing reading. The student will be expected to read children’s books widely and in depth.  
Three credit hours

EDU 350 Modern Philosophies of Education  
Staff  
This course is designed to examine the current patterns of thought that ground and guide contemporary theory, policy, and practice in the enterprise of education. An emphasis will be placed on philosophy as an activity through which one critically examines the merits of alternative patterns of educational thought and seeks to form a personal philosophy of education. Prerequisites: Open to Juniors and Seniors who have completed EDU 200 or equivalent, or a course in general Philosophy.  
Three credit hours
EDU 351 Historical Foundations of American Education
This course examines the development of public education in the United States and traces selected reforms that have influenced and altered the nature, purposes, and roles of this institution. Offered during the first and third quarters of the academic year. Prerequisites: Open to Juniors and Seniors who have completed EDU 200 or equivalent.
Three credit hours

EDU 352 The Role of Education in Social Change
A critical examination of four basic types of social change procedures, with emphasis on the theories that support each, the possible effects of each on persons and the general social order, and the socio-psychological conditions that give rise to social change. The case-study method is used in examining the basic types; theoretical literature is used to provide a working fund of knowledge on the nature of social systems. (Not offered in 1974-75)
Three credit hours

EDU 360 Teaching the Child Under Six
Philosophy, curricula, methods, and materials of the preschool child and his teachers. Extensive observation and field experience are integral parts of the program.
Three credit hours

EDU 368 Introduction to Speech Correction
The common speech and language disorders found in school children will be discussed. For each disorder the probable causes, symptoms, and methods of diagnosis and remediation will be covered. The course will also include the basic principles of articulatory phonetics.
Three credit hours

EDU 371 Career Education for the Elementary School
Exploration of the Career-Based Curriculum model emphasizing the relationship and interdisciplinary nature of all curricular areas to the Career Education theme. Students will work with tools, equipment, and materials applicable to the elementary setting and will develop model lessons and units of study stressing career awareness and guidance practices. (Career Awareness has been identified by the U.S. Office of Education as the major thrust for education of our young people as well as adults.)
Three credit hours

EDU 393 Science Field Workshop
An advanced field experience designed to enhance the student's awareness of and capability in the teaching of science to young children. Students individually, or in small groups, plan process-concept hierarchies, translate these into activities for appropriate learning levels, and prepare the materials necessary for classroom implementation. Students are expected to trial teach their units in classrooms under close supervision of cooperating school and university staff. Pass/Fail grading.
Three credit hours

EDU 499 Introductory Photography
Basic principles, skills, and techniques of the photographic medium. The course of study will consider the camera, film, composition, lighting, exposure, processing, printing, and print finishing. Major thrusts to be in the black and white realm. No prerequisite. Class limited to 15. Lab fee: $12.50 per person.
Three credit hours

ECED 300 Economic Concepts and Resource Materials
A study of the simplification of economic concepts for presentation at elementary and secondary grade levels; also the study and preparation of various resource materials used in presenting economic concepts at these levels. Prerequisites: ECON 101, 102, and 350, plus junior standing in the School of Education.
Three credit hours

EDPY 331 Group Dynamics
A study of the nature of group process and one's own functioning in a group. Problems of leadership, roles filled, and techniques will be integral parts of the course. The developing awareness of one's self in relation to others in a group will be of importance. Specific techniques will include reading, leadership of other groups, and participation in a seminar planned to aid in the exploration of leadership styles of self and others. Open to upper class undergraduates and graduate students. (Not offered in 1974-75)
Three credit hours
EDPY 332 Psychology of the Self

An exploration into the development of the self, primarily as an issue of personal growth. Topics might include alienation, loneliness, and verbal-nonverbal communication. Learning techniques center around extensive reading, common class experiences, and intensive small group interaction. (Not offered in 1974-75)

EDPY 333 Human Growth and Development

A study of significant elements in the physical, mental, emotional, and social make-up of children as they develop from infancy to adolescence. Selected case studies and projects in the application of basic principles of growth and development to problems of adjustment to school, home, and community. Special attention is given to the developmental tasks of school-age children.

EDPY 335 Educational Psychology

Basic principles, techniques, and research in Educational Psychology. Special consideration given to the learning process, perception, motivation, individual differences, and measurement, with reference to the facilitation of effective teaching and learning. A one-semester course open to upperclass students.
Industrial Arts

Purposes

The undergraduate curriculum in Industrial Arts has as its central purpose the preparation of certified teachers who are able to organize, manage, and teach a program of industrial arts in the elementary and secondary schools of the State.

A secondary purpose of the program is to provide non-teaching majors an opportunity to develop general technical proficiencies along with a basic knowledge of business administration, leading to middle management positions in industry.

A B.S. degree with a major in Industrial Arts or in Technology will be granted upon successful completion of the following requirements:

### REQUIRED OF BOTH
TEACHER EDUCATION MAJORS AND TECHNOLOGY MAJORS

General Education Courses: 52 credit hours total

<table>
<thead>
<tr>
<th>Category</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities</td>
<td>9</td>
</tr>
<tr>
<td>Fine and Applied Arts</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics and Science</td>
<td>12</td>
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<tr>
<td>Social Sciences and Psychology</td>
<td>9</td>
</tr>
<tr>
<td>Area 5: General</td>
<td>6</td>
</tr>
<tr>
<td>Modern Industry (IA 270)</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Electives (General)</td>
<td>6</td>
</tr>
</tbody>
</table>

Core Requirements in Technical Education: 27 credit hours total

(Each course listed carries 3 credits.)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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</thead>
<tbody>
<tr>
<td>IA 100</td>
<td>Manufacturing and Construction</td>
</tr>
<tr>
<td>IA 101</td>
<td>Energy and Transportation</td>
</tr>
<tr>
<td>IA 130</td>
<td>Graphic Communication</td>
</tr>
<tr>
<td>IA 210</td>
<td>Electronics Technology</td>
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<tr>
<td>IA 220</td>
<td>Power Technology</td>
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<tr>
<td>IA 231</td>
<td>Technical Graphics</td>
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<tr>
<td>IA 241</td>
<td>Graphic Arts Technology</td>
</tr>
<tr>
<td>IA 250</td>
<td>Metals Technology</td>
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<tr>
<td>IA 260</td>
<td>Woods Technology</td>
</tr>
</tbody>
</table>

### REQUIRED OF TEACHER EDUCATION MAJORS

Professional Education Courses: 23 credit hours total

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 150-4</td>
<td>Preprofessional Field Experiences</td>
<td>2</td>
</tr>
<tr>
<td>EDU 335</td>
<td>Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>IAED 380-381</td>
<td>Curriculum Methods and Materials</td>
<td>6</td>
</tr>
<tr>
<td>EDU 324</td>
<td>Student Teaching and Seminar</td>
<td>12</td>
</tr>
</tbody>
</table>

(Minimum 2.5 cumulative index required in order to register for EDU 324)
Teaching Area Options

Teacher Education majors have four teaching area options, one of which must be selected prior to entrance to the junior year. Each student should plan the program with the adviser. The teaching areas are I—Laboratory of Industries, II—Energy and Transportation, III—Graphic Communication, IV—Manufacturing and Construction. The following tabulation indicates the number of credit hours a student should take in each of the teaching areas, as selected from the list of technical electives below.

<table>
<thead>
<tr>
<th></th>
<th>II</th>
<th>III</th>
<th>IV</th>
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<tbody>
<tr>
<td>I. Laboratory of Industries</td>
<td>6</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>II. Energy and Transportation</td>
<td>12</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>III. Graphic Communication</td>
<td>3</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>IV. Manufacturing and Construction</td>
<td>3</td>
<td>6</td>
<td>12</td>
</tr>
</tbody>
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TECHNICAL ELECTIVES
FOR BOTH TEACHER EDUCATION MAJORS
AND TECHNOLOGY MAJORS

II—Energy and Transportation
IA 311 Communications Electronics
IA 312 Computer Technology
IA 313 Electrical Construction
IA 321 Automotive Systems
IA 322 Automotive Diagnosis and Tuneup
IA 413 Instrumentation
IA 414 Digital Electronics
IA 423 Fluid Power
IA 424 Fluid Power Systems

III—Graphic Communication
IA 332 Architectural Drawing and Design
IA 333 Descriptive Geometry
IA 342 Photo-Offset Lithography
IA 343 Communications Design
IA 434 Industrial Production Illustration
IA 435 Systems Analysis and Design
IA 444 Photographic Reproduction
IA 445 Color Reproduction Theory

IV—Manufacturing and Construction
IA 351 Machining and Fabrication
IA 352 Fabrication and Forming
IA 361 Custom Production in Wood
IA 362 Residential Construction
IA 363 Wood Science
IA 370 Crafts Technology
IA 371 Plastics Technology
IA 452 Metallurgy and Metrology
IA 472 Materials Testings (Metals/Wood)

REQUIRED OF TECHNOLOGY MAJORS

Additional Course in General Education: 3 credit hours
EDU 200 Studies in Foundations of Education

Business Administration and Economics: Elect 18 credit hours
(Electives from the following 3 credit courses)

Economics
Accounting
Industrial Management
Marketing

Cost Accounting
Finance
Industrial Relations
Human Relations

Technical Electives: 24 credits from the groups above.
Minimum of two courses in each group

Special Problems: 2 credit hours
INDUSTRIAL ARTS CURRICULUM

Freshman Year

English (Elective) 6
Mathematics (Elective) 6
Science (Elective) 6
Physical Education 1

EDU 150-4 Pre-Professional Field Experiences 2
IA 130 Graphic Communication 3
IA 100 Manufacturing and Construction 3
IA 101 Energy and Transportation 3
IA 231 Technical Graphics 3

Sophomore Year

PSY 101 General Psychology 3
Fine and Applied Arts (Elective) 6
Humanities (Elective) 3
IA 210 Electronic Technology 3
IA 220 Power Technology 3
IA 241 Graphic Arts Technology 3
IA 250 Metals Technology 3
IA 260 Wood Technology 3
IA 270 Modern Industry 3
Social Science (Elective) 3

Junior Year (Teacher Education Majors)

Social Science (Electives) 3
Area 5: General (Electives) 6
EDU 335 Educational Psychology 3
IAED 380-381 Curriculum Methods and Materials 6
Industrial Arts Technical (Electives) 12

Junior Year (Technology Majors)

Social Science (Elective) 3
Area 5: General (Elective) 6
Economics (Elective) 3
Accounting (Elective) 3
Finance (Elective) 3
Industrial Arts Technical (Electives) 12

Senior Year (Teacher Education Majors)

EDU 324 Student Teaching and Seminar 12
General Education (Electives) 6
Industrial Arts Technical (Electives) 9
Special Problems (Elective) 2

Senior Year (Technology Majors)

Industrial Management (Elective) 3
Marketing (Elective) 3
Industrial Relations (Elective) 3
Industrial Arts Technical (Electives) 12
Special Problems (Elective) 2
General Education (Elective) 6

Clinical Training in Manual Arts Therapy

An opportunity is provided junior and senior Industrial Arts majors to participate in a clinical training program provided by Veterans Administration Hospital, Brockton, Massachusetts. Two hundred and forty hours, or six weeks, to be spent at hospital, at convenience of student. Transportation not furnished, but room and board provided at no expense. Consult department chairman for further details.
COURSES IN INDUSTRIAL ARTS

ENERGY AND TRANSPORTATION

IA 101 Energy and Transportation
Concepts of Energy and Power related to the areas of muscle, water, wind, solar, nuclear, chemical, combustion, electricity; and with the World of Transportation, the areas of land, water, and space. Students will be involved with group and individual constructional activities to facilitate the study of such energy sources and transportation vehicles, facilities, and networks. Required for all first year students. Prerequisite: Permission of instructor.
Three credit hours

IA 210 Electronics Technology
Review of basic network theory; AC networks; theory and use of electrical measuring instruments; semiconductors, diodes, and transistors; basic communication circuits. Prerequisite: Permission of instructor.
Three credit hours

IA 220 Power Technology
A study of those industries concerned with power; its sources, generation, transmission, and control. Applications of power in the fields of manufacturing construction and transportation are considered and developed. Emphasis is placed on thermal engines — theory, construction, operation, maintenance, and service. Prerequisite: Permission of instructor.
Three credit hours

IA 311 Communication Electronics
Detailed study of common communication circuits, including phonographs, AM-FM radio, television, and radar; integrated circuit technology and application. Prerequisite: Permission of instructor.
Three credit hours

IA 312 Computer Technology
Basic programming and use of University computing facilities; principles of logic design of digital equipment; social, industrial, and psychological consequences of the computer revolution. Open to all students. Prerequisite: Permission of instructor.
Three credit hours

IA 313 Electrical Construction
Modern electrical construction and wiring practices utilizing the National Electrical Code. Motors, controllers, and residential wiring will be stressed. Field study of industrial electrical construction and maintenance procedures, as well as commercial and new residential buildings. Prerequisite: Permission of instructor.
Three credit hours

IA 321 Automotive Systems
The study of the automobile and its systems. Theory, design and construction, operation, maintenance, testing, and service included. Utilization of prime movers and devices common to all fields of transportation explored and considered. Prerequisite: IA 220 and permission of instructor.
Three credit hours

IA 322 Automotive Diagnosis and Tuneup
The study of automotive systems. Analysis and diagnosis. Tuneup and servicing included. Opportunities for independent research and problem solving provided. Prerequisite: IA 321 or permission of instructor.
Three credit hours

IA 413 Instrumentation
Introduction to the study of sensing devices and instruments necessary to observe and control both manufacturing processes and the performance of mechanical and electrical machinery. Emphasis on pressure in liquids, atmospheric pressure, temperature, indicating instruments, mechanical and electrical transducers, potentiometric devices, and other monitoring instruments. Prerequisite: IA 210 and permission of instructor.
Three credit hours

IA 414 Digital Electronics
Semiconductor junction theory; special devices such as SCR’s, FET’s; digital electronics, including switching theory and applications. Permission of instructor.
Three credit hours

IA 423 Fluid Power
A study of fluids at work. Investigation of the theory and application of hydraulics and pneumatics in mechanics and industry. Design, construction, and maintenance of fluid power devices and systems. Prerequisite: Permission of instructor.
Three credit hours
IA 424 Fluid Power Systems
Application of fluid power and fluidic systems to manufacturing and construction industries. Prerequisite: IA 423 and permission of instructor. Three credit hours

GRAPHIC COMMUNICATION

IA 130 Graphic Communication
Introduction to the concepts of effective industrial communications. Translating ideas and images through understanding and applying the elements of graphic design, shape and dimension, layout and image assembly, and reproduction techniques. Prerequisite: Permission of instructor. Three credit hours

IA 231 Technical Graphics
Concepts of spatial relationships and visualizations with related techniques. Basic skill development and understanding taught through freehand illustrations as well as conventional instruments and devices. Multi-view projections, pictorial techniques, primary and secondary auxiliaries, detail and assembly working drawings, and reproduction techniques. Contemporary industrial practices and processes. Prerequisite: Permission of instructor. Three credit hours

IA 241 Graphic Arts Technology
A study of the common reproduction systems utilized in the graphic arts industries and technology. Designing, composing, reproduction, assembling, and finishing of printed materials utilizing conventional reproduction techniques. Emphasis on letterpress, offset lithography, and screen printing with related experiences in rubber stamp making, block printing, embossing, and photo enlarging. Prerequisite: Permission of instructor. Three credit hours

IA 332 Architectural Drawing and Design
Basic architectural design and drawing as related to residential and light construction. A detailed set of plans for a single family home will be executed. Construction techniques, environmental considerations, building materials, specifications, costs and financing, codes and zoning, schedules, and architectural models. Prerequisite: IA 231 or equivalent and permission of instructor. Three credit hours

IA 333 Descriptive Geometry
Analysis of the spatial relationship of points, lines, planes, and solids with orthographic and pictorial practice. Vector analysis, nomographs, charts, graphs, graphical arithmetic, truss systems with application. Prerequisite: IA 231 or permission of instructor. Three credit hours

IA 342 Photo-Offset Lithography
A study of those industries utilizing photo-offset lithography with emphasis upon camera work, stripping, platemaking, and presswork. Photographic conversion of line and halftone copy, photo-screen stencils, and finishing procedures are also included. Prerequisite: IA 241 or permission of instructor. Three credit hours

IA 343 Communications Design
An introduction to the principles of layout and design in preparing camera copy for lithographic reproduction. Emphasis on design elements and fundamentals, manuscript and illustration preparation, graphic and photographic techniques, and production specifications. Prerequisite: Permission of instructor. Three credit hours

IA 434 Industrial Production Illustration
Principles and techniques employed by contemporary industry to graphically describe industrial products, technical concepts, and service information. The media range will include chalk, ink, pencil, charcoal, water color, tempera, pressure sensitive transfer symbols, and various methods of reproduction. Engineering and architectural problems. Prerequisite: IA 231 or permission of instructor. Three credit hours

IA 435 Systems Analysis and Design
Research applied to solving basic engineering problems. Contemporary systems of analysis and design. Economic factors, resource utilization, planning, design, model construction, follow-up studies and evaluation techniques applied to specific practical problems. Prerequisite: IA 333 and permission of instructor. Three credit hours
**IA 444 Photographic Reproduction**  
Photographic concepts, processes, and techniques utilized in graphic arts reproduction. Experience in contact printing, continuous tone enlarging, use of filters, and color separations. Prerequisite: IA 342 and permission of instructor. Three credit hours

**IA 445 Color Reproduction Theory**  
Advanced study in the additive and subtractive theories of color reproduction. Experiences in photographic separation and offset press printing of color originals. Emphasis on understanding physiological and psychological responses to color. Prerequisite: IA 342 and permission of instructor. Three credit hours

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### MANUFACTURING AND CONSTRUCTION

**IA 100 Manufacturing and Construction**  
Basic concepts and common functions involved in both the production of manufactured goods and building construction are studied. Custom and line-production activities and model structures are utilized. Graphic communication concepts are included. Required of all first-year students. Prerequisite: Permission of instructor. Three credit hours

**IA 250 Metals Technology**  
A study of metal manufacturing industries. Introduction to concepts of designing, planning, fabrication, finishing, and distribution as they pertain to these industries. Selection, use, and care of equipment. Safety practices. Prerequisite: Permission of instructor. Three credit hours

**IA 260 Wood Technology**  
Structure of wood and its relation to moisture, strength properties, and working qualities. Wood-based materials: veneer, plywood, particleboard, hardboard will be considered. Basic skills in hand and machine processes will be developed. Emphasis on research and experimentation and basic processes in the wood manufacturing industry. Safety practices. Prerequisite: Permission of instructor. Three credit hours

**IA 351 Machining and Fabrication**  
A study of metal industries concerned with electric and gas welding and machining techniques. Emphasis on process engineering. Individual and group problems. Laboratory and maintenance practices. Prerequisite: IA 250 and permission of instructor. Three credit hours

**IA 352 Fabrication and Forming**  
Concepts, principles, and activities in TIG welding, sheet metal fabrication, and casting techniques as they relate to the manufacturing and construction industries. Consideration is also given to plumbing. Group and individual problems and activities. Prerequisite: IA 351 and permission of instructor. Three credit hours

**IA 361 Custom Production in Wood**  
Production and wood manufacturing problems including jigs, fixtures, special machine operations, and advanced finishing techniques. General maintenance procedures on production equipment. Group and individual research assignments and related technical problems. Prerequisite: IA 260 and permission of instructor. Three credit hours

**IA 362 Residential Construction**  
A study of the residential construction industries including construction principles; layout, foundation, framing, exterior covering, and finish. Related areas of services, plot planning, earth-moving principles considered in research activities. Group and individual problems. Prerequisite: IA 260 or permission of instructor. Three credit hours

**IA 363 Wood Science**  
Wood anatomy and identification experiences leading into a study of the properties of wood, wood-liquid relations, bonding and finishing of wood, and machining as they relate to the manufacturing processes. Prerequisite: IA 260 or permission of instructor. Three credit hours
IA 370 Crafts Technology
Nonna y
Design and manufacture of products utilizing ceramics, leather, plastics, art metals, and other craft materials. Examination of artistic crafts for leisure-time activities and for adult programs. Individual and group research and problem solving. Prerequisite: Permission of instructor.
Three credit hours

IA 371 Plastics Technology
Staff
Pattern and mold design and construction; thermo-forming, injection-molding, reinforced plastics, blow molding, foam and plastisol forming. Theory and application of thermoplastic and thermo-set principles. Prerequisite: IA 250 or IA 260 and permission of instructor.
Three credit hours

IA 452 Metallurgy and Metrology
Moore
The technology of metallurgy and metrology. Heat treatment, powdered metals, machining and inspection of metal parts. Individual and group activity. Prerequisite: IA 250 and permission of instructor.
Three credit hours

IA 472 Materials Testing
Staff
Industrial techniques involved in the analysis of the physical properties of materials and their utilization in the manufacturing and construction industries. Emphasis on research and experimentation. Individual and team activities. Prerequisite: IA 250 or 260 and permission of instructor.
Three credit hours

INDUSTRIAL ARTS EDUCATION

IA 270 Modern Industry
Staff
Evolution and structure of modern American industry and its impact upon the social, economic, and cultural milieu. Major areas and functions of industry explored include: personnel administration, research and development, production, finance, marketing, and service. Industrial visitations and reports. Prerequisite: Permission of instructor.
Three credit hours

IA 490 Special Problems in Industrial Arts
Staff
Provides upper level students an opportunity to pursue independently a topic, project, or experiment of interest.
Students will prepare a contract or proposal for study to be conducted and, upon completion, submit findings in a scholarly report or other evidence of merit. Permission of instructor. Technical elective may be substituted.
Two credit hours

IAED 380 Curriculum Methods and Materials
Mitchell
Evaluation of contemporary curriculums in industrial arts. Development of long and short range plans, with emphasis on unit preparation and performance-based objectives. Task analyses for teaching skills and concept development. Instructional media preparation and utilization. Organization for individualized or group instruction. First of full year sequence prior to student teaching. Prerequisite: Basic technical core, EDU 335.
Three credit hours

IAED 381 Curriculum Methods and Materials
Mitchell
Utilization of prepared plans for micro- and participation-teaching. Audio and video tape presentations and critiques. Introduction to criterion referenced evaluation techniques. Safety principles and classroom control stressed. Basic organization and administration procedures for implementing a modern program of industrial arts. Orientation to student teaching. Prerequisite: IAED 380 and permission of instructor.
Three credit hours

EDU 371 Career Education for the Elementary School
Nonna y
Exploration of the Career-Based Curriculum model emphasizing the relationship and interdisciplinary nature of all curricular areas to the Career Education theme. Students will work with tools, equipment, and materials applicable to the elementary setting and will develop model lessons and units of study stressing career awareness and guidance practices. (Career Awareness has been identified by the U.S. Office of Education as the major thrust for education of our young people as well as adults.)
Three credit hours
Vocational Technical Education

A part-time Evening and Summer program designed to:

a) prepare instructors for the teaching of vocational-industrial and/or technical subjects in the high schools and post-secondary schools of Maine. Candidates must be eligible for vocational teaching certification. (EDUCATION)

b) provide non-teaching majors an opportunity to pursue a collegiate program leading to a baccalaureate degree which recognizes trade or technical competency and provides knowledge of business and industry leading to supervision, technician, or middle management positions. (TECHNOLOGY)

A B.S. degree with a major in Vocational-Technical Education or in Technology will be granted upon successful completion of the following requirements:

Curriculum Requirements

One hundred and twenty (120) semester hours of credit are required for the bachelor's degree. A minimum of one year, or 30 semester hours, exclusive of work trade experience credits, must be earned at this institution.

A. General Education ........................................................................................................45 credit hours

| Humanities | 6 |
| Fine and Applied Arts | 6 |
| Science and Mathematics | 15 |
| Social Sciences | 6 |
| PSY 101 General Psychology | 3 |
| IVE 360 Modern Industry | 3 |
| Area 5: General | 6 |

B. Professional Education (Teaching Majors Only) .................................................27 credit hours

| IVE 305 Curriculum Development in Vocational Education | 3 |
| EDU 333 Human Growth and Development | 3 |
| IVE 300 Occupational and Trade Analysis | 3 |
| IVE 310 Methods and Materials of Instruction | 3 |
| IVE 340 Shop Organization and Management | 3 |
| IVE 350 Philosophy of Vocational Education | 3 |
| IVE 411 Measurement and Evaluation (Vocational) | 3 |
| EDU 324 Student Teaching (Required for all candidates with less than three years of successful teaching experience) | 6 |

C. Area of Specialization (Technical) .................................................................45 credit hours

| IVE 400 Occupational Experience, verified (Credits will be determined by rating plan) | maximum |
| IVE 440 Related Industrial Experiences (Two options, total credits to be no more than the difference between those granted for IVE 400 and 45 credits.) | |

Recommended Electives

| IVE 315 Learning and Programmed Instruction | 3 |
| IVE 320 Coordination of Cooperative Education | 3 |
| IVE 325 Conference Learning | 3 |
| IVE 330 Principles and Practices of Vocational Guidance | 3 |
| IVE 420 Trends in Vocational Education | 3 |
IVE 450  Local Administration and Supervision of Vocational Education  3
IVE 455  Development of Technical Education  3
IVE 460  Independent Study in Vocational Education  3
EDU 310  Preparation of Instructional Materials  3
EDU 314  Curriculum (Education)  3

Technology Major

(To be taken in place of professional education) ........................................27 credit hours
IVE 300  Occupational and Trade Analysis  3
IVE 325  Conference Leading  3
BUS 300  Business Administration ..........................................................18 credit hours
(Electives from following areas)
  Economics  Cost Accounting
  Accounting  Finance
  Industrial Management  Industrial Relations
  Marketing  Human Relations
IVE 460  Independent Study in Vocational Education  3
  Elect One
IVE 350  Philosophy of Vocational Education  3

IVE 300  Occupational and Trade Analysis  Staff
  Identification of occupational or trade fields, units, operations, and items of related information.
  Three credit hours

IVE 305  Curriculum Development in Vocational Education  Staff
  This course is concerned with developing specific course content from an occupational analysis. The identification of educational needs and objectives precedes the selection and organization of relevant matter. Prerequisite: IVE 300.
  Three credit hours

IVE 310  Methods and Materials of Instruction in Vocational Education  Staff
  This course treats the general and specific materials and methods of teaching vocational courses. Deals with both the theoretical and practical aspects. Prerequisites: IVE 300 and 305.
  Three credit hours

IVE 315  Learning and Programmed Instruction  Staff
  The first application of the laboratory and scientific study of the learning process. The principles of learning derived from experimental study which have provided a foundation for advances in the techniques of learning.
  Three credit hours

IVE 320  Coordination of Cooperative Education  Staff
  The role of the coordinator in organizing and conducting a program of work-study experience in high school. Introduction to cooperative half-time training, community survey, advisory committees, laws and regulations; and examination of the responsibilities and activities of the coordinator.
  Three credit hours

IVE 325  Conference Leading  Staff
  A course in the philosophy and techniques of organizing and conducting successful conferences. Each participant will assume the responsibility of planning and leading a simulated conference.
  Three credit hours

IVE 330  Principles and Practices of Vocational Guidance  Staff
  Discussion and study with the intent to develop a better understanding of principles and objectives of Vocational Guidance.
  Three credit hours

IVE 340  Shop Organization and Management  Staff
  Basic principles of planning, organizing and managing an industrial or technical shop or laboratory. Selection and arrangement of equipment including specification writing. Control of personnel for efficient shop management. Prerequisite: IVE 310.
  Three credit hours

IVE 350  Philosophy of Vocational Education  Staff
  A survey of the history and philosophy of vocational education in the United States with emphasis upon recent developments.
  Three credit hours

187
IVE 360 Modern Industry
Evolution and structure of modern American industry and its impact upon the social, economic, and cultural milieu. Major areas and functions of industry explored include: personnel administration, research and development, production, finance, marketing and service, industrial visitations and reports.

Three credit hours

IVE 382 Preparation of Instructional Materials
A lecture-laboratory series which involves students in the creation of instructional materials. Techniques include the dry mounting of flat pictorial materials, cloth backing of pictorial materials, professional quality lettering, rudimentary photography and processing (including use of the darkroom), and the production by several techniques of transparent projectuels.

Three credit hours

IVE 400 Trade Experience, verified (see IVE 440, Option No. 2 below.)
(Credits will be determined by rating plan)

IVE 411 Measurement and Evaluation in Vocational Education
The construction, selection, and use of achievement and performance tests in industrial-technical education. Skill in writing test items is developed. Elementary statistics for the industrial-technical instructor, including grading, are stressed. Prerequisites: IVE 300 and 310.

Three credit hours

IVE 420 Trends in Vocational Education
Identification, analysis, and discussion of major problems and trends in vocational education.

Three credit hours

IVE 440 Related Industrial Experiences
(Two options, total credits to be no more than the difference between those granted for IVE 400, and 45 credits).

OPTION NO. 1
This course is designed to include attendance at an approved industry-sponsored school or seminar for the purpose of providing the student with advanced related occupational or technical training. Courses provided by organizations such as General Motors Training Centers, or International Typographical Union, qualify under this course offering.

OPTION NO. 2
Approved employment with a company may qualify a student under this option. Arrangements must be approved by the adviser in advance. The experiences should provide opportunities for updating technical skills and knowledge. Credit will be determined on the basis of one credit for each two full weeks of employment with a maximum of five credits for each period of approved continuous full-time employment. A daily log, summary report and evaluation by an industrial supervisor will constitute part of this course.

For additional information concerning either option of IVE 440, consult your adviser.

IVE 450 Local Administration and Supervision of Vocational Education
Procedure and practices utilized in establishing, promoting, coordinating, supervising, and controlling vocational programs on the local level.

Three credit hours

IVE 452 Heat Treatment and Inspection
A study of the origin, nature, and properties of metals. Specimen mounting and microscopic identification of their properties. Experimentation in various heat treatment processes and microscopic observation of these. Selection, care, maintenance, and use of measuring and testing equipment. Application of this equipment in metal manufacturing.

Three credit hours

IVE 455 Development of Technical Education Programs
Planning and development of technical education programs including the determination of needs and organization of programs for secondary and post-secondary schools.

Three credit hours

IVE 460 Independent Study in Vocational Education
An opportunity to pursue independently, a topic, project, or experiment of interest. Students will prepare a contract or proposal for study to be conducted and, upon completion, submit findings in a scholarly report or other evidence of completeness. Permission of advisor.

Three credit hours
Scogis

The School of General and Interdisciplinary Studies

SCOGIS is an experiment in undergraduate education which offers unique opportunities for an interdisciplinary approach to learning. Presently it centers its energies around issues of community, the environment and human ecology, within an holistic world view.

This program is designed for the person who has a good deal of self-motivation and personal energy. It provides a setting for the integration of human problems and current issues where traditional disciplines can go beyond themselves. Courses actualize this approach by crossing traditional departmental boundaries in a spirit of synthesis and by offering a student both freedom and responsibility in determining what the student wants to learn. This happens in a dialogue between student and course leader throughout the semester. Each individual SCOGIS course, moreover, meets in common with other courses to explore areas of mutual concern.

Interested students are invited to visit SCOGIS House at 11 Granite Street (see Portland Campus map for the location) or telephone Portland campus extension 478.

SCOGIS COURSES — FALL 1974

SCO 307 Interpreting the Signs of the Times
Harter

This course is an enquiry into our plight as an endangered creature of planet earth. It will involve its participants in looking at our world society from various points of view (for example, political, psychological, media oriented, culture-art oriented, counter-cultural) in an attempt to get an all encompassing overview of the transformation we as human beings are going through. Each individual involved will have a chance to examine self and goals in relation to whatever is discovered regarding the direction society is going in an effort to determine how best to prepare for the envisioned future.

The emphasis in this course will be placed on the examination of diverse major events and patterns of our times.

SCO 308 Old Time Lifestyles: 19th Century Techniques Applied to 20th Century Survival
Finks

Course members will be encouraged to devise personal solutions for the basic problems of shelter, food production, and other necessities of life. These problems were solved personally or locally by the people of the 19th century. Contrasting their experience with our own, the course will examine topics and attempt solutions in the following areas: construction of dwellings and supportive buildings; food production and storage; manufacture of tools and implements; design of homestead and community; use of energy; social and cultural life; and a philosophy of production and consumption.

SCO 309 Environmental Design
Harley

This course will work to help the people in a small Maine town — possibly Bowdoinham — to determine the future of their community, help them understand and appreciate their environment and the pressure of change it faces, assist them in finding their own direction, and equip them with the tools which may be necessary in order to follow that direction.

Environmental Design is based on the ideal that people can and should be the masters of the man-made portion of the environment in which they live and that such portion should not be shaped by any force contrary to the will of its inhabitants. 'Progress' is not an inevitable threat; it can be controlled or, if not desired, halted. Students will work with townspeople to research, design, and present a master plan for community development.

SCO 310 Krishnamurti and the Teachings of Don Juan
Woodman

This course will be an enquiry into the existential mysticism of both J. Krishnamurti and Juan Matus. The lives and teachings of these two living practitioners will be examined in an effort to distill an essence for radical transformation in one's own life. Classes will focus on those elements in the psyche which obstruct access to nonordinary reality; and will explore, in particular, the movement from linear into magical time. Recent work in theoretical physics, experimental psychology and neurophysiology will be included to emphasize the truly interdisciplinary nature of esoteric psychology and to validate it in terms of western esoteric models.
SCO 311 Imminent Divinity

This course is designed to acquaint students with the language of theological reflection and with the experiences which focus on theological dimensions. It seeks to enable persons to perceive the imminence of divinity within their own relationships and environment and to provide the opportunity to share and reflect upon these perceptions. In this context, the world will be described as a complex of powers within which the human predicament is wrought. The effects of audio-visual media will be explored: music, paintings, photographs, films, and television will be examined with reference to theological word studies and definitions.

SCO 312 Basics of Land Use and Environmental Action

This course explores the complexities of land-use planning and is designed to introduce students to the skills and resources necessary for them to participate in sound land-use decisions. Evaluation will consist of choosing a sample land-use problem and, with reference to State agencies and the disciplines involved, discussing (orally or on paper) methods by which it may be solved.

SCO 331 Handicapped and Self-Concept

This enquiry into concept-of-self and the cripple will involve sensory exercises: being mute for a day; being blind for a class session; the blind and mute working together; confinement to a wheelchair for one day on campus. A journal of these experiences will be kept. Outside projects will include the investigation of architectural barriers in the community and the compilation of data for a bulletin which may be made accessible to the handicapped. Classes will include interviews with handicapped persons and with representatives from agencies that aid the handicapped, such as Goodwill, Institution for the Blind, and Vocational Rehabilitation.
University of Maine
School of Nursing

MARY ANN EELLS, Dean

Professor MacLean; Associate Professors Cotton, Dorbacker, Eells, Ivanisin, Jensen, Malmude, Roscoe, Stone, Talbot, Tryon; Assistant Professors Dubowick, Hass, Linehan, Marshall, Shapiro, Shoobs, Tukey; Instructors Balber, Bellone, Dudac, A. Ellis, E. Ellis, Henderson, Karabin, Luther, MacPherson, Mendelson, Paige, Perry, Pitkin, Rost, Tatro, Tiedemann; Lecturers Cashman, Edwards; Clinical Associate Flaherty.

GENERAL DESCRIPTION
THE BACCALAUREATE PROGRAM

The University of Maine School of Nursing offers a four-year program leading to the degree of Bachelor of Science, with a major in nursing. One hundred and twenty credit hours, with a cumulative point average of 2.0, are required for graduation.

The program is accredited by the National League for Nursing and approved by the Maine State Board of Nursing. Graduates are eligible to take the State Board Test Pool Examinations for licensure as registered nurses.

The School of Nursing supports the policies of the Admissions Office that (1) applicants must meet the University standards of personal fitness, and (2) that it has the right to cancel acceptance of any applicant that it deems necessary for academic or personal reasons. In addition, the School of Nursing requires that students in the nursing major demonstrate personal fitness and academic proficiency throughout the entire program.

The first two years in the program, consisting largely of general education courses, are available on the Orono, Portland-Gorham, and Presque Isle campuses. The junior and senior years, which include clinical nursing courses, are available on the Portland-Gorham campus. Early application is advisable because of competition for space.

Available for advanced placement is credit in general and subject examinations offered through C.L.E.P. Interested candidates should discuss their eligibility for taking these examinations with the Director of Admissions, or the Dean of the School of Nursing. The School of Nursing also offers credit-by-examination in certain courses of the nursing major for advanced placement. For more details, interested students should contact the Department Chairman of the specific course to be challenged.

In addition to the usual University fees and expenses, nursing students must purchase uniforms (approximately $75.00) during the sophomore year. They must also provide themselves with a car for one semester during the senior year for use in the course in Community Health Nursing.

Objectives of the Program

In order to prepare the student for nursing in today's world and for the ability to cope with nursing of the future, the program at the University of Maine School of Nursing is designed to prepare a nurse who can: (1) make effective responses to the needs of people in providing direct care; (2) demonstrate an ability to effectively coordinate care in various settings; (3) identify a personal role as a professional nurse in the community.
Philosophy

The faculty believes that nursing is an art and a developing science which began with the simple acts of caring and curing. Nursing begins with the initial response of recognizing the biological, social, and psychological needs of the client, makes a priority assessment of such needs, and utilizes feasible modes of nursing intervention. It is this set of sensitive and crucial responses which comprises excellence in nursing care.

The faculty further believes that professional nursing preparation occurs within the climate of higher education. The practice of nursing stems from a theoretical base that concerns man in his biological, social, and cultural environment, and the utilization of this knowledge in nursing science.

REQUIREMENTS FOR THE NURSING MAJOR

The student who matriculates at this campus must attain a cumulative average of 2.0 and a minimum of 60 credits to enter the courses at the junior level of the nursing major. D grades will not count towards fulfillment of the requirements of the clinical courses in the nursing major.

FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Required</th>
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<tbody>
<tr>
<td>BIO 101</td>
<td>Biological Principles</td>
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<tr>
<td>BIO 102</td>
<td>Biological Experiences</td>
</tr>
<tr>
<td>BIO 111</td>
<td>Human Anatomy and Physiology</td>
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<tr>
<td>BIO 112</td>
<td>Practical Human Anatomy and Physiology</td>
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<tr>
<td>NSG 100</td>
<td>The Role of the Nurse</td>
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<tr>
<td>CHEM 101</td>
<td>Chemistry for Health Sciences I</td>
</tr>
<tr>
<td>CHEM 102</td>
<td>Chemistry for Health Sciences II</td>
</tr>
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<td>PSY 101</td>
<td>General Psychology</td>
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<td>PSY Elective</td>
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<td>FINE ARTS</td>
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<td>HUMANITIES</td>
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<td>ELECTIVE</td>
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SOPHOMORE YEAR

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<tr>
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<tbody>
<tr>
<td>BIO 311</td>
<td>Microbiology</td>
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<tr>
<td>BIO 312</td>
<td>Microbiology Lab</td>
</tr>
<tr>
<td>FN 352</td>
<td>Human Nutrition</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introduction to Sociology</td>
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<td>ANY 101 or POL 101</td>
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<tr>
<td>SOC Elective</td>
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<tr>
<td>FINE ARTS</td>
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<td>HUMANITIES</td>
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<td>ELECTIVES</td>
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JUNIOR YEAR

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<tr>
<th>Nursing</th>
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<tbody>
<tr>
<td>NSG 301</td>
<td>Medical-Surgical Nursing I</td>
</tr>
<tr>
<td>NSG 302</td>
<td>Medical-Surgical Nursing II</td>
</tr>
<tr>
<td>NSG 303</td>
<td>Nursing of Mothers &amp; Children I</td>
</tr>
<tr>
<td>NSG 304</td>
<td>Nursing of Mothers &amp; Children II</td>
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<td>28</td>
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SENIOR YEAR

<table>
<thead>
<tr>
<th>Nursing</th>
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</thead>
<tbody>
<tr>
<td>NSG 400</td>
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<tr>
<td>Advanced Medical-Surgical Nursing</td>
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<tr>
<td>NSG 401</td>
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<tr>
<td>Community Health Nursing</td>
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<tr>
<td>NSG 402</td>
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<tr>
<td>Community Health Nursing</td>
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<tr>
<td>NSG 403</td>
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<tr>
<td>Psychiatric Nursing</td>
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<td>NSG 404</td>
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<tr>
<td>Seminar in Nursing</td>
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</table>

In addition to the above, there is a Physical Education requirement of two credits which must be met unless excused in writing by the Dean of the School of Nursing.
COURSE DESCRIPTIONS

NSG 100  The Role of the Nurse
A survey of the current and expanding roles of the nurse.  Eells  Three credit hours

NSG 301 Medical-Surgical Nursing I
The nursing care of adults with health problems, present or potential, arising from aging or a pathophysiological condition. The nursing process of assessment, planning, intervention and evaluation is utilized. Learning experiences in the classroom and clinical laboratory are closely correlated with NSG 303/304 for integration of nursing concepts basic to both areas of clinical practice.  Tolbot, Staff  Seven credit hours

NSG 302 Medical-Surgical Nursing II
A continuation of NSG 301.  Tolbot, Staff  Seven credit hours

NSG 303 Nursing of Mothers and Children I
A family-centered approach to the nursing needs of parents and children in community care agencies. Learning experiences in the classroom and clinical laboratory will be closely correlated with NSG 301/302 for integration of nursing concepts basic to both areas of clinical practice.  Linehan, Staff  Seven credit hours

NSG 304 Nursing of Mothers and Children II
A continuation of NSG 303.  Staff  Seven credit hours

NSG 400 Advanced Medical-Surgical Nursing
Concepts of nursing intervention based on scientific principles. Emphasis is on current trends in clinical nursing and the organizational principles relevant to the leadership role in coordinating the work of others. Prerequisites: NSG 301, NSG 302, NCG 403, and NSG 304.  Stone, Staff  Twelve credit hours

NSG 401 Community Health
Concepts and principles basic to the development and maintenance of community health, including theories of ecology, biostatistics, epidemiology, and the organization and delivery of health care.  Roscoe, Staff  Three credit hours

NSG 402 Community Health Nursing
Concepts of community health and the nursing process essential to the practice of nursing in the community.  Roscoe, Staff  Six credit hours

NSG 403 Psychiatric Nursing
The study of psychodynamic concepts and their application to nursing care.  Cotton, Staff  Six credit hours

NSG 404 Seminar in Nursing
Current problems and issues of the profession.  Ivansin  Two credit hours

NSG 295 Independent Study in Nursing I
Individualized study in an area of nursing with the permission of the instructor.  Staff  Two to three credit hours

NSG 395 Independent Study in Nursing II
Individualized study in an area of nursing with the permission of the instructor.  Staff  Two to three credit hours

NSG 495 Independent Study in Nursing III
Individualized study in an area of nursing with the permission of the instructor.  Staff  Two to three credit hours

FN 352 Human Nutrition
Body metabolism and requirements for nutrients by normal individuals. Prerequisites: CHEM 101, CHEM 102 or equivalent, and BIO 111.  Jensen  Three credit hours

193
THE BUREAU OF CONTINUING EDUCATION FOR NURSING

The overall objective of the Bureau is to provide educational programs for nurse practitioners in Maine that are designed to (1) stimulate and create an interest in extending their basic education, (2) update their knowledge within specialized areas of nursing care, (3) enhance the leadership capability of nurses, (4) promote better health care to consumers by enhancing the knowledge and skills of the nurse practitioner, and (5) create an awareness of the total system of health-care delivery and how their special nursing knowledge and skills can serve imaginatively the health-care delivery system.

The planning and implementation of such programs are based upon identified and projected needs of the learner and society, and are conducted in concert with related health agencies and key advisory people in the State of Maine.

As part of the School of Nursing, the Bureau of Continuing Education for Nursing offers counseling and program guidance to persons interested in pursuing part-time study prior to matriculation into the School of Nursing. Program information may be obtained by contacting Mary Ann Rost, Director, B.C.E.N., University of Maine at Portland-Gorham, Portland campus, 773-2981, Extension 476.

THE PEDIATRIC NURSE ASSOCIATE PROGRAM

The Pediatric Nurse Associate Program is conducted yearly at the Maine Medical Center, in conjunction with the School of Nursing at this University.

The admission requirements are that the applicant be a registered nurse, have a defined position upon graduation, and have had previous experience in child care or public health nursing. Preference is given to nurses who will practice in Maine. The course is one year in length, with time approximately equally divided between academic and clinical instruction. Upon satisfactory completion of the course, the Certificate of P.N.A. is awarded by the University of Maine and the Maine Medical Center.

Program information may be obtained by contacting Dr. George Hallett at the Maine Medical Center.

THE FAMILY NURSE ASSOCIATE PROGRAM

The Family Nurse Associate Program is conducted as a non-credit certificate program through the School of Nursing at this University. It is designed to enable the professional nurse to assume an expanded role in providing health care to the family.

The Program has three phases: a six-month pre-phase of directed home study, a four-month full-time formal course, and an eight-month field experience.

The curriculum is devoted to history-taking, physical examination, simple laboratory procedures, common health problems, public health nursing principles, intensive clinical teaching, and physician-supervised clinical practice in community health facilities.

Program information may be obtained by contacting Dr. Doris Pennoyer, University of Maine at Portland-Gorham, Portland campus, 773-2981, Extension 416.

Program information may be obtained by contacting Doris Pennoyer, M.D., or Mildred Roche, R.N., F.N.A., of the University of Maine at Portland-Gorham, Portland campus, 773-2981, Extension 416.
Division of Physical Education and Intercollegiate Athletics

Professor Richard A. Costello, Director
Professor James V. Sullivan
Chairman Department of Physical Education
Associate Professor Robert Folsom, Chairman Department of Recreation
Associate Professor Paula Hodgdon, Chairman Department of Athletics
Associate Professor Jeannette L. Goodwin, Coordinator of Dance
Associate Professor Joey Bouchard, Coordinator of Men's Athletics
Assistant Professors Breton, Martin, Willard; Instructor's Drew, Raybould.

Goals and Objectives

The goals and objectives of this division are to provide course offerings, programs, and services in our specialty areas to all university students. Through wholesome physical activities and experiences, the student will learn lifetime skills and techniques.

In order for students to become liberally educated, they should understand and appreciate the importance of human movement with respect to their complete development.

COURSES IN PHYSICAL EDUCATION ACTIVITIES

Courses in Physical Education Activities are numbered PE 100 to PE 197 and may be used to satisfy the Physical Education requirements of the School of Education or the School of Nursing. They may also be used as General Education electives under Area 5 of the General Education Requirements for students in the College of Arts and Sciences or the School of Nursing, or for four-year Business Administration majors in the School of Business and Economics.

**PE 100 Foundations of Physical Education**

Designed to inform the student of the key concepts of exercise and activity while helping the student assess personal needs in reference to current and future exercise and physical activity. Lecture and laboratory.

**Staff**

**One-half credit hour**

**PE 101 through 197 inclusive**

Performance courses in many activities designed for the beginner. Actual practice and competitive play are stressed when appropriate. Continuing Registration.

**Staff**

**One-half credit hour**

| PE 101 | Handball |
| PE 102 | Racquetball |
| PE 103 | Physical Fitness |
| PE 104 | Squash |
| PE 105 | Weight Training |
| PE 106 | Wrestling |
| PE 107 | Trampoline |
| PE 108 | Camping |
| PE 109 | Yoga |
| PE 110 | Canoeing |
| PE 112 | Cycling |
| PE 113 | Cross-Country |
| PE 114 | Snow-Shoeing |
| PE 115 | Scuba Diving |
| PE 116 | Hiking |
| PE 117 | Small Boat Handling |
| PE 118 | Roller Skating |
| PE 119 | Horsemanship |
| PE 120 | Fly Fishing |
| PE 134 | Basketball for Women |
| PE 135 | Field Hockey for Women |
| PE 136 | Slimnastics |
| PE 137 | Tumbling |
| PE 140 | Ballet |
| PE 174 | Archery |
| PE 175 | Badminton |
| PE 177 | Candlepin Bowling |
| PE 179 | Folk Dance |
| PE 180 | Dance |
| PE 181 | Modern Dance |
| PE 182 | Fencing |
| PE 183 | Figure Skating |
| PE 184 | Golf |
| PE 185 | Gymnastics |
| PE 186 | Jogging |
| PE 187 | Karate |
| PE 188 | Lacrosse for Women |
| PE 189 | Soccer |
| PE 190 | Skiing |
| PE 191 | Softball |
| PE 192 | Basic Swimming |
| PE 193 | Swimming |
| PE 194 | Tennis |
| PE 195 | Volleyball |
| PE 196 | Self-Defense |
| PE 197 | Rhythms |
CERTIFICATE PROGRAM IN
ATHLETIC COACHING FOR MEN AND WOMEN

This program is designed to prepare interested students in handling certain coaching responsibilities in the public schools of Maine. The curriculum includes an introduction to the organization and administration of athletics as well as practical work in assisting coaches in selected sports. Coverage is also given to the care and prevention of the most common injuries occurring in athletic programs.

A certificate of accomplishment will be presented to students completing the minimum fifteen hour program. In addition, the proper notation will be made on the student's official transcript indicating proficiency in the area of athletic coaching as determined by the Certificate Program.

COURSE OF STUDY IN ATHLETIC COACHING

(15 credit program)

Required Courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 203</td>
<td>Athletic Training (Care and Prevention of Injuries)</td>
<td>3</td>
</tr>
<tr>
<td>PE 314</td>
<td>Organization and Administration of Athletics</td>
<td>3</td>
</tr>
<tr>
<td>PE 391</td>
<td>Field Experience in Coaching</td>
<td>1-3</td>
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</table>

Elective Courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 303</td>
<td>Coaching Women's Basketball</td>
<td>3</td>
</tr>
<tr>
<td>PE 305</td>
<td>Coaching Track and Field</td>
<td>3</td>
</tr>
<tr>
<td>PE 311</td>
<td>Coaching Soccer</td>
<td>3</td>
</tr>
<tr>
<td>PE 312</td>
<td>Coaching Football</td>
<td>3</td>
</tr>
<tr>
<td>PE 315</td>
<td>Coaching Field Hockey</td>
<td>3</td>
</tr>
<tr>
<td>PE 316</td>
<td>Coaching Volleyball</td>
<td>3</td>
</tr>
<tr>
<td>PE 318</td>
<td>Coaching Women's Gymnastics</td>
<td>3</td>
</tr>
<tr>
<td>PE 330</td>
<td>Coaching Men's Basketball</td>
<td>3</td>
</tr>
<tr>
<td>PE 331</td>
<td>Coaching Golf</td>
<td>1</td>
</tr>
<tr>
<td>PE 332</td>
<td>Coaching Tennis</td>
<td>1</td>
</tr>
<tr>
<td>PE 333</td>
<td>Coaching Skiing</td>
<td>1</td>
</tr>
<tr>
<td>PE 334</td>
<td>Coaching Cross Country</td>
<td>1</td>
</tr>
<tr>
<td>PE 335</td>
<td>Coaching Softball</td>
<td>3</td>
</tr>
<tr>
<td>PE 336</td>
<td>Coaching Baseball</td>
<td>3</td>
</tr>
</tbody>
</table>

PROFESSIONAL COURSES IN PHYSICAL EDUCATION

PE 202  Current Health Issues  Costello
The aim of this course is to help students grow in scientific health knowledge, develop desirable health attitudes, improve health practices, and solve individual and group health problems.  Three credit hours

PE 203  Athletic Training  Drew, Sullivan
Care and prevention of athletic injuries; the use of proper field equipment, support methods, therapeutic modalities, pharmacology in athletics, and training techniques.  Three credit hours

PE 207  Gymnastics  Staff
To develop skills, techniques, and understandings for competency in conditioning exercises, tumbling apparatus, and free exercise.  One credit hour

PE 208  Folk and Square Dance Workshops  Staff
An beginning, intermediate, and advanced affiliation program with the Maine Folk Dance Camp.  One credit hour
PE 209 Officiating Women's Basketball

Raybould

Study and discussion of the rules as well as practical experience in the techniques of officiating women's basketball. Practical and written tests will be given. Opportunity to become a rated DGWS (Division of Girls' and Women's Sports) official. (Offered each year)

Two credit hours

PE 210 Officiating Field Hockey

Hodgdon

Study and discussion of the rules of field hockey as well as practical experience in the techniques of officiating. Practical and written tests will be given. Opportunity to become a rated official. (Offered in alternate years)

Two credit hours

PE 215 Posture and Figure Control

Raybould

Posture appraisal and programs developed to assist individuals attain better posture and figure control.

One credit hour

PE 298 First Aid and Safety

Drew, Breton

Lectures and laboratory experiences in the utilization of first aid skills and techniques as prescribed by the American Red Cross.

Two credit hours

PE 303 Coaching Women's Basketball, Philosophy and Methods

Raybould

Emphasis on the methods of teaching and coaching basketball. Offense and defense, coach-player relationship, team selection, planning of practice sessions, and game situations will be areas of concentration. Two hours lecture, two hours lab per week.

Three credit hours

PE 304 Methods and Materials for Teaching Physical Education

Hodgdon

A basic course for prospective teachers to acquaint them with the various areas of Physical Education. Topics include: philosophy and objectives of PE, rhythms, dance, and movement exploration; basic motor skills and activities; first aid and safety; outdoor education; posture; program planning; and PE for atypical children. Practical experience with children will be included.

Three credit hours

PE 305 Coaching Track and Field, Philosophy and Methods

Martin

Coaching experience on the field with analysis of the form and technique of the various events. Selection of candidates, training, conditioning, diet, organization and promotion of track will be covered. Two hours lecture, two hours lab per week. (Offered in alternate years)

Three credit hours

PE 306 Movement Education in Elementary and Secondary Schools

Goodwin

This course is designed to help the prospective teacher in planning balanced units of instruction to meet the needs of boys and girls — keeping in mind the importance of engaging in activities which present challenges, having opportunities to be creative and participating in the planning. Children from grades one to six are part of the experience. Activities based on movement skills are stressed. Also traditional and contemporary dance movements, movement exploration, creative activities. The work can also be applied to all ages, including college and recreational groups. Two hours lecture, two hours lab per week.

Three credit hours

PE 308 Physical Education for the Mentally Retarded

Costello, Sullivan

This course is planned to help the student understand corrective physical education with emphasis on the mentally retarded children in a variety of activities, including games, relays, tumbling, apparatus, swimming, and bowling. Investigation of the causes and incidence of mental retardation is also undertaken.

Three credit hours

PE 309 Rhythms and Motor Activities

Bouchard, Goodwin

Preparation of classroom teachers with necessary knowledge to provide an understanding of sound mechanical principles that insure the proper application of force and the attainment of accuracy and balance through the learning of basic motor skills. Also to provide comprehensive dance experiences for students through the introduction to the meaning and areas of dance, teachers of techniques, skills, aids to teaching and the use of rhythm in accompaniment.

Three credit hours
**PE 311 Coaching Soccer, Philosophy and Methods**
Bouchard
Emphasis on the methods of teaching and coaching soccer. Offense and defense, player-coach relationship, team selections, planning of practice sessions, and game situations will be areas of concentration. Two hours lecture, two hours lab per week. (Offered in alternate years)
Three credit hours

**PE 312 Coaching Football, Philosophy and Methods**
Sullivan
Emphasis on the methods of teaching and coaching football. Offense and defense, player-coach relationship, team selections, planning of practice sessions, and game situations will be areas of concentration. Two hours lecture, two hours lab per week. (Offered in alternate years)
Three credit hours

**PE 314 Organization and Administration of Athletics**
Costello, Hodgdon
This course covers the principles and practices of athletic administration as related to elementary, junior and senior high schools. Areas of concentration will be travel, scheduling, supplies, equipment, facilities, budget, and personnel. Three hours lecture per week.
Three credit hours

**PE 315 Coaching Field Hockey, Philosophy and Methods**
Hodgdon
Analysis of the techniques and methods of coaching field hockey with emphasis on stick work, team strategy, and practice organization. Two hours lecture, two hours lab per week.
Three credit hours

**PE 316 Coaching Volleyball, Philosophy and Methods**
Willard
Fundamentals of individual skills, team strategy, practice organization, and team play are emphasized. Two hours lecture, two hours lab per week.
Three credit hours

**PE 318 Coaching Gymnastics, Philosophy and Methods**
Breton
Analysis of skills fundamental to competitive gymnastics with emphasis on techniques of coaching floor exercise, uneven parallel bars, vaulting, and balance beam. Judging skills is also developed. Two hours lecture, two hours lab per week.
Three credit hours

**PE 324 Dance Methods and Materials for Teaching**
Goodwin
Theory and practice of methods of teaching dance on elementary, secondary, college, and professional levels; concentrated technique in the individual’s movement vocabulary; exploration of movement sequences; elements of movement qualities.
Three credit hours

**PE 330 Coaching Men’s Basketball, Philosophy and Methods**
Bouchard
Emphasis on the methods of teaching and coaching basketball. Offense and defense, coach-player relationship, team selection, planning of practice sessions, and game situations will be areas of concentration. Two hours lecture, two hours lab per week. (Offered Fall Semester only, even years)
Three credit hours

**PE 331 Coaching Golf, Philosophy and Methods**
Costello
A four week concentrated course dealing primarily with team selection, match strategy, scheduling, equipment, and basic fundamentals of golf instructional techniques. One hour lecture, two hours lab per week. (Offered in alternate years)
One credit hour

**PE 332 Coaching Tennis, Philosophy and Methods**
Martin
A four week concentrated course with emphasis on match strategy, player selection, and instructional techniques for individual and team play. One hour lecture, two hours lab per week. (Offered in alternate years)
One credit hour

**PE 333 Coaching Skiing, Philosophy and Methods**
Staff
A four week concentrated course emphasizing the methods of team selection, race strategy, and instructional techniques. One hour lecture, two hours lab per week. (Offered in alternate years)
One credit hour

**PE 334 Coaching Cross Country, Philosophy and Methods**
Martin
An eight week course of study with emphasis on training techniques, race strategy, and practice organization. One hour lecture, one hour lab per week.
One credit hour

**PE 335 Coaching Softball, Philosophy and Methods**
Raybould
Areas of emphasis are team selection, practice organization, techniques of instruction, and game situations in softball. Two hours lecture, two hours lab per week. (Offered in alternate years)
Three credit hours
PE 336 Coaching Baseball, Philosophy and Methods
Bouchard
Emphasis on the methods of teaching and coaching baseball. Offense and defense, player-coach relationship, team selection, planning of practice sessions, and game situations will be areas of concentration. Two hours lecture, two hours lab per week. (Offered in alternate years) Three credit hours

PE 391 Field Experience in Coaching
Staff
Practical field work in a coaching area. The student will be assigned as an assistant coach in a sport for a season. Supervision, evaluation, and guidance of the student will be provided by a staff member who is responsible for that coaching area. Prerequisite: Permission of instructor.

PE 397 Adapted Physical Education for the Physically Handicapped
Sullivan
Designed to bring both handicapped and unhandicapped students together to participate in such sports as table tennis, badminton, shuffleboard, basketball, bowling, and physical fitness activities. First of its kind offered at this University. Three credit hours

PE 399 Man and Movement
Folsom
Stresses the acquisition of knowledges and understandings about participation in physical activity. Primary emphasis on the student's physical and organic development understandings. Lab experiments. Provides a background of the scientific principles underlying physical activity. Two credit hours

PE 406 Survey of Movement and Dance in Education
Goodwin
A background of the history and development of modern dance heritage. Folk, square, modern dance forms, including techniques and teaching composition of each form. Course is also designed to include the place of dance in education. Three credit hours

PHYSICAL EDUCATION LEADERSHIP COURSES

EDPE 298 First Aid and Safety
Drew
A multi-media approach to the utilization of techniques of first aid as prescribed by the American Red Cross. Various aspects of safety will be discussed. Successful completion of the course requirements will lead to Red Cross certification. One credit hour

EDPE 216 Analysis of Human Movement
Raybould
A study of major skeletal bones and muscle groups; posture appraisal, development, and correction; and application of the principles of mechanics to body movement. Opportunity for posture appraisal of elementary children provided. Three credit hours

EDPE 310 Human Growth and Development Lab
Staff
A laboratory for Ed Py 333, designed to provide a practical application of basic principles on early childhood growth and development. Students have the opportunity to observe, handle, and evaluate individual differences on the physical, emotional, mental, and social make-up of children. One credit hour

EDPE 304 Methods and Materials for Teaching Physical Education
Staff
A basic course for prospective teachers to acquaint them with the various areas of Physical Education. Topics include: philosophy and objectives of PE, rhythms, dance, and movement exploration; basic motor skills and activities; first aid and safety; outdoor education; posture; program planning; and PE for atypical children. Practical experience with children will be included. Three credit hours

EDPE 306 Movement Education in the Elementary School
Goodwin
A course is designed to help the prospective teacher plan instructional programs which will give children an opportunity to be creative and to participate in the planning. Activities based on movement skills—movement exploration are stressed. Children from grades one to six are part of the experience. Three credit hours

EDPE 309 Rhythms and Motor Activities
Goodwin
Preparation of classroom teachers with necessary knowledge to provide an understanding of sound mechanical principles that insure the proper application of force and the attainment of accuracy and balance through the learning of basic motor skills. Also to provide comprehensive dance experiences for students through the introduction to the meaning and areas of dance, teachers of techniques, skills aids to teaching and the use of rhythm in accompaniment. Three credit hours
EDPE 300  Camp Leadership  
A leadership course for the elementary school teacher to direct an outdoor education program. The course includes the skills, attitudes, and appreciations necessary for the intelligent use of the outdoors and outdoor pursuits. Many of these are often considered a part of physical education and recreation programs but they have significance in other subjects which cut across all areas of the school curriculum. Three credit hours

EDPE 308  Physical Education for the Atypical Child  
This course is planned to help the student understand adaptive physical education for the physically and mentally handicapped child. The emphasis will be on the educable mentally retarded child in the special education class. Activities covered include games, relays, tumbling, apparatus, swimming, bowling, and activities geared to assist learning in the cognitive areas. The investigation of the causes and incident of mental retardation is also included. Three credit hours

EDPE 401  Practicum in Physical Education Leadership  
Provides opportunity for group thinking and discussion on problems of organization, administration, and conduct of programs of physical education and intramural activity in the elementary school. Provision for the students to work individually or in small groups toward the solution of problems of their own choosing. Special attention will be given to the problems of student teachers and to the leadership role in organization an elementary school program. Three credit hours

EDPE 398  Independent Study in Physical Education  
Provides students who have demonstrated critical and analytical capability an opportunity to pursue a project independently, charting a course and exploring an area of interest, bearing upon it previous course experience and emerging with an intellectually sound, coherent synthesis reflecting a high calibre of performance. Prerequisite: Permission of the instructor. One to three credit hours
Graduate Studies

Robert M. York, Dean
Virginia M. Lewis, Administrative Assistant

Currently, this University offers programs leading to the following graduate degrees: Master of Business Administration, Master of Science in Adult Education, and Master of Science in Education. In addition, a program leading to the degree of Master of Library Service is offered in cooperation with the University of Maine at Orono, which grants the degree in that program. Information concerning each of these programs may be obtained from the Office of Graduate Studies, 103 Corthell Hall, Gorham, Maine 04038.

With the exception of Summer Session graduate courses, all graduate courses are offered through the Continuing Education Division during late afternoon or evening hours, most classes meeting once a week, either from 4:00-6:30 p.m. or from 7:00-9:30 p.m.

Application for admission to a program of graduate study should be made to Dr. Robert M. York, Dean of Graduate Studies, 103 Corthell Hall, UMPG Gorham, Maine 04038, on the forms provided for this purpose. In order to be admitted to a program of graduate study, an applicant must have received a baccalaureate degree from an accredited college or university and, as judged by the previous scholastic record or otherwise, must show promise of ability to pursue advanced study and research.

All applicants, except those for the M.B.A. program, are required to provide the results of their performance on either the Graduate Record Examination or Miller Analogies Test. In the case of the GRE the results should include the scores obtained on the general aptitude portion of the examination and on the appropriate advanced test. Applicants for the Master of Business Administration program should present scores from the Admission Test for Graduate Study in Business in lieu of GRE scores or MAT scores.

An application is not considered complete until all the required transcripts, the appropriate test scores, and letters of recommendation are on file. A $10, non-returnable fee is required at the time of application. All material sent in support of an application for admission becomes the property of the University and will not be returned to the student.

An applicant’s admission status will be one of the following: Regular, Conditional, Non-Degree, or Transient.

Listings of Graduate Programs

MASTER OF BUSINESS ADMINISTRATION

Material describing the program leading to the degree of Master of Business Administration is provided in the section of this catalog dealing with the School of Business and Economics.

MASTER OF SCIENCE IN EDUCATION

THE CLASSROOM TEACHER (K-12) — 33 CREDITS

*12-24 credit hours in Arts and Sciences
6-18 credit hours in Professional Education
3 credit hours in EDU 550 Research Seminar
Comprehensive Examinations

*A minimum of 9 hours must be completed in one of the following disciplines: English, Geography, History, Mathematics, Psychology, Science, or Sociology.
COGNATE AREA IN MATHEMATICS (K-8)* — 33 CREDITS

18-24 credit hours in Mathematics** from:

MS 502 Number Systems
MS 503 Informal Algebra
MS 504 Informal Geometry
MS 505 Logic and the Nature of Proof
MS 506 Foundations of Mathematics
MS 507 The Real Numbers
MS 508 The Theory of Numbers
MS 509 Topics in the History of Mathematics
MS 514 Analysis I
MS 515 Analysis II
MS 524 Probability and Statistics
MS 528 Computer Programming I
MS 532 Geometry
MS 545 Abstract Algebra

6-12 credit hours in Professional Education from:

EDU 555 Current Research in Mathematics Education
EDPY 560 Psychology of Learning
MSED 512 Newer Practices in Elementary Mathematics
MSED 513 Laboratory and Field Experiences in Mathematics Education
MSED 514 Selected Topics in Mathematics Education

3 credit hours from:

EDU 550 Research Seminar in Professional Education

*Graduate students matriculated in the Master of Science in Education Classroom Teacher program who wish to work toward the Cognate Area in Mathematics Certificate must notify the Dean of Graduate Studies of their intentions. The Dean will assign an adviser who will assist the student in selecting an appropriate sequence of Mathematics courses totaling 18 hours.

**Five-hundred level courses in Mathematics are reserved for in-service elementary teachers and may not be taken for credit by other students except with the permission of the Dean of Graduate Studies. In addition to their degree, teachers who satisfactorily complete the Cognate Area in Mathematics will receive a certificate from the Mathematics Department countersigned by the Dean of Graduate Studies.

ELEMENTARY AND SECONDARY HIGH READING — 33 CREDITS

12-18 credit hours in Professional Education

EDU 511 Reading Synthesis in the Middle Grades
*EDU 512 Sequential Development of the Reading Domain
*EDU 514 Teaching Language Arts in the Elementary School
*EDU 515 Children's Literature
EDU 536 Innovations in Reading
*EDU 537 Reading Remediation
EDU 538 Analysis of Reading Difficulties (Grades 7-12)
*EDU 539 Clinical Practices in Reading (Clinic)
EDU 540 Learning Disabilities
EDU 571 Introduction to Counseling

12-18 credit hours in Arts and Sciences

*EDPY 521 Individual Psychological Testing
EDPY 560 Psychology of Learning
EDPY 569 Psychology of Motivation
EDPY 571 Psychopathology for Educators
EDPY 575 Psychology of the Exceptional Child
*EDPY 582 Psychological Measurement and Evaluation
ENG 503 Modern Short Story
ENG 530 History of the English Language
ENG 531 Linguistics

3 credit hours in Research Seminar or Thesis Preparation and Thesis Comprehensive Examination

*Required courses
INDUSTRIAL EDUCATION — 33 CREDITS

6-15 credit hours in Industrial Education
9-18 credit hours in Liberal Arts
6 credit hours in Professional Education
3 credit hours in EDU 550 Research Seminar or Thesis Preparation and Thesis Comprehensive Examination in Industrial Education

ELEMENTARY SCHOOL COUNSELOR EDUCATION — 33 CREDITS

12-21 credits in Core Courses
*EDPY 521 Individual Psychological Testing
*EDPY 562 Group Process and Procedures
*EDPY 570 Problems and Issues in School Guidance
*EDPY 571 Introduction to Counseling
*EDPY 582 Psychological Measurement and Evaluation
*EDPY 590 Practicum in Elementary School Guidance Services, Individual Counseling

3-9 credits in Related Issues
Reading Courses
Learning Disabilities Courses
EDPY 563 Advanced Group Process and Procedures
EDPY 572 Educational and Occupational Theory and Information
EDPY 573 Advanced Counseling
*EDPY 585 Introduction to Field Experience
EDPY 586 Field Experience in Elementary School Guidance
Other

3-12 credits in Psychology and Appropriate Related Courses
EDPY 560 Psychology of Learning for Educators
*EDPY 567 Child Psychology
EDPY 568 Adolescent Psychology
EDPY 575 Psychology of the Exceptional Child
Social Welfare Courses
Other

3-6 credits in Research
EDU 550 Research Seminar
or
TH 598 Thesis Preparation and TH 599 Thesis
*Suggested first courses

SECONDARY SCHOOL COUNSELOR EDUCATION — 33 CREDITS

12-21 credits in Core Courses
*EDPY 521 Individual Psychological Testing
*EDPY 562 Group Process and Procedures
*EDPY 570 Problems and Issues in School Guidance
*EDPY 571 Introduction to Counseling
*EDPY 582 Psychological Measurement and Evaluation
*EDPY 590 Practicum in Secondary School Guidance Services, Individual Counseling

3-9 credits in Related Issues
Reading Courses
Community Relations
Family Dynamics
EDPY 563 Advanced Group Process and Procedures
EDPY 573 Advanced Counseling
*EDPY 585 Introduction to Field Experience
EDPY 586 Field Experience in Secondary School Guidance
Other

Continued on the next page
Secondary School Counselor Education, Continued

3-12 credits in Psychology and Appropriate Related Courses

EDPY 560  Psychology of Learning for Educators
EDPY 567  Child Psychology
*EDPY 568  Adolescent Psychology
EDPY 569  Behavior Problems for Educators
EDPY 575  Psychology of the Exceptional Child

Social Welfare Courses

3-6 credits in Research

EDU 550  Research Seminar

or

TH 598  Thesis Preparation and TH 599 Thesis

*Suggested first courses

REHABILITATION COUNSELING — 33 CREDITS

9-12 credits in Core Courses

EDPY 550  Introduction to Rehabilitation Services
EDPY 551  Medical Aspects of Rehabilitation
EDPY 552  Psychosocial Aspects of Disability
EDPY 553  The Rehabilitation Process

3 credits in Counseling

EDPY 571  Introduction to Counseling

12-18 credits in Related Issues

EDPY 562  Group Process and Procedures
EDPY 568  Adolescent Psychology
EDPY 572  Educational and Occupational Theory and Information
EDPY 582  Psychological Measurement and Evaluation
EDPY 586  Field Experiences
EDPY 590  Practicum in Counseling

Other appropriate courses in Education, Psychology and Social Welfare

3-6 credits in Research

EDU 550  Research Seminar

or

TH 598  Thesis Preparation

and

TH 599  Thesis

ELEMENTARY ADMINISTRATION — 33 CREDITS

12-18 credit hours in Arts and Sciences

EDPY 560  Psychology of Learning for Educators  or
EDPY 561  Psychopathology for Educators is required

12-18 credit hours in Professional Education as follows:

EDU 508  Supervision in the Public Schools
EDU 509  Elementary Administration

6-12 credit hours to be elected from the following courses:

EDU 530  Evaluating Pupil Achievement
EDU 533  School Law
EDU 534  School Personnel Administration
EDU 570  Introduction to School Guidance Services
EDU 583  Public Relations
EDU 589  School Finance

3 credit hours in EDU 550 Research Seminar or Thesis Preparation and Thesis Comprehensive Examination in Administration

204
SECONDARY ADMINISTRATION — 33 CREDITS

12-18 credit hours in Arts and Sciences
EDPY 560 Psychology of Learning for Educators or
EDPY 561 Psychopathology for Educators is required

12-18 credit hours in Professional Education as follows:
EDU 507 Secondary Administration
EDU 508 Supervision in the Public Schools
6-12 credit hours to be elected from the following courses:
EDU 530 Evaluating Pupil Achievement
EDU 533 School Law
EDU 534 School Personnel Administration
EDU 570 Introduction to School Guidance Services
EDU 583 Public Relations
EDU 589 School Finance

3 credit hours in EDU 550 Research Seminar or Thesis Preparation and Thesis Comprehensive Examination in Administration

The programs in Administration and Guidance are designed to satisfy state certification requirements for the elementary principal or counselor (K-8) and the secondary principal or counselor (7-12). It is assumed that candidates in the Guidance programs hold the necessary teaching certificate and will have completed a minimum of two years of successful teaching by the time their graduate program is completed. Candidates in the Administration programs must have completed three years of successful teaching.

Master of Science in Adult Education

This program of 33 graduate credits offers a choice of 18 credit hours of concentration in Administration or Classroom Management as follows:

**CONCENTRATION IN ADMINISTRATION**

18 Credit hours

EDUA 527 Growth and Development of Adult Education
EDUA 528 Psychology of Adult Learning
EDUA 529 Curriculum Construction for Adults
EDUA 530 Administration of Adult Education
EDUA 531 Leadership for Change
EDUA 540 Internship, Career Exploration or
EDUA 541 Internship, the Adult in the Community

**CONCENTRATION IN CLASSROOM MANAGEMENT**

18 Credit hours

EDUA 505 Preparation of Instructional Materials
EDUA 527 Growth and Development of Adult Education
EDUA 528 Psychology of Adult Learning
EDUA 529 Curriculum Construction for Adults
EDUA 532 Methods and Techniques of Teaching Adults
EDUA 540 Internship, Career Exploration or
EDUA 541 Internship, the Adult in the Community

**ADDITIONAL REQUIRED CREDITS**

12 credit hours in electives from non-related areas or the following:
EDUA 533 Paraprofessional in Adult Education
EDUA 535 Teaching Reading to Adults

3 credit hours in Research Seminar
Comprehensive Examination
MASTER OF LIBRARY SERVICE — 36 CREDITS

This program is operated jointly by this University and the University of Maine at Orono. All credits may be earned at either campus or appropriate courses may be completed at both.

There is a required core of twenty-one credit hours as follows:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cataloging and Classification</td>
<td>3 credits</td>
</tr>
<tr>
<td>One of the following:</td>
<td></td>
</tr>
<tr>
<td>Advanced Cataloging and Classification</td>
<td>3 credits</td>
</tr>
<tr>
<td>Technical Services in Libraries</td>
<td>3 credits</td>
</tr>
<tr>
<td>Introduction to Reference Materials and Services</td>
<td>3 credits</td>
</tr>
<tr>
<td>Two of the following:</td>
<td></td>
</tr>
<tr>
<td>Subject Reference Sources</td>
<td>3 credits</td>
</tr>
<tr>
<td>Literature of the Social Sciences</td>
<td>3 credits</td>
</tr>
<tr>
<td>Literature of the Humanities</td>
<td>3 credits</td>
</tr>
<tr>
<td>Literature of Science and Technology</td>
<td>3 credits</td>
</tr>
<tr>
<td>Library Organization and Administration</td>
<td>3 credits</td>
</tr>
<tr>
<td>Selection of Library Materials</td>
<td>3 credits</td>
</tr>
</tbody>
</table>

In addition, enrollees will elect nine credits in other courses in Library Service. Enrollees may elect an additional six credits from appropriate courses outside Library Service.
School of Law

Bert S. Prunty, Dean
William F. Julavits, Assistant Dean


History and General Description

The University of Maine School of Law, established in Portland in 1961, is the successor of the university's college of law which existed in Bangor from 1898 to 1920. The school is located on the undergraduate campus of the University in Portland, in a new building of unique architectural design, where the law school shares facilities with the Advanced Study and Research Center.

The research activities of the law students and faculty already extend over a wide range of social problems, and the proximity of the law school to the various institutes in the Research Center will foster continuing interdisciplinary study. A distinctive feature of the school is the close working relationship among students and faculty resulting in part from the small size of classes.

The school is a charter member of the Association of American Law Schools, having resumed membership in 1966, and is on the fully approved list of the American Bar Association. As an element of the University of Maine, the school is accredited by the New England Association of Colleges and Secondary Schools.

Library and Physical Facilities

The library, containing nearly 115,000 volumes, provides a sound working collection of legal and collateral materials. The new building has space for expansion to 150,000 volumes. An integral part of the library program is a course of instruction to students in legal research, beginning early in the first year and continuing through the senior year as an adjunct of the senior thesis program.

Basic Program of Study and Degree Requirements

The law school is on the semester basis, with 88 semester credits required for the J.D. degree. The first year curriculum, including work in the basic legal subjects, is required of all students. Through the case-and-problem method of instruction, the student has an opportunity to apply, compare, and test legal concepts in varying situations, using legal precedents and authorities from all jurisdictions, as well as relevant materials drawn from other disciplines. The perspective is national, although statutes and rules peculiar to Maine are noted to some extent. Classroom work is supplemented by programs of legal writing, drafting, advocacy, and clinical practice designed to promote professional skills. Within this framework the successful student comes to understand basic principles of law, their purposes and social origins, and the processes by which legal institutions grow.

The school has a writing program designed to develop the student's skill in research, writing, and advocacy. In the first year the program is devoted to legal analysis and writing, with emphasis on criticism and rewriting. In the second year a student may participate in a moot court program in which the student prepares a formal brief upon an assigned legal issue and argues the position orally before a moot court. In the third year each student is required to prepare and submit a research paper on some topic determined by the student in consultation with a faculty adviser. The student may satisfy this requirement by preparation during the third year of a note or comment in publishable form for the *Maine Law Review*. The thesis affords the senior law student an opportunity to explore in depth some topic that may not be treated in the regular curriculum in which the student has developed a special interest.

The curriculum is taught by a resident faculty of fourteen members, plus occasional lecturers from bench and bar.
Special Programs

Third-year students in good standing are permitted under special rules to represent indigent clients before any state court in Maine provided they are properly supervised in a public agency or legal assistance office. Some third-year students will be authorized under similar rules to represent the state in prosecutors' offices in counties near Portland. The clinical practice courses are specifically offered to help the student further develop and refine skills in advocacy and negotiation. Junior and senior students who are interested in serving as research assistants to professors are often invited to do so.

Activities

Law students participate on many university committees and councils concerned with governance of the University of Maine at Portland-Gorham. The Maine Law Review, published twice a year by law students, concerns itself with national and state legal problems, with some emphasis on matters of current interest to the public. The Student Bar Association, which performs the usual functions of student government, has a special committee which researches problems referred to it by lawyers and judges. The association is partly financed with the proceeds from such research. The Law Students Civil Rights Research Council gives research assistance in civil rights cases, particularly those arising in Maine.

Student:

Most of the law students are from Maine and other New England states. During 1973-74 there were 206 students, of whom 38 were women; the student body included graduates of 70 colleges and universities.

Admission

An applicant must hold a bachelor's degree from an accredited college or university and must take the Law School Admission Test before entering law school. Transcript evaluation by the Law School Data Assembly Service is required except in unusual circumstances. There are no specific prerequisites for an undergraduate curriculum, but the law school offers in its own catalog some suggestions regarding pre-law study.

Beginning students are admitted only in September; transfer students into the upper classes may be admitted at the beginning of the spring semester only in extraordinary circumstances. Written recommendations are required, but personal interviews are not encouraged. The deadline for applications is February 15, and applications must be completed by April 1, 1975; applications received after February 15 will be processed only if the lateness is satisfactorily explained.

Because admission has become extremely competitive, those who show the highest promise of effective performance will be chosen from all the applicants. Although the admissions committee considers many factors in the records of applicants, academic performance in college and Law School Admission Test scores are evidence to which the committee necessarily attaches considerable weight in making its choices. In the class entering in September 1973, the mean LSAT score was 640 and the mean grade-point average was 3.2 on a 4-point scale. The averages are expected to be higher for the class entering in 1974.

Expenses and Financial Aid

Residents of New England will be charged $550 for tuition and fees for the year 1974-75; non-residents, $1,650. Expenses for a single student are estimated at $2,500 plus tuition and fees. Scholarships and loans are awarded by the university student aid office on the basis of need to the extent that funds are available.

Housing

Most law students live in apartments in the city of Portland or suburban homes. There may be a few dormitory rooms available for law students in the undergraduate dormitories at the Gorham campus of this University. It is recommended that new students come to Portland a few days before school opens in order to find suitable housing.

Correspondence

Registrar, University of Maine School of Law, 246 Deering Avenue, Portland, Maine 04102.
The Center for Research and Advanced Study is dedicated to practical and applied research conducted through a multi-disciplinary mode of problems which presently or potentially confront the State of Maine.

The Center, which opened its doors in the fall of 1972, already houses three Institutes dealing with the areas of Human Services, the Environment, and Economics. Three more Institutes, dealing with Education and Manpower Training, Law, and Government, will ultimately be added.

The Center also houses a major Biomedical Research activity, which is concerned with coronary disease research.

Additionally, the Center serves as the clearing house for all research activities carried on within the University and assists in the development of research projects valuable to the University community.

The Center shares its building with the University of Maine Law School. The Law School occupies the bottom two and one-half floors and the remaining four and one-half floors are dedicated to the Center for Research and Advanced Study.

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**Continuing Education Division**

**WILLIAM G. MORTENSEN**
Director of Continuing Education and Public Service

**WILLIAM U. SMALL**
Associate Director of Continuing Education and Summer Session

**HOLLIE L. INGRAHAM**
Assistant Director of Continuing Education and Summer Session

John N. Farrar, Director of Counseling, Continuing Education and Summer Session; Shirley A. Mader, Assistant Counselor; Raymond P. Kane, Coordinator, Special Programs, C.E.D.; Ellen M. Martel, Administrative Assistant.

The Continuing Education Division offers a broad diversity of programs, including those to meet specialized needs and designed to relate the University to the outlying community, and also those to meet the cultural and academic needs of persons who have to work during normal daylight hours but who are able and willing to take university courses offered in the late afternoon, in the evening, on Saturdays, or during day or evening Summer Sessions.

**ACADEMIC PROGRAMS OFFERED THROUGH C.E.D.**

**Deferred Degree Candidates**

Persons who have to work during daytime hours may enroll for individual courses for which they are qualified. Adults who have not made formal application for degree status, but are interested in following a C.E.D. program which may lead to admission as a degree candidate, are required to receive counseling from a C.E.D. Counselor in order to be admitted as Deferred Degree Candidates. Persons who register as Deferred Degree Candidates, complete the basic program specified by their C.E.D. Counselor, and earn grades acceptable for transfer, may then apply as regular Degree Candidates; and if accepted, applicable credits may be transferred toward the desired degree.
Degree Candidates

Applicants who satisfy the same admission standards as students enrolled in the day division of the University are classified as Degree Candidates. Undergraduates who wish degree status must apply to the Director of Admissions. Graduate students must apply to the Dean of Graduate Studies. Degree Candidates are those who have been accepted by the Committee on Admissions.

Types of Programs Offered

The Continuing Education Division offers many of the academic programs described on the earlier pages of this catalog. A few programs, such as those of the School of Law or some of the laboratory-centered undergraduate programs in the various sciences, are not offered. Most of the other subjects described in this catalog are available on either an annual or a rotating basis.

The current academic-year enrollment of the Continuing Education Division totals approximately 6,000 part-time students, and an additional 3,000 persons are normally enrolled in the various Summer Session courses.

In addition to the varied C.E.D. programs for undergraduate and graduate students, the Division offers many short courses, specialized seminars, and other programs.

CERTIFICATE PROGRAM IN MANAGEMENT

For those who are interested in the field of management and desirous of improving skill and effectiveness, the Continuing Education Division offers a program leading to a certificate in Management.

The program is the result of consultations with business and educational leaders. The subjects are designed to meet the specific needs of the business community. Upon completion, it is expected the participants will be better equipped with basic, usable knowledge of management principles, thus contributing to career, company, and society.

The following courses are offered in the program:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>CSM 010</td>
<td>Business Management I</td>
</tr>
<tr>
<td>CSM 011</td>
<td>Psychology Applied to Business</td>
</tr>
<tr>
<td>CSM 012</td>
<td>Legal Aspects of Business*</td>
</tr>
<tr>
<td>CSM 013</td>
<td>General Economics</td>
</tr>
<tr>
<td>CSM 014</td>
<td>Oral Communication</td>
</tr>
<tr>
<td>CSM 015</td>
<td>Written Communication</td>
</tr>
<tr>
<td>CSM 016</td>
<td>Business Management II</td>
</tr>
<tr>
<td>CSM 018</td>
<td>Human Relations*</td>
</tr>
<tr>
<td>CSM 020</td>
<td>Business Management II*</td>
</tr>
<tr>
<td>CSM 030</td>
<td>Marketing and Distribution</td>
</tr>
<tr>
<td>CSM 040</td>
<td>Production Control*</td>
</tr>
<tr>
<td>CSM 041</td>
<td>Electronic Data Processing*</td>
</tr>
<tr>
<td>CSM 042</td>
<td>Policy Formulation and Administration</td>
</tr>
<tr>
<td>CSM 050</td>
<td>Managerial Accounting I</td>
</tr>
<tr>
<td>CSM 051</td>
<td>Managerial Accounting II*</td>
</tr>
<tr>
<td>CSM 052</td>
<td>Business Mathematics</td>
</tr>
</tbody>
</table>

*Electives: Two to be chosen to meet Certificate requirements as explained below.

The subjects of the program are designed to be both flexible and practical from the standpoint of the needs of management. Each course will frequently have the traditional college approach as well as practical aspects necessary for current business practice. A "Certificate of Completion" rather than degree credit will be awarded to those who successfully complete the Certificate Program.

Each course is scheduled for ten weeks and, with a few exceptions, classes will be of two and one-half hours duration. Those not interested in completing the entire program may register in individual courses. Upon completion of the ten required courses and two of the five elective courses identified with an asterisk (*), a Certificate of Completion will be awarded by the Continuing Education Division.

Instructors include business specialists and faculty members from the University and other institutions. As of September 1973, the fee for each course was $35, plus a $5 registration fee. Textbooks and study materials are not included in the charge. A brochure is available upon request.
CERTIFICATE PROGRAM FOR PRACTICING SECRETARIES

Persons who are already trained in stenographic skills and who wish to meet the requirements of higher level secretarial positions including, if desired, preparation for the prestigious Certified Professional Secretary's examination, will find this program designed to meet their needs.

The twelve evening courses in the Certificate Program for Practicing Secretaries include eleven of the most valuable courses offered in the Certificate Program in Management, together with a specialized course emphasizing the aspects of office administration which are apt to be the responsibility of a major executive's secretary. The entire group of courses covers all subjects tested in the two-day Certified Professional Secretary's examination, except for the stenographic skills of typing, shorthand, and transcription. Since this certificate program is designed for persons who are already employed as practicing secretaries, it is understood that all persons who register in this program have already received a thorough training in the various stenographic skills.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSM 002</td>
<td>Office Administration</td>
</tr>
<tr>
<td>CSM 010</td>
<td>Business Management I</td>
</tr>
<tr>
<td>CSM 012</td>
<td>Legal Aspects of Business</td>
</tr>
<tr>
<td>CSM 013</td>
<td>General Economics</td>
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<tr>
<td>CSM 014</td>
<td>Oral Communication</td>
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<td>CSM 015</td>
<td>Written Communication</td>
</tr>
<tr>
<td>CSM 018</td>
<td>Business Management II</td>
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<td>CSM 028</td>
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<td>Electronic Data Processing</td>
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<td>CSM 042</td>
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<td></td>
<td>Administration</td>
</tr>
<tr>
<td>CSM 050</td>
<td>Managerial Accounting I</td>
</tr>
<tr>
<td>CSM 052</td>
<td>Business Mathematics</td>
</tr>
</tbody>
</table>

Each course is scheduled one evening a week for ten weeks, and classes are normally of two and one-half hours duration. Students may enter classes in early September, early December, or late February each year. The program normally requires two years for completion, but those not interested in completing the entire program may register in individual courses. Upon completion of the twelve required courses, a Certificate of Completion will be awarded by the Continuing Education Division.

Instructors include business specialists and faculty members from the University and other institutions. As of September 1973, the fee for each course was $35, plus a $5 registration fee. Textbooks and study materials are not included in the charge. A brochure is available upon request.

SPECIALIZED SEMINARS AND SHORT COURSES

Throughout the school year, the Continuing Education Division periodically offers a variety of seminars, institutes, workshops, conferences, and other short courses. The specialized programs are frequently developed at the request of the representative of a group, a member of the university staff, or an interested individual. Many programs include a group of lectures and seminars scheduled for a single day; others consist of briefer sessions once a week for several weeks.

Some of the more popular subject matter is in the area of:

- Engineering
- Retailing
- Shakespeare
- Antiques
- Purchasing
- Transportation
- Management
- Veterinarian
- Medicine

Although local talent is utilized when available, each lecturer or seminar leader is a professional in the given field, and speakers are often recruited from distant parts of the United States or Canada. Since this type of public service must be self-supporting, a nominal tuition fee is charged.

Information regarding specialized courses is available from the Continuing Education Division Office, 96 Falmouth Street, Portland, Maine 04103 (Telephone 773-2981, extension 272).
PUBLIC SERVICE FACILITIES OF THE UNIVERSITY

This University offers facilities at both campuses for conferences, institutes, seminars, workshops, and training programs. Thousands of persons each year take advantage of the resources and facilities offered by the University to such groups.

Meetings of educational value — whether their primary purpose may be to impart information, solve problems, upgrade professional skills, further some aspect of education, or develop a greater understanding of current problems — are a part of the total educational program of the University.

VOCATIONAL - TECHNICAL EDUCATION PROGRAM

A program recognizing Industrial and Occupational Experience and awarding college credit through part-time evening and summer courses leading to a Bachelor of Science degree in Vocational Education or Technology is designed to:

(a) prepare instructors for the teaching of vocational and/or technical subjects in high schools and post-secondary schools:
or (b) provide non-teaching majors an opportunity to pursue a college program leading to a degree which recognizes trade and technical competencies and provides knowledge in business and industry leading to supervisory, technical, or middle-management positions.

For additional information and a brochure, contact:
Dr. Arthur O. Berry
Director of Vocational-Technical Education, U.M.P.G.
Gorham, Maine 04038

COMMUNITY SERVICES

The Continuing Education Division, through the office of the Director of Continuing Education and Public Service, is able to provide community services on a limited basis. Currently the Urban Adult Learning Center project services undereducated adults in adult basic education and is described more fully below.

The community service function of C.E.D. is capable of assisting community groups or individuals on a limited basis. Additional efforts are related to identifying and matching appropriate University resources in various colleges and departments with community requests.

THE URBAN ADULT LEARNING CENTER

The Urban Adult Learning Center (UALC) is an off-campus project of the Continuing Education Division of this University, operating in the “Old Law School” building at 68 High Street, in the heart of in-town Portland.

The basic objective of the UALC is to assist undereducated adults in preparing to cope with the demands of modern living. It directs its energy toward meeting the individual educational needs of each student. Instructors and volunteer tutors are available at the UALC from 9:00 a.m. to 9:00 p.m., Monday through Friday, so that a student may schedule study conveniently. Instruction is offered at all skill levels from elementary reading and mathematics through preparation for the high school equivalency (GED) examination. Special tutoring is available to assist adults with deficient educational backgrounds so that they may enter college and succeed.

The staff of the UALC also offers teacher training to professionals, paraprofessionals, and University volunteers and practice teachers in the creative use of independent study, tutoring, audio-visual aids and other media, and various educational techniques in a constructive adult education program. All materials and methods used have been carefully researched and tested at the UALC.
Cooperative Education Program

Dr. Kenneth T. H. Brooks, Director
Donald Gnecco, Coordinator

Cooperative education is a method of integrating classroom theory with practical experience. Students alternate specific periods of attendance at the University with specific periods of employment. The word "cooperative" emphasizes that the plan combines the efforts of employers and educators to form a superior total educational program for students. Its primary value is educational. Of secondary importance is the opportunity for students to earn money for college expenses and for employers to find a ready market of good workers.

Under the direction of University Professor Kenneth T. H. Brooks, various programs of cooperative education are being established throughout the University of Maine.

Persons desiring further details should correspond directly with Dr. Kenneth T. H. Brooks, Director of Cooperative Education, or Don Gnecco, Coordinator of Cooperative Education at UMPG, University of Maine, 246 Deering Avenue, Portland, Maine 04102.

Participants

The cooperative education program is voluntary for selected students who clearly demonstrate interest and ability to profit from such an educational experience. There are no restrictions as to sex, race, color, creed or nationality.

Students desiring to participate (1) must submit an application for the program, (2) must attend the University in accordance with a current schedule, (3) must be physically and temperamentally fit for the appropriate career or profession, and (4) must maintain acceptable academic standards. Selection will be in accordance with procedures established by the individual colleges, schools, and departments. Cooperative Education students are considered to be enrolled at the University throughout the program, and they pay registration and tuition fees each semester while on work assignments.

Pay and Credit

Students who are involved with Cooperative Education work experiences will most generally be paid directly by the employer. University credit will be granted by the department, school, or college of the student's major field of study.

Current Programs

Presently Cooperative Education Programs are already in operation to students in the School of Business and Economics, and to majors in Theatre/Communications in the College of Arts and Sciences. Programs are being developed in other areas, and students are encouraged to contact the Cooperative Education Office, (Room 415, Center for Advanced Study and Research, Portland) for information about programs that are being planned or considered.

Job Locations

Students may be placed for work experience in the area near their campus or home, but some work experience opportunities may be at more distant locations in Maine or even out of state. A student's indicated area preference will be given consideration, but the chief criteria are the nature of the job itself and the student's personal qualifications. There is no geographical restriction.
Advantages to the Student

The advantages of cooperative education to the student are numerous and include some that are intangible. Among other benefits, the student (1) is able to apply classroom theory to actual work situations, thereby gaining a deeper understanding of the field; (2) has an opportunity to work with and observe people of varied backgrounds and disciplines; (3) can discover early whether the choice of profession has been a wise one and whether the profession offers opportunities for the student to specialize in a particular field of interest which will advance personal career objectives; (4) can mature more rapidly and develop those personal characteristics which greatly aid a successful career; (5) can acquire human relation skills and, through daily contact with others, learn to get along with all types of people; (6) can gain first-hand knowledge of various management-labor problems; (7) can defray a portion of college expenses, all while gaining experience that will aid in job placement and a better potential salary upon graduation.

Associate Degree Studies

George P. Connick
Director

Samuel G. Andrews
Assistant Director

Richard H. Sturgeon
Assistant Director

YORK COUNTY COMMUNITY COLLEGE SERVICES

Ellen Forbes, Coordinator; Lorraine Masure, Counseling Director-Sanford; Judi Mellor, Counseling Director-Biddeford; John Pence, Counselor-Biddeford; Robert Weimont, Counselor-Sanford.

Associate Degree Studies, a new academic unit of the University established in 1973, has the responsibility for less-than-baccalaureate degree programs.

In cooperation with Southern Maine Vocational Technical Institute (SMVTI), Associate Degree Studies is offering off-campus degree programs through York County Community College Services. This joint venture provides less-than-baccalaureate degree opportunities and comprehensive counseling services for the citizens of York County.

Programs currently available from the University of Maine are Liberal Studies, General Studies and Business Administration. Southern Maine Vocational-Technical Institute has made available programs in Law Enforcement, Building Construction and Electronics Technology. In addition, a joint program in Hotel-Motel-Restaurant Management is being offered.

Courses are offered in the early morning, late afternoon, and evening in order to maximize the opportunity for working students to participate. Arrangements made with private colleges, local education agencies, churches and libraries allow the majority of courses to be offered in convenient locations for the student.

Interested persons holding a high school diploma (or its equivalent) or who are 18 years of age, may enroll by contacting the local Counseling Offices.

BIDDEFORD
260 Main Street
282-4111 or 282-4112

SANFORD
195 Main Street
324-6012 or 324-6013
Local Offices Representing Statewide University Functions

Several offices, located in buildings shown on the campus maps near the back of this catalog, are not under the administration of this University but represent statewide services of the University of Maine. Among these are the Chancellor's Portland office at 228 Deering Avenue, the Cumberland County office of the Cooperative Extension Service at 15 Chamberlain Avenue, the Portland MPBN studios at 45 Exeter Street, and the office of the Coordinator of Cooperative Education at 246 Deering Avenue.

THE CHANCELLOR'S OFFICE

One of the offices of the Chancellor of the University of Maine is located next to the new Law School and Advanced Study and Research Center. The Chancellor's office building also houses the Health Science Program Planning Staff of the University of Main.

COOPERATIVE EXTENSION SERVICE

A broad variety of services to bring the benefits of the University to families and community groups in both the inner city and also suburban and rural areas is provided by the Cooperative Extension Service of the University of Maine. All of Cumberland County is served by the CES office at 15 Chamberlain Avenue on the Portland Campus. Some programs, such as the annual series for persons preparing for retirement or the seminars on various aspects of family money management for married couples, are normally offered in the University classrooms, if space is available. Many of the urban programs are conducted in low-rent housing developments or Model City neighborhood centers, where 4-H clubs adapted to the needs of urban children are developed and training in homemaking and in the planning and cooking of meals utilizing government-surplus foods is provided. CES aides supplement the services of the professional staff in such cases.

In addition to these newer programs for inner city inhabitants, the more traditional programs for residents of suburban and rural areas throughout Cumberland County are continued. The staff of the Portland CES office includes specialists in urban community development, a nutritionist, a district recreation specialist, a dairy specialist, agricultural specialist, and other county agents. Visiting specialists from the Orono Campus provide added services from time to time. The work of the local and visiting specialists is multiplied through volunteer leaders in community groups scattered throughout the county.

LOCAL MPBN STUDIOS AND CONTROL FACILITIES

The Maine Public Broadcasting Network maintains studios and control facilities for WMEA-FM and WMEG-TV (Channel 26) in the 45 Exeter Street building shown on the Portland Campus map. Public radio and television programming is produced here as well as at Orono for statewide distribution as a public service of the University of Maine.

INSTRUCTIONAL TELEVISION

Instructional television, which is not broadcast for home reception like general educational television but which is beamed directly for use in specific classrooms or other meeting places, is being developed in the Greater Portland area through the services of the Portland MPBN office at 45 Exeter Street. One of the recent developments has been the installation of in-service instructional television facilities at major hospitals in the area. Demonstration operations or similar procedures conducted at the University of Vermont Medical School or other facilities are transmitted to the receiving antenna on the roof of Luther Bonney Hall, converted electronically for local transmission, and then beamed to dish antennae mounted on the roofs of local hospitals. In this way, hospital staff members may view the latest surgical or therapeutic techniques on television screens in staff lounge rooms. Both live and taped instructional materials are utilized. This type of development is but one example of the sort of project being developed by the local instructional television office.
Landmark Dates in the Development of UMPG

1773—Construction date of the McLellan House, considered to be the oldest brick house in the State of Maine and the oldest building still used by UMPG. It was purchased and renovated by Gorham State College in 1966 and is currently operated as an honor resident dormitory for 16 women students.

1780—The approximate date of the construction of the Cape Cod building on the Portland Campus. In 1947 it was acquired by purchase of part of the Deering Estate by the trustees of Portland Junior College and has been used for offices ever since.

1807—Construction date of the Academy Building. Built to house the original Gorham Academy, it was presented to the State of Maine in 1895. In 1966 it was renovated to contain studios, offices, and classrooms for the Art Department.

1821—Construction date of the Art Gallery, originally built as the Gorham Town Hall. Acquired by Gorham State Teachers College in 1961 for use as a student chapel, it now houses the Gorham Campus Art Gallery.

1878—Establishment of Western Maine Normal School on the site of the former Gorham Female Seminary approved by the Maine Legislature. The Normal School opened on January 29, 1879, with six faculty members and 85 students.

—Dr. William Corthell appointed first president of the institution. He served for 27 years, from 1878 to 1905.

—Corthell Hall built to house the original Western Maine Normal School. Afterward named to honor the first president, it now houses administrative offices, information desk, classrooms and offices of the Music Department, and the Museum of Man.

1897—Construction of Robie Hall, the first unit of the Robie-Andrews Halls dormitory complex. Robie Hall is named for Governor Frederick Robie, an early benefactor of Gorham.

1905—Inauguration of Dr. Walter F. Russell as the second president of Western Maine Normal School. He served in this office for 35 years, from 1905 to 1940.

1906—The President's Residence constructed on the Gorham Campus.

1911—The Industrial Arts Program established at Gorham.

1916—Andrews Hall constructed. It is named for Professor Emerita of Music, Miriam Andrews. The dormitory complex called Robie-Andrews Halls contains accommodations for 200 resident women students. Andrews Hall also contains classrooms and laboratories of the audio-visual education program.

1927—Graduation date of the first class in the Kindergarten-Primary Program at Gorham.

1931—Construction date of Russell Hall, named for the second president at Gorham. It now contains a 500-seat auditorium with stage, workshop facilities, offices for the Theatre Department, and a small gymnasium for various recreational activities.

1938—Baccalaureate degrees awarded to the first graduates of a full four-year program at Gorham.

1940—Inauguration of Dr. Francis L. Bailey as third president at Gorham. He served for 20 years, from 1940 to 1960.

1945—Gorham State Teachers College adopted as the new name of the Gorham institution.

1947—Part of the former Deering Estate purchased as a campus for Portland Junior College, which had previously utilized rented quarters. The land purchased forms the nucleus of the present Portland Campus of UMPG.

—The present University Bookstore Building, a military war-surplus building, disassembled at its original location, brought by barge to Portland, and reassembled at its present location on the Portland Campus, together with several other buildings which are no longer standing.
1955—*Woodward Hall* constructed to provide dormitory accommodations for 96 resident men students. It was named for a former Vice-President of Gorham, Louis B. Woodward.

1956—A *Music Education Program*, to prepare supervisors and teachers of music for the public schools, established at Gorham.

1957—The *University of Maine in Portland* established by the Maine Legislature, making the former property of Portland Junior College a part of the University of Maine. Until 1961, only the first two years of the academic programs of the University's College of Liberal Arts and College of Education were available, together with the freshman year of several other University of Maine programs.

1958—*Dean Luther I. Bonney*, long-time Dean of Portland Junior College, appointed Dean Emeritus by the University of Maine Board of Trustees, retroactive to July 1, 1957.

—*Dr. William L. Irvine* appointed Dean of the University of Maine in Portland. He served in this position for three years until 1961.

—An *Art Education Program*, to prepare supervisors and teachers of art for the public schools, established at Gorham.

--- The *Science Wing of Bailey Hall*, the first unit of the present Bailey Hall complex, constructed at Gorham. It contains classrooms, laboratories, a greenhouse, a science museum, and offices for various physical and biological scientific disciplines.

1960—*Payson Smith Hall* constructed at the Portland Campus and named in honor of a prominent Maine educator who had also served with distinction as Commissioner of Education for the Commonwealth of Massachusetts. The lower level contains a large cafeteria, a formal dining room called the College Room, and a small seminar dining room. The main floor now houses the Portland offices for admissions, the registrar, the campus business personnel, student affairs, student aid, testing and counseling, placement, and other services, as well as the Continuing Education Division. The upper floors contain classrooms; a language laboratory; physics, chemistry, organic chemistry, and geology laboratories; a science lecture hall; and some faculty offices.

—*Upton Hall* constructed at Gorham to provide added dormitory and lounge accommodations for women students. The basement now houses the Gorham Campus Bookstore. The building is named for a long-time faculty member, Miss Ethlyn Upton. A second unit, making up the Upton-Hastings complex, was added in 1968.

—*Dr. Kenneth T. H. Brooks* inaugurated as President of Gorham State Teachers College. He served for 10 years, from 1960 to 1970.

1961—The *merger of Portland University* and the University of Maine in Portland approved by the Maine Legislature. Portland University had already established a baccalaureate program in Business Administration and a professional School of Law. Following the merger, the latter program was reorganized and developed into the University of Maine School of Law, housed from 1961-72 in the former Portland University building on High Street in downtown Portland. The four-year undergraduate program in Business Administration was moved to the Portland Campus, to become the first four-year program of the University of Maine to be offered in this area. This program has now evolved into the UMPG School of Business and Economics.

—The *Library Wing of Bailey Hall* constructed. The library section provides reading areas, conference rooms, a study-smoker, and a music-listening area. The east side of the building contains classrooms, conference rooms, faculty offices, and facilities for closed-circuit television.

—*William L. Whiting* appointed Dean of the University of Maine in Portland. He served in this capacity for four years, from 1961 to 1965.

1962—Establishment of the *Continuing Education Division* at the University of Maine in Portland. Under the direction of John M. Blake, former Dean of Portland University, acting as a special assistant to the President of the University of Maine, the previous evening program of Portland University and the Portland extension courses of the University of Maine were consolidated and expanded into a coordinated program.
1963—Construction of *Warren G. Hill Gymnasium* at Gorham. Named for a former Maine Commissioner of Education and graduate of Gorham, the 2,500 seat gymnasium provides facilities for men's and women's physical education, locker rooms, classrooms, and offices for Health Services and Gorham members of the Division of Physical Education and Intercollegiate Athletics.

--- *Anderson Hall* constructed at Gorham. Named for Hayden L. V. Anderson, alumnus of Gorham and former Executive Director of Professional Services for the Maine Department of Education, it contains lounges, study areas, and dormitory accommodations for 100 resident men students.

1964—A *Graduate School* established at Gorham.

1965—*Gorham State College* adopted as the official name of the institution at Gorham.

--- Dr. David R. Fink, Jr., appointed Dean of the University of Maine in Portland. After serving as Dean for three years, he was promoted to Provost by the Board of Trustees in 1968, in which position he served until joining the Chancellor's staff in 1970.

--- Construction of the *Industrial Education and Technology Center* at Gorham. It contains offices, classrooms, and laboratories for conducting programs in industrial arts and vocational-industrial teacher education, providing facilities to teach concepts in the manufacturing, construction, power-transportation, electrical-electronics, graphic communications, and service industries.

--- Dedication of *Luther I. Bonney Hall* at Portland, a five-story building named in honor of the Dean Emeritus of the Portland Campus. The main floor contains academic administrative offices and Luther Bonney Auditorium, a modern, air-conditioned lecture hall seating 250 persons. The upper floors contain classrooms, seminar rooms, faculty offices, and specialized quarters for art studios, choral groups, closed circuit and other instructional television, and other audio-visual aids.

--- Opening of the *Library Wing of Bonney Hall* at Portland. In addition to plentiful study carrels, four rooms called the Quattro Galleries, containing shifting art exhibits and comfortable furniture, provide facilities for smoking, recreational reading, listening to recorded music, and other functions.

1966—A *Secondary Education* program established at Gorham.

1967—A baccalaureate program in the *Liberal Arts* established at Gorham.

1968—Establishment of Gorham State College as a unit of the University of Maine with the official title of *Gorham State College of the University of Maine*.

--- *Hastings Hall* constructed at Gorham and named for a long-time faculty member, Miss Mary Hastings. The complex of Upton-Hastings Halls contains lounges and dormitory accommodations for 300 resident women students.

--- Acquisition of scattered houses or house lots in the vicinity of Bedford Street and Chamberlain Avenue in Portland to provide quarters for the *Student Union* and various administrative or faculty offices and to enlarge student parking facilities.

1969—Opening of the Portland Campus *Gymnasium and Physical Education Building*. The main gymnasium can seat 2,800 spectators. The building also contains offices, classrooms, Health Center offices, examination rooms, a general purpose corrective and adaptive room, a dance room for women, and a small auxiliary gym for a variety of activities. Two squash courts and two handball courts are located in a wing on the lower level behind the main building.

--- Opening of the *Science Building* at the Portland Campus. The main tower of the Science Building, six stories high, has facilities for students in the engineering programs, as described in this catalog, on the ground floor: laboratories for the various biological sciences, as well as offices, seminar rooms, and classrooms, on the second, third, and fourth floors; laboratories and other facilities for the courses in psychology on the fifth floor; and quarters for experimental animals, as well as a greenhouse for botanical specimens, on the sixth floor. In the two-story wing, the *Southworth Planetarium* is located on the lower and ground-floor levels. The Portland *Computer Center*, ringed about with faculty offices, occupies the second-floor space directly above the Southworth Planetarium.
—Rapid increase in the Baccalaureate Degree programs offered at the Portland Campus. The facilities offered by the new buildings, coupled with the marked increase in faculty and student body, enabled the University Board of Trustees to authorize, at successive meetings during this period between 1965 and 1970, a number of added programs leading to a baccalaureate degree, with majors in various arts and sciences.

—Opening of the Classroom Wing of Bailey Hall at Gorham. This final unit of Bailey Hall contains a 200-seat multi-purpose lecture hall, a student lounge, classrooms, and academic and faculty offices.

—Bachelor of Arts degrees awarded to the first group of candidates completing this new program at Gorham.

1970—Dean Edward S. Godfrey of the School of Law appointed to serve as Acting Provost of the Portland Campus for the final semester before the administrative formation of the University of Maine at Portland-Gorham on July 1, 1970.

—Dr. William J. MacLeod, Professor of Philosophy, appointed Acting President of the University of Maine at Portland-Gorham on July 1, 1970. Dr. MacLeod served for one year during the period of administrative merger of the former University of Maine in Portland, the University of Maine School of Law, and Gorham State College of the University of Maine.

—Dr. Kenneth T. H. Brooks, former President of Gorham State College of the University of Maine, created University Professor of Education.

—Opening of the Dining Center at the Gorham Campus. It contains a 900-seat dining hall, faculty and Presidential dining rooms, a snack bar, and a student lounge, together with offices and conference rooms for student organizations and activities.

—Opening of the Tower Residence at the Gorham Campus. These twin high-rise student residences provide accommodations for 380, with lounge and study facilities.

1971—Dr. Louis J. P. Calisti appointed the first President of the University of Maine at Portland-Gorham, effective July 1, 1971. Dr. William J. MacLeod at the same time assumed office as Vice President for Academic Affairs. Dr. Gordon S. Bigelow assumed office as Vice President for Student Affairs.

—Academic reorganization of the University of Maine at Portland-Gorham, as a single, integrated University, completed at the opening of the academic year in September 1971. Shuttle-bus transportation permitting students to schedule courses on either campus was established at the same time.

1972—Moving of the University of Maine School of Law to its new home in the lower three floors of the seven-story School of Law and Advanced Study and Research Center building at 246 Deering Avenue, opposite the Portland Campus.

—The Center for Research and Advanced Study was established at 246 Deering Avenue under the direction of Halsey Smith.


—UMPG officially became accredited with full membership in the New England Association of Schools and Colleges for a period of three years. Prior to this time the Gorham campus had been separately accredited and the Portland campus had shared accreditation as part of the Orono campus accreditation.

—The Dickey and Wood Tower Dormitories were officially named in honor of Miss Edna F. Dickey, who became Associate Professor Emerita of History, and Miss Esther E. Wood, who became Associate Professor Emerita of Social Sciences, after contributing a total of 69 years of service.

—Dr. N. Edd Miller appointed the second President of the University of Maine at Portland-Gorham. His appointment was approved by the Board of Trustees on August 23, 1973, and he assumed his duties on November 1.

1974—The Bachelor of Fine Arts degree program established in the College of Arts and Sciences, which had been previously known as the College of Liberal Arts.

219
The following list includes both teaching faculty and administrative personnel. Dates in parentheses indicate initial year of appointment.

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Institution</th>
<th>Dates</th>
<th>Additional Information</th>
</tr>
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<tbody>
<tr>
<td>ALBEE, PARKER BISHOP, JR. (1966)</td>
<td>Associate Professor of History; Dartmouth College, A.B., 1961; Duke University, M.A., 1964; Ph.D., 1968</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>ALLEN, BRUCE A. (1970)</td>
<td>Assistant Professor of Mathematics Education; Gorham State College, B.S., 1960; M.S., 1967; Boston University, Ed.D., 1973</td>
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<td></td>
</tr>
<tr>
<td>ANDREWS, BRUCE H. (1974)</td>
<td>Assistant Professor of Business Administration; University of Connecticut, B.A., 1967; Polytechnic Institute of New York, M.S., 1969</td>
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<tr>
<td>ANDREWS, SAMUEL GEORGE (1966)</td>
<td>Associate Professor of Associate Business Administration and Assistant Director of Associate Degree Studies; Babson Institute, B.S.A., 1964; University of Maine, M.S., 1966</td>
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<tr>
<td>ANGELAKOS, EVANGELOS T. (1973)</td>
<td>Research Associate, Biomedical Research Laboratory; Tripolis College, Greece. Diploma (s.c.l.), 1948; Boston University, M.A., 1953; Ph.D., 1956; Harvard University, M.D. (m.c.l.), 1959</td>
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<tr>
<td>ANNETT, DONALD ARCHIE (1969)</td>
<td>Associate Professor of Business Administration; University of New Hampshire, B.S., 1937; New York University, M.B.A., 1963</td>
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<tr>
<td>ANSPACH, DONALD FREDERICK (1970)</td>
<td>Associate Professor of Sociology and Chairman, Department of Sociology; Franklin and Marshall College, A.B., 1964; Western Reserve University, M.A., 1966; Case Western Reserve University, Ph.D., 1970</td>
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<tr>
<td>ARMEN'TROUT, CHARLES EDWIN (1960)</td>
<td>Associate Professor of Physics and Chairman, Department of Physical Sciences and Engineering; University of Maine, B.A., 1955; Wesleyan University, M.A., 1958; Columbia University, M.S., 1970</td>
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<tr>
<td>AYERS, GEORGE H. (1959)</td>
<td>Associate Professor of Physical Science and Director, Southworth Planetarium; University of Maine, B.A., 1951; Ohio State University, M.A., 1959</td>
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</tr>
<tr>
<td>BAIER, LEE S. (1966)</td>
<td>Associate Professor of English; Reed College, A.B., 1948; Columbia University, M.A., 1952; Ph.D., 1965</td>
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</tbody>
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Numbers in the left hand margin are coded as follows:
- 1 on leave, Fall semester, 1974
- 2 on leave, Spring semester, 1975
- 3 on leave, Academic year, 1974-1975
1974-75 listings as reported to Public Information on or before July 31, 1974


BALBER, PAULA G. (1973) Instructor in Nursing; Boston University, B.S., 1969; New York University, M.A., 1970


BAY, JOHN WILLIAM (1965) Dean, School of Business and Economics and Associate Professor of Business and Economics; Saint Ambrose College, B.A., 1961; Boston College; M.A., 1964; Ph.D., 1966

BEARCE, JEANA DALE (1965) Associate Professor of Art; Washington University, B.F.A., 1951; New Mexico Highlands University, M.A., 1954

BELLONE, ROSEMARY (1972) Instructor in Nursing; Virginia Commonwealth University, B.S.N., 1970; Catholic University of America, M.S.N., 1971

BEMIS, A. NYE (1970) Instructor in Education and Assistant Director, Maine Teacher Corps; Gorham State College B.S., 1964; M.S., 1969

BERNARD, JULES EUGENE (1963) Professor of English; Yale University, B.A., 1934; M.A., 1936; Ph.D., 1937

BERRY, ARTHUR O. (1955) Director of Vocational Technical Education and Professor of Metals Technology; Gorham State College, B.S., 1950; Pennsylvania State University, Ed.M., 1954; University of Connecticut, Ph.D., 1967

BERUBE, LIONEL (1970) Associate Director, Upward Bound; University of Maine at Orono, B.A., 1961

BIBBER, JOYCE K. (1967) Associate Professor of History; Westbrook Junior College, A.A., 1956; Barnard College, B.A., 1958; Stanford University, M.A., 1966; Ph.D., 1969

BIEN LEON J. (1970) Assistant Professor of Economics and Chairman, Department of Economics; Boston College, B.A., 1966; Michigan State University, M.A., 1970

BIGELOW, GORDON S. (1971) Vice President for Educational Services; Brown University, A.B., 1954; University of Maine, Ed.M., 1962; Brigham Young University, A.M., 1966; Ph.D., 1967

BISHOP, JOHN SCOTT (1968) Associate Professor of Psychology; University of New Brunswick, B.A., 1955; Dalhousie University, M.A., 1957; University of London, Ph.D., 1958

BONNER, ROWLAND A. (1973) Research Associate, Biomedical Research Laboratory; Michigan State University, B.S., 1962; D.V.M., 1964; Boston University, Ph.D., 1972

BONNEY, JAMES H. (1970) Lecturer, School of Law; Bowdoin College, A.B., 1948; University of Vermont, M.D., 1953; University of Maine, J.D., 1967

BOUCHARD, JOEY A. (1968) Associate Professor of Physical Education and Coordinator of Men's Athletics; Springfield College, B.S., 1960; M.Ed., 1961; Boston University, C.A.S., 1968

BOUCHARD, KATHLEEN M. (1969) Associate Dean of Student Life; Western Michigan University, B.A., 1966; Indiana University, M.S., 1969


BRANNIGAN, CLAIRE (1972) Instructor in Nursing; McGill University, B.S.N., 1970


BRETON, LILLETTE CAMILLE (1969) Assistant Professor of Physical Education; University of Maine, B.S., 1965; M.S., 1968; University of Maine at Orono, C.A.S., 1972

BRIGGS, WAYNE F. (1965) Accountant

1 on leave Fall Sem. 2 on leave Spring Sem. 3 on leave for Acad. Year

221
1974-75 listings as reported to Public Information on or before July 31, 1974

BROOKS, KENNETH T. H. (1959) University Professor of Education and Director, Co-operative Education Program; University of New Hampshire, A.B., 1947; Boston University Ed.M., 1948; Ed.D., 1955

BROWN, ELECTA M. (1943) Bursar; Shaw’s Business College, 1926

BROWN, HAROLD F. (1972) Professor of Music and Chairman, Department of Music; Colby College, A.B., 1935; Westminster Choir College, B.Mus., 1938; Harvard University, A.M., 1942; Michigan State University, Ph.D., 1968

BROWN, WILLIAM ALLEN (1960) Associate Professor of Mathematics and Computer Science; Bowdoin College, B.A., 1954; University of Maine, M.A.; 1959

BRUCKNER, LAWRENCE A. (1973) Assistant Professor of Mathematics and Computer Science; Catholic University of America, B.A., 1962; M.A., 1964; Ph.D., 1967

BULLOCK, WILLIAM B. (1970) Business Manager; Cornell University, B.S., 1953; M.B.A., 1959

BURKE, L. MORRILL, JR. (1959) Associate Professor of English; Bowdoin College, A.B., 1949; University of Washington, M.A., 1951; Columbia University, Ph.D., 1971

CAMPBELL, RICHARD R. (1973) Financial Aid Officer


CARPER, THOMAS R. (1967) Assistant Professor of English; Harvard University, A.B., 1958; New York University, M.A., 1967; Boston University, Ph.D., 1973

CARR, CONSTANCE M. (1972) Associate Dean, College of Arts and Sciences and Assistant Professor of Classics; Duquesne University, B.A., 1966; Knubly University School of Hellenic Civilization (Athens, Greece), M. Cert., 1967; University of Pittsburgh, M.A., 1969

CARTER, RICHARD H. (1964) Associate Professor of Power Technology; Gorham State College, B.S., 1954; University of Maine, Ed.M., 1964; Boston University, C.A.S., 1971

CASHMAN, LINDA R. (1973) Lecturer in Nursing; Washington State University, B.S., 1968

CHABOT, MAURICE JOSEPH (1965) Assistant Professor of Mathematics and Computer Science; University of Maine, B.A., 1961; Bowdoin College, M.A., 1965

CHAMBERLAND, GERARD G. (1957) Professor of Music; Boston University, B.Mus., 1950; M.M. 1956


CLARK, ELMER BANKS FRED (1946) Associate Professor of French and Spanish; University of Florida, B.A.E., 1935; M.A., 1937

CLARKE, CAROLYN K. (1968) Periodicals Associate; University of Maine at Orono, B.A., 1968


COFFIN, RICHARD NEAL (1964) Associate Professor of English; Bowdoin College, B.A., 1951; Harvard University, A.M., 1952; Boston University, Ph.D., 1962

COLE, PHILLIP ALBERT (1957) Professor of History; Boston University, B.S., 1954; M.A., 1955; Ph.D., 1963

COLE, RONALD F. (1963) Assistant Professor of Music; Bowdoin College, B.A., 1961; Eastman School of Music, M.A., 1963

CULUCCI, NICHOLAS DOMINIC, JR. (1969) Assistant Professor of Education; Gorham State College, B.S., 1963; University of Connecticut, M.A., 1964; Ph.D., 1969

CONNICK, GEORGE PERCY (1966) Director of Academic Planning and Acting Director of Associate Degree Studies; Associate Professor of History; Sanford University, B.A., 1957; San Jose State College, M.A., 1960; University of Colorado, Ph.D., 1969

COOGAN, WILLIAM H., III (1972) Assistant Professor of Political Science; Boston College, B.A., 1963; Rutgers University, M.A., 1964; University of North Carolina, Ph.D., 1971

COOPER, JANET K. (1972) Associate Cataloger, School of Law; St. Thomas College, M.A.T., 1972


COSTELLO, MELISSA H. (1953) Associate Professor of Education and Chairman, Department of Elementary Education; Gorham State College, B.S., 1952; University of Maine, Ed.M., 1957; C.A.S., 1960
1974-75 listings as reported to Public Information on or before July 31, 1974

COTELLO, RICHARD A. (1953) Director, Division of Physical Education and Intercollegiate Athletics and Professor of Health and Physical Education; University of Alabama, B.S., 1952; University of Illinois; M.S., 1953; Springfield College, D.P.E., 1965

COTTON, JEAN (1967) Associate Professor of Nursing and Chairman, Department of Psychiatric Nursing; Simmons College, B.S., 1960; Boston University, M.S., 1962


CROSBY, JEANIE W. (1973) Assistant Professor of Education and Program Development Specialist, Maine Teacher Corps; Centre College, B.A., 1963; University of Wisconsin, M.A., 1964; University of Massachusetts, Ed.D., 1973

CROTZER, ROBERT E. (1970) Instructor, Urban Adult Learning Center; Erie County Technical Institute, A.A.S., 1959; Purdue University, B.S., 1964; University of Maine at Portland-Gorham, M.S., 1973


CUPRAK, RUTH M. (1973) Assistant Professor of Elementary Education and Child Development Specialist, Maine Head Start Educational Resource Center; University of Connecticut, B.S., 1944; Tufts University, M.S., 1966

DALVET, YVES FRANCOIS (1968) Associate Professor of French; Laval Collège, B.A., 1940; New York University, M.A., 1965; Yale University, M.Ph., 1969

DAMON CORA M. (1973) Reference Librarian; Gorham State College, B.S., 1970; University of Toronto, M.L.S., 1972

DAVIS, EVERETT A. (1966) Assistant Professor of Educational Media; Gorham State College, B.S., 1961; Indiana University, M.S.Ed., 1966; Ed.S., 1972

DEANE, GEORGE D., JR. (1974) Assistant Professor of Business Administration and Director, Cooperative Education in the School of Business and Economics; Fairleigh Dickinson University, B.S., 1960; M.B.A., 1967

DEAS, DAVID C. (1973) Assistant Registrar; University of Maine at Portland-Gorham, B.A., 1971

DELOGUE, ORLANDO E. (1966) Professor of Law, School of Law; University of Utah, B.S., 1960; University of Wisconsin, M.S., 1963; J.D., 1966

DEPREZ, GREGORY A. (1973) Administrative Coordinator, ESCO Economic Institute; University of Maine at Portland, B.S., 1965; University of Maine at Gorham, M.S., 1970

DIAMOND, STEPHEN R. (1973) Administrative Assistant, School of Law Clinical Practice Program; Stanford University, B.A., 1965; University of Chicago, J.D., 1968

DI BENEDETTO, LUCIA A. (1970) Assistant Professor of French; Emmanuel College, B.A., 1963; Middlebury College, M.A., 1965

DIETRICH, CRAIG (1968) Associate Professor of History; University of Chicago, A.B., 1961; Ph.D., 1970

DORBACHER, BEATRICE M. (1974) Associate Professor of Nursing; Columbia University, B.S., 1950; M.A., 1957; Boston University, Ed.D., 1972

DORSEY, F. DONALD, JR. (1967) Assistant Professor of Biology; Bowdoin College, A.B., 1950; Syracuse University, M.S., 1960; Simmons College, M.S., 1964


DUBOWICK, DOROTHY BUNKER (1968) Assistant Professor of Nursing; Colby College, A.B., 1948; University of Maine at Portland-Gorham, M.S., 1971

DUCLOS, ALBERT JOSEPH (1965) Assistant Professor of Theatre; University of Maine, B.S., 1963; M.A., 1965

DUCLOS, GLORIA SHAW (1962) Associate Professor of Classics; Radcliffe College, A.B., 1949; M.A., 1953; Oxford University, B.A., 1951; M.A., 1955


DURGIN, FRANK ALBERT, JR. (1964) Professor of Business and Economics; Tufts University, B.A., 1949; University of Toulouse, France, License en Droit, 1954; Docteur en Droit, 1956

DUVAL, MARGORIE ANN (1962) University Archivist and Associate Professor of Library Service; New England Conservatory of Music, B.Mus., 1945; Simmons College, M.S., 1962
1974-75 listings as reported to Public Information on or before July 31, 1974

EASTMAN, JOEL WEBB (1970) Assistant Professor of History; University of Maine at Orono, B.A., 1962; M.A., 1965; University of Florida, Ph.D., 1973


EDWARDS, MARY J. (1966) Lecturer in Nursing; Cornell University, B.S., 1952

EELLS, MARY ANN (1969) Dean, School of Nursing and Associate Professor of Nursing; State University of New York, B.S., 1955; University of Rochester, M.S., 1968; Ed.D., 1970

ELDRIDGE, SUSAN D. (1972) Bookstore Manager; University of Maine at Portland-Gorham, B.S., 1971

ELLIS, ANN P. (1973) Instructor in Nursing; University of Maine at Orono, B.S., 1964; Boston University, M.S., 1967

ELLIS, EDNA M. (1973) Instructor in Nursing; University of Maine at Portland-Gorham, B.S., 1972; Boston University, M.S., 1973

EMANUELSON, MILLARD E. (1966) Associate Professor of Business Administration; Colby College, B.S., 1936; Boston University, LL.B., 1951

EMERSON, HORTON W., JR. (1962) Professor of History; Colby College, A.B., 1949; Yale University, Ph.D., 1957

EMERY, VIRGINIA L. (1966) Administrative Assistant to the President; Shaw's Business College, 1938

ESTES, ROBERT A. (1966) Professor of Mathematics and Computer Science; Bowdoin College, A.B., 1958; University of Kansas, M.A., 1961; University of Michigan, Ph.D., 1970


FAULKNER, HOWARD M. (1970) Associate Professor of Graphics; Massachusetts State College at Fitchburg, B.S., 1957; Northeastern University, M.Ed., 1960


FELDMAN, STEPHEN R. (1972) Associate Professor of Law, School of Law; Duke University, A.B., 1959; Fordham University, LL.B., 1965; Harvard University, LL.M., 1972


FINDLAY, ROBERT WALKER (1967) Professor of Accounting and Chairman, Baccalaureate Program in Business Administration; Boston University, B.S., 1955; M.B.A., 1964; C.P.A. (Massachusetts and Maine)


FISH, CAROLYN WELCH (1968) Associate Professor of Nursing; Boston University, B.S., 1964; University of North Carolina, M.P.H., 1967

FISH, LINCOLN T., JR. (1959) Professor of Mathematics and Computer Science and Chairman, Department of Mathematics and Computer Science; University of Maine, B.S., 1948; M.A., 1949; Boston University, Ed.D., 1951

FISHER, IRVING D. (1967) Assistant Professor of Political Science; University of Connecticut, B.A., 1946; Columbia University, M.A., 1953

FITZPATRICK, ALBERT ARTHUR (1968) Professor of Business and Economics; University of Southern California, B.S., 1949; M.B.A., 1951; Baylor University, M.S., 1955; University of Southern California, Ph.D., 1962

FLEHERTY, AGNES E. (1973) Clinical Associate in Nursing at the Maine Medical Center; Columbia University, B.S., 1950; Catholic University of America, M.S., 1961

FOLSOM, ROBERT EUGENE (1968) Associate Professor of Physical Education and Chairman, Department of Recreation; Springfield College, B.S., 1953; Boston University, Ed.M., 1963

FOSTER, CAROLYN NEIDIG (1966) Assistant Professor of Mathematics and Computer Science; Douglass College (Rutgers), A.B., 1958; Purdue University, M.S., 1961; Bowdoin College, A.M., 1966

FRANKLIN, PATRICIA R. (1970) Assistant Professor of Art; Pratt Institute, B.F.A., 1962; Tulane University of Louisiana, M.F.A., 1970

FRENCH, ROBERT K. (1969) Associate Professor of Geography-Anthropology and Director, Museum of Man; Dartmouth College, A.B., 1957; Northeastern University, M.Ed., 1967; Clark University, M.A., 1972

1974-75 listings as reported to Public Information on or before July 31, 1974

FRIDINGER, WALTER PETER (1958) Vice President for Finance and Administration; Lebanon Valley College, B.S., 1938


GARVEVOORT, HERMAN (1973) Instructor in History; Calvin College, B.A., 1965; Wayne State University, M.A., 1967

GARRECHT, DONALD L. (1962) Law Librarian and Professor of Law, School of Law; University of Minnesota, A.B., 1958; LL.B., 1961

GAVIN, WILLIAM JOSEPH (1968) Associate Professor of Philosophy and Chairman, Department of Philosophy; Fordham University, B.A., 1965; M.A., 1967; Ph.D., 1970


GIERINGER, RAMONA (1972) Serials Librarian, School of Law

GIGUERE, MADELEINE DINORA (1967) Associate Professor of Sociology; College of New Rochelle, B.A., 1947; Fordham University, M.A., 1950; Columbia University, M.Phil., 1973


GNECCO, DONALD R. (1973) Coordinator of Cooperative Education and Adjunct Professor of Elementary Education; University of Maine at Farmington, B.S., 1970; University of New Hampshire, M.Ed., 1971

GODFREY, EDWARD S. (1962) Professor of Law, School of Law; Harvard University, A.B., 1934; Columbia University, J.D., 1939

GOLD, JOEL I. (1973) Instructor in Associate Business Administration; Pace University, B.A., 1968; Bernard Baruch College, M.B.A., 1972

GOODWIN, JEANETTE L. (1955) Associate Professor of Physical Education and Coordinator of Dance; Sargent College, B.S., 1944; Springfield College, Ed.M., 1955

GRANGE, JOSEPH (1970) Associate Professor of Philosophy; St. Joseph's College, B.A., 1961; Fordham University, M.A., 1965; Ph.D., 1970

GRASS, CALVIN F. (1966) Associate Professor of Physical Science; Boston University, A.B., 1949; University of Maine, Ed.M., 1954; Ohio State University, Ph.D., 1972

GRAY, MARIE L. (1970) Acting Director, Urban Adult Learning Center; Catholic University of America, B.A., 1967; New York University, M.S., 1970

GREENWOOD, HELEN L. (1969) Associate Professor of Biology; Northeastern University, B.S., 1958; University of New Hampshire, M.S., 1960; University of Connecticut, Ph.D., 1969

GREGORY, DAVID D. (1972) Associate Professor of Law, School of Law; Duke University, B.A., 1964; University of Maine, LL.B., 1968; Harvard University, L.L.M., 1972


GRZELKOWSKI, SLAWOMIR A. (1973) Assistant Professor of Sociology; University of Warsaw, Poland, M.A., 1962; Indiana University, Ph.D., 1974

GUAY, MERLE DANA (1969) Associate Professor of Mathematics and Computer Science; Tufts University, B.S., 1958; University of Maine, M.A., 1960; Michigan State University, Ph.D., 1967

HAAS, BARBARA A. (1971) Assistant Professor of Nursing; New York University, B.S., 1961; M.A., 1965

HACKETT, GEORGE F. (1968) Associate Professor of Education; Central Michigan University, B.A., 1952; University of Michigan, M.A., 1957


HALL, OWEN C. (1952) Associate Professor of Accounting; Portland University, B.S., 1955; Maine Society of Public Accountants, C.P.A., (Maine)

HANNA, JOHN G. (1963) Professor of English; Trinity College, B.S., 1936; Harvard University, B.A., 1946; Boston University, Ph.D., 1958

HANSEN, EDWIN R. (1964) Professor of Communication; Tufts University, B.S., 1936; University of Denver, M.A., 1947; Cornell University, Ph.D., 1952

HARE, PARNELL S. (1963) Associate Professor of Physical Science; University of Maine, B.S., 1956; University of New Hampshire, M.S., 1960

HAYES, DALE T. (1973) Assistant Professor of Reading, Maine Teacher Corps; Bob Jones University, B.A., 1959; Arizona State University, M.A., 1968

HARTMAN, H. BERNARD (1973) Assistant Professor of Biology; University of Maryland, B.S., 1960; American University, M.S., 1962; University of Connecticut, Ph.D., 1965

1 on leave Fall Sem. 2 on leave Spring Sem. 3 on leave for Acad. Year
1974-75 listings as reported to Public Information on or before July 31, 1974

HAWKES, DAVID B. (1971) Lecturer, School of Law; University of Maine, B.S., 1966; J.D., 1969; Boston University, LL.M., 1970; C.P.A., 1971

HEARN, JOSEPH F. (1970) Associate Professor of Psychology; Boston College, B.S., 1964; University of Massachusetts, M.S., 1966; Ph.D., 1967

HEEL, HELEN E. (1953) Assistant Professor of Music; Gorham State College, B.S., 1942; University of Michigan, M.M., 1948

HEISLER, EDWIN A. (1972) Lecturer, School of Law; Tufts University, B.S., 1957; George Washington University National Law Center, LL.B., 1965

HENDERSON, SUSAN J. (1973) Instructor in Nursing; St. Luke's Hospital, School of Nursing, R.N., 1963; Fairleigh Dickinson University, B.S., 1966; New York University, M.A., 1973

HERNANDEZ, ADELE BETANCOURT (1962) Part-time Instructor in Spanish and Director of Language Laboratory; M.A., Florida State Christian College, 1973

HIGGINS, BERTHA F. (1970) Executive Director, Gorham Alumni Association; Gorham State Teacher's College, B.S., 1939

HIGGINS, GEORGE MICHAEL (1971) Assistant Business Manager; University of Maine in Portland, B.S., 1971

HOC, LINDA S. (1973) Career Development Officer; Oberlin College, B.A., 1972

HODGSON, PAULA D. (1967) Associate Professor of Physical Education and Chairman, Department of Athletics; Lasell Junior College, A.A., 1948; Beaver College, B.A., 1950; Columbia University, M.A., 1952; Springfield College, D.P.E., 1973

HODGES, FRANKLIN D. (1966) Associate Professor of Geography and Chairman, Department of Geography-Anthropology; Farmington State College, B.A., 1961; Clark University, M.A., 1966

HODSON, D. BRADLEE (1973) Assistant Professor of Accounting; University of Maine at Orono, B.S., 1968; University of Pennsylvania, M.S., 1969; C.P.A. (Massachusetts)

HOLMES, PETER KARL (1968) Associate Professor of Biology; Bowdoin College, A.B., 1956; Wesleyan University, M.A., 1958; University of Illinois, Ph.D., 1964

HOPKINSON, DAVID BRADFORD (1959) Associate Professor of General Engineering; University of Maine, B.S., 1942; University of Vermont, M.S., 1949; University of Maine, M.E., 1961; P.E. (Maine)


HORTON, DONALD BION (1969) Lecturer in Biology and Executive Director, The Research Institute of the Gulf of Maine (TRIGOM); Union College (New York), B.S., 1954; University of Rhode Island, M.S., 1958; Ph.D., 1965


HUDSON, ROBERT W. (1971) Project Director of Upward Bound and Assistant Professor of Education; Milton College, B.A., 1950; State University of Iowa, M.A., 1952

HUGHFRIES, DREW (1972) Assistant Professor of Sociology; L'Universite de Bordeaux (Bordeaux, France), Certificate des Etudes, 1966; University of California, A.B., 1967; M.S., 1972; Ph.D., 1973

HUNT, HARRY DRAPER, III (1965) Professor of History; Harvard University, B.A., 1957; Columbia University, M.A., 1960; Ph.D., 1968

HYMOFF, IRA H. (1971) Director of Counseling and Career Development; Colby College, B.A., 1965; University of Maine at Orono, Ph.D., 1970

INGRAHAM, HOLLIE L. (1973) Assistant Director of Continuing Education Division and Summer Session; University of Maine, B.A., 1967; University of Maine at Portland-Gorham, M.S., 1972

IRISH, JOEL W. (1971) Assistant Professor of Mathematics and Computer Science; Colby College, B.A., 1967; University of New Hampshire, M.S., 1969

IVANISIN, ANNA BERNARDINE (1967) Assistant Dean, School of Nursing and Associate Professor of Nursing; Columbia University, B.S., 1938; M.A., 1946

JAGOLINZER, PHILIP (1966) Associate Professor of Accounting; Clark University, A.B., 1958; University of Rhode Island, M.S., 1960; C.P.A. (Maine, Maryland)

JAQUES, JOHN FREDERICK (1946) Professor of English; Bowdoin College, A.B., 1943; Columbia University, A.M., 1946; Ph.D., 1971

JENSEN, HELENA MARIE (1967) Associate Professor of Nutrition; University of Maine, B.S., 1943; Pennsylvania State University, M.Ed., 1951

JOHNSON, SHEILA A. (1968) Acquisitions Associate; Boston College, B.S., 1967

JULAVITS, WILLIAM F. (1970) Assistant Dean and Lecturer, School of Law; Amherst College, B.A., 1964; University of Maine, LL.B., 1968

1on leave Fall Sem. 2on leave Spring Sem. 3on leave for Acad. Year

226
KANE, RAYMOND PAUL (1965) Coordinator, Special Programs, Continuing Education Division; University of Maine, B.S., 1964

KAPLE, DONALD J. (1973) Assistant Professor and Director, Adult Education; Athenaeum of Ohio, B.A., 1953; Th.M., 1958

KARABIN, JACQUELINE (1973) Instructor in Nursing; University of Michigan, B.S.N., 1967; M.P.H., 1973

KAZENSKI, JOHN T. (1973) Director of Physical Plant; U.S. Naval Academy, B.S., 1960

KERN, ABRAHAM K. (1959) Associate Professor of Botany and Zoology; Bowdoin College, A.B., 1936; University of Maine, M.Ed., 1956


KNOWLTON, SUZANNE L. (1968) Assistant University Librarian; University of Kansas, B.A., 1960; University of Denver, M.A., 1963


KREISLER, JOSEPH D. (1972) Assistant Professor of Social Welfare; Oklahoma University, B.A., 1947; Columbia University, M.A., 1949; M.S.W., 1959

LACOGNATA, ANGELO A. (1965) Professor of Sociology; University of Buffalo, B.A., 1957; University of Rochester, M.A., 1959; Michigan State University, Ph.D., 1962

LADLEY, ANNE (1973) Assistant Professor of Social Welfare and Acting Director, Office of Equal Employment Opportunity; University of Pittsburgh, B.A., 1953; New York University, M.S.W., 1962

LAFFIN, CATHERINE ALEXION (1962) Administrative Assistant to the Vice President for Finance and Administration

LaFRANCE, ARTHUR B. (1973) Associate Professor of Law, School of Law; Dartmouth College, B.A., 1960; Yale University, LL.B., 1963


LAPointe, norman j. (1967) Project Director, Head Start Supplementary Training Program and Assistant Professor of Education; University of Maine, B.S., 1956; University of Massachusetts, M.A., 1960

LEHMANN, PETER M. (1974) Visiting Assistant Professor of Sociology; Oberlin College, A.B., 1968; Meadville Theological School/University of Chicago, M.A., 1970

LEPELLEY, EDITH (1965) Associate Professor of French; Lycée de Jeunes Filles de Chartres, Baccalauréat, 1950; University of Rennes (France), License est Lettres, 1956

LINEHAN, FRANCIS M. (1972) Assistant Professor of Nursing; Boston College, B.S., 1953; Catholic University of America, M.S., 1955

LITTLEFIELD, MAURICE E. (1965) Assistant Professor of Education and Development Officer; University of Maine, B.S., 1960; University of Virginia, Ed.M., 1964


LOPER, MERLE W. (1971) Associate Professor of Law, School of Law; Northwestern University, B.A., 1962; University of Chicago, J.D., 1965; Harvard University, LL.M., 1971

LYONS, CHARLES M. (1973) Instructor, Maine Teacher Corps; St. Francis Xavier University, B.A., 1966; University of Hartford, M.Ed., 1970

LUTHER GERTRUDE E. (1974) Instructor in Nursing; Columbia University, B.S., 1959; Marquette University, M.S., 1964

MacDONALD, STEPHEN A. (1970) Assistant Professor of Mathematics and Computer Science; Gorham State College, B.S., 1963; University of Maine, M.A., 1964; Case Western Reserve University, Ph.D., 1972


MacLEAN, JEAN (1958) Professor of Nursing; Boston University, B.S., 1930; Yale University, B.N., 1933; University of Chicago, M.S., 1948; Yale University, M.A. (Hon.), 1954

1 on leave Fall Sem. 2 on leave Spring Sem. 3 on leave for Acad. Year

227
1974-75 listings as reported to Public Information on or before July 31, 1974

1 MacLEOD, WILLIAM JOHN (1969) Professor of Philosophy; Gordon College, Th.B., 1938; Boston University, A.M., 1940; Ph.D., 1948


McCASLIN, MILLARD P. (1968) Superintendent of Buildings and Grounds, Portland Campus

McGUIRE, RAYMOND G. (1973) Associate Professor of Law, School of Law; Canisius College, B.S., 1960; Harvard University, LL.B., 1964; Columbia University, LL.M., 1968

McKEL, RICHARD LLOYD (1966) Associate Professor of Associate Business and Economics and Chairman, Associate Program in Business Administration; University of Maine, B.A., 1959; M.A., 1965

McMAHON, ROBERT CHARLES (1969) Associate Professor of Economics; University of Washington, B.A., 1959; M.A., 1964; Lehigh University, Ph.D., 1970

MADER, SHIRLEY A. (1973) Counselor, Continuing Education Division; University of Maine, B.S., 1946; Boston University, M.A., 1948

MADDOX, RENA MARGARET (1967) Associate Professor of Nursing; Boston University, B.S., 1959; M.S., 1969

MAINVILLE, WALDECKER ERNEST, JR. (1965) Associate Professor of Mathematics and Computer Science and Assistant Dean, College of Arts and Sciences; University of Maine, B.S., 1960; Bowdoin College, A.M., 1964; Bowling Green State University, Sp.Ed., 1965; Michigan State University, Ph.D., 1972

MALIK, HASAN MUHAMMAD (1974) Associate Professor of Educational Psychology; University of Oregon, B.A., 1957; M.A., 1959; University of Oregon, Ph.D., 1973

MALMUD, ALICE PROBST (1972) Assistant Professor of Nursing; New York University, B.S., 1960; M.S., 1962

MANCK, WILLIAM J. (1970) Assistant Professor of Marketing; University of Maine, B.S., 1957; College of the City of New York, M.B.A., 1966

MANUEL, CHARLOTTE (1971) Instructor, Urban Adult Learning Center; University of Maine at Portland-Gorham, B.A., 1969

MARTIN, THOMAS ANDREW (1965) Assistant Professor of Physical Education; University of Maine, B.S., 1963; M.Ed., 1969

MASSEY, SARA R. (1973) Assistant Professor of Educational Psychology, Maine Teacher Corps; University of Colorado, B.S., 1960; University of Denver, M.A., 1968; University of Northern Colorado, Ed.D., 1973

MAZURKIEWICZ, MICHAEL, JR. (1969) Assistant Professor of Biology; Rutgers University, B.S., 1961; M.S., 1964; University of Connecticut, Ph.D., 1970

MENDELSON, JANE I. (1974) Instructor in Nursing; Cornell University, B.S., 1968; Columbia University, M.S., 1971

MENNINGER, HAROLD P. (1970) Associate Dean of Student Program Development and Assistant Professor of Education; University of Maryland, B.S., 1963; C.W. Post College (Long Island University), M.S., 1967; University of New Mexico, Ed.D., 1970

MILBURY, ALLEN W. (1963) Associate Professor of Education and Director of Educational Media Center; University of New Hampshire, B.S., 1960; Indiana University, M.S., Ed.D., 1969

MILLARD, RONALD W. (1973) Research Associate, Biochemical Research Laboratory; Tufts University, B.S., 1963; Boston University, Ph.D., 1969

MILLER, N. EDD (1973) President and Professor of Speech; University of Texas, B.S., 1939; M.A., 1940; University of Michigan, Ph.D., 1952

MILLER, ROBERT N. (1946) Associate Professor of Physical Science; Colby College, A.B., 1936

MILLIKEN, ROBERT ALSTON (1968) Instructor in English; University of Maine, B.A., 1964; M.A., 1965

1 On leave Fall Sem. 2 On leave Spring Sem. 3 On leave for Acad. Year
1974-75 listings as reported to Public Information on or before July 31, 1974

MINER, GALE P. (1960) Assistant Professor of Art; Columbia University, B.S., 1947; M.A., 1951; M.F.A., 1958

MIRTO, DOLORES A. (1974) Assistant Professor of English; Barnard College, B.A., 1963; Cornell University, M.A., 1965; Ph.D., 1973

MITCHELL, JOHN (1947) Professor of Industrial Arts and Chairman, Department of Industrial Education and Technology; Fitchburg State College, B.S., 1939; University of Minnesota, M.A., 1947; Pennsylvania State University, Ed.D., 1954

MONSEN, SVENNE HENRY (1969) Associate Professor of Sociology; Florida State University, B.A., 1957; University of California, Los Angeles, M.A., 1959; University of Texas, Ph.D., 1967

MOORE, DOROTHY DEAN (1968) Assistant Professor of Education; University of Maine, B.S., 1966; M.Ed., 1968


MORRILL, DAVID (1970) Associate Professor of Graphic Arts; Missouri State College, B.S., 1967; Texas A & M University, M.Ed., 1968; Ed.D., 1970

MORRIS, BARBARA W. (1973) Assistant Professor of Elementary Education; Bates College, A.B., 1942; Gorham State College, M.Ed., 1966; Boston University, C.A.G.S., 1972

MORTENSEN, WILLIAM G (1966) Director of Continuing Education and Public Service; University of Maine, B.S., 1961; M.S., 1966

MOTHERWELL, JULIE E. (1973) Coordinator of Student Activities and Student Union; St. Francis College, B.A., 1968; Ball State University, M.A., 1973


MULLEN, SISTER GERALDINE (1971) Project Director, Special Education Resource Teacher Team Project of the Continuing Education Division of UMPG; St. Joseph's College, B.S., 1963; Catholic University of America, M.A., 1969

MUNSEY, WILLIAM J. (1965) Director of Admissions; University of Maine, B.S., 1960; Boston University, M.Ed., 1964


MURPHY, THOMAS J., JR. (1972) Instructor, Urban Adult Learning Center; St. Francis Xavier University, B.A., 1969

NAJARIAN, HAIG HAGOP (1966) Professor of Biology and Chairman, Department of Biology; University of Massachusetts, B.S., 1948; Boston University, M.A., 1949; University of Michigan, Ph.D., 1953

NANNAY, ROBERT WILLIAM (1972) Assistant Professor of Industrial Arts; Trenton State College, B.A., 1964; M.A., 1967; University of Maryland, Ed.D., 1970

NELSON, CLIFFORD V. (1973) Research Associate, Biomedical Research Laboratory; Massachusetts Institute of Technology, B.S., 1942; University of London, Ph.D., 1953

NELSON, LEONARD M. (1962) Lecturer, School of Law; Harvard University, A.B., 1957; LL.B., 1960

NEUBERGER, HAROLD T. (1957) Professor of Science Education; Iowa-Wesleyan College, B.S., 1952; University of New Mexico, M.S., 1953; Boston University, Ed.D., 1964

NOVAK, IRWIN (1971) Assistant Professor of Geology; Hunter College, A.B., 1966; University of Florida, M.S., 1968; Cornell University, Ph.D., 1971

O'DONNELL, C. MICHAEL P. (1970) Associate Professor of Early Childhood Education; University of Maine, B.S., 1958; M.S., 1961; Syracuse University, Ed.D., 1968

O'NEIL, JAMES M. (1972) Director, School of General and Interdisciplinary Studies (SCOGIS); St. Louis University, B.A., 1968; Goddard University, M.A., 1974

O'REGAN, PATRICK (1970) Director, Urban Adult Learning Center; University of Maine at Portland, B.A., 1969

O'REILLY, CHARLES A. (1966) Assistant Professor of English; Colby College, B.A., 1949; Antioch-Putney Graduate School of Teacher Education, M.A., 1952

PADULA, ALFRED L. (1972) Assistant Professor of History; College of the Holy Cross, B.S., 1957; University of the Americas (Mexico City), M.A., 1961

1 on leave Fall Sem. 2 on leave Spring Sem. 3 on leave for Acad. Year

229
1974-75 listings as reported to Public Information on or before July 31, 1974

PAIGE, SYLVI A DRAKE (1970) Assistant Professor of Nursing; Marietta College, B.A., 1944; Yale School of Nursing, M.N., 1947

PARADISE, NOEL E. (1967) Professor of Psychology; University of Maryland, A.B., 1948; University of Michigan, Ph.D., 1960

PEASE, ALLE N GARDNER (1962) Associate Professor of Political Science; Colby College, A.B., 1950; Ohio State University, M.A., 1952

PEIRCE, JOHN ALDEN (1965) Associate Professor of Political Science and Chairman, Department of Political Science; University of Maine, B.S., 1962; University of Virginia, M.A., 1965; Ph.D., 1971

PENDLETON, JAMES W. (1967) Assistant Professor of Physical Science; Keene State College, B.Ed., 1959; Oregon State University, M.S., 1963

PENNOYER, DORIS (1971) Director, Family Nurse Associate Project; Smith College, B.A., 1950; Columbia University, M.D., 1954

PERRY, BETSY J. (1973) Instructor in Nursing; University of Michigan, B.S.N., 1969; M.S., 1972

PETERS, DORIS M. (1964) Registrar, School of Law

PETERSON, ANDREW J. (1971) Assistant Professor of Secondary Education; University of Maine, B.S., 1948; Boston University, Ed.M., 1960

PETRUCELLI, GERALD F., JR. (1968) Professor of Law, School of Law; Boston College, A.B., 1964; LL.B., 1967

PHILIPPI, HARLAN A (1972) Dean, School of Education and Professor of Education; University of Wisconsin, B.S., 1949; M.S., 1953; Northwestern University, Ph.D., 1962

PICKEL, MELVIN E. (1969) Associate Professor of Communication and Acting Chairman, Department of Communication; Pepperdine College, B.A., 1958; M.A., 1962

PINE, MARY A. (1974) Assistant Professor of Elementary Education and Early Childhood Specialist; Boston University, Ed.B., 1952; Ed.M., 1955

PITKIN, RHODA A. (1974) Instructor in Nursing; University of Vermont, B.S., 1956; Boston University, M.S., 1974

PLOWMAN, E. GROSVENOR Lecturer in Business Administration; Dartmouth, B.S., 1921; University of Denver, M.S., 1936; University of Chicago, Ph.D., 1937; University of Maine, Sc.D., (Hon.), 1971


POTTER, JUDY R. (1972) Associate Professor of Law, School of Law, and Director, Clinical Practice Program; Cornell University, B.A., 1960; University of Michigan Law School, J.D., 1967

POULOS RICHARD E. (1962) Lecturer, School of Law; Bowdoin College, A.B., 1948; Harvard University, LL.B., 1951

POWER, THOMAS AMBLER (1966) Assistant Professor of Theatre; University of Maine, B.S. in Ed., 1964; M.A., 1968

PRANGER, EUGENE (1973) Assistant to Director of the Center for Research and Advanced Study; Indiana University, B.S., 1971


PRUNTY, BERT S., JR. (1973) Dean, School of Law and Professor, School of Law; Drake University, B.A., 1948; Drake University Law School, J.D., 1950


QUINN, HORATIO (1973) Chief, Department of Police and Security; University of Maine at Augusta, A.S., 1973

RACKO VAN, LAWRENCE FRANCIS (1967) Assistant Professor of Art; Wayne State University, B.S., 1967; Rhode Island School of Design, M.A., 1969


REUTER, JOHN E. (1949) Associate Professor of English; University of New Hampshire, A.B., 1958; University of Rochester, M.A., 1963; Ph.D., 1968

RHOADES, ROGER HANSON (1964) Professor of Education; Colby College, B.A., 1935; University of Michigan, M.A., 1938; University of Colorado, Ph.D., 1961

RICIPUTI, REMO H. (1965) Associate Professor of Biology; University of New Hampshire, B.A., 1954; M.S., 1958

ROBERTS, JAMES WESTON (1967) Associate Professor of Political Science; San Diego State College, B.A., 1954; University of North Carolina, Ph.D., 1973

ROCHE, MILDRED (1971) Nursing Director, Family Nurse Associate Project; University of Vermont, B.S., 1951; Catholic University of America, M.S.N., 1966
1974-75 listings as reported to Public Information on or before July 31, 1974

RODGERS, MARJORIE J. (1970) Assistant Director of Admissions; University of Massachusetts, B.S., 1966

ROGERS, ALVIN D. (1952) Editor of Publications; Gordon College, Th.B., 1935

ROGERS, PAUL CARNEY (1965) Professor of Mathematics and Computer Science; College of the Holy Cross, B.S.N., 1945; Boston University, M.A., 1948

ROGOFF, MARTIN A. (1972) Associate Professor of Law, School of Law; Cornell University, B.A., 1962; University of California, Berkeley, M.A., 1963; Yale Law, LL.B., 1966

ROLFE, FREDERICK B. (1966) Assistant Professor of French and Chairman, Department of Foreign Languages and Classics; Bowdoin College, A.B., 1946; Middlebury College, A.M., 1948

ROMANYSHYN, JOHN MIKE (1946-1950; 1953) Margaret Payson Professor of Social Welfare and Chairman, Department of Social Welfare; University of Oklahoma, B.A., 1942; University of Chicago, M.A., 1952

ROOTES, MINOR R. (1966) Associate Professor of Theatre; University of California, Santa Barbara, A.B., 1954; San Francisco State College, M.A., 1961

ROSCOE, MARJORIE MARY (1966) Associate Professor of Nursing and Chairman, Department of Community Nursing; Simmons College, B.S. in P.H.N., 1950; University of Michigan, M.P.H., 1959

ROTHENBERG, CHRISTINE M. (1971) Information Specialist; College of Wooster, B.A., 1966; Columbia University, M.A., 1967


SALDANHA, ESTELITA LONGUINHOS (1966) Professor of Psychology and Chairman, Department of Psychology; University of Lisbon, B.A., 1943; University of Nebraska, B.S., 1946; M.A., 1947; Cornell University, Ph.D., 1950

SALMON, EDWARD I. (1966) Director of Engineering and Planning; University of Maine, B.S., 1956

SANBORN, JANE OBERHOLTZER (1961) Associate Professor of Psychology; Wilson College, A.B., 1942; University of California, Los Angeles, Ed.D., 1961

SAYTELLE, GWEN D. (1938-43; 1953) Associate Professor of Art; University of Minnesota, B.S., 1935; George Peabody College for Teachers, M.A., 1939

SCHWANAUER, FRANCIS (1962) Professor of Philosophy; University of Stuttgart and Tubingen, Dr., 1959


SCHWINCK, LOTTE (1969) Associate Professor of Biology; University of Tubingen, Dr. rer. nat., 1956

SELKIN, MICHAEL (1970) Assistant Professor of English; Columbia College, A.B., 1961; Cornell University, M.A., 1963

SCHWANAUER, FRANCIS (1962) Professor of Philosophy; University of Stuttgart and Tubingen, Ph.D., 1959


SCHWINCK, LOTTE (1969) Associate Professor of Biology; University of Tubingen, Dr. rer. nat., 1956

1on leave Fall Sem. 2on leave Spring Sem. 3on leave for Acad. Year

1on leave Fall Sem. 2on leave Spring Sem. 3on leave for Acad. Year

231
<table>
<thead>
<tr>
<th>Name</th>
<th>Title and Years</th>
<th>Education</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Slocum, Lloyd V. (1966)</td>
<td>Associate Professor of Electronics</td>
<td>Pennsylvania State University, B.S., 1955; M.S., 1957</td>
<td></td>
</tr>
<tr>
<td>Small, William Ullrich (1967)</td>
<td>Associate Director of Continuing Education and Summer Session</td>
<td>Bowdoin College, B.S., 1949; Columbia University, M.B.A., 1951</td>
<td></td>
</tr>
<tr>
<td>Smith, Alan Guy (1967)</td>
<td>Professor of Chemistry</td>
<td>Mount Allison University (New Brunswick), B.S., 1949; University of New Brunswick, M.S., 1951; University of Maine, Ph.D., 1966</td>
<td></td>
</tr>
<tr>
<td>Smith, Charles F. (1969)</td>
<td>Associate Professor of Education; Coordinator of Research and Development for the School of Education</td>
<td>Westfield State College, B.S., 1960; University of Massachusetts, M.S., 1963; Ed.D., 1969</td>
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<tr>
<td>Smith, Halsey (1972)</td>
<td>Director of Research and Advanced Study</td>
<td>Princeton University, A.B., 1943; University of Maine in Portland, LL.D., (Hon.), 1962</td>
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<tr>
<td>Smith, Mary Angela (1969)</td>
<td>Circulation Associate</td>
<td>University of Maine in Portland, B.S., 1968</td>
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<tr>
<td>Snow, Roger V., Jr. (1967)</td>
<td>Director of Public Information</td>
<td>Williams College, B.A., 1940</td>
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<tr>
<td>Solotaire, Patricia (1973)</td>
<td>Administrative Director, Allagash Environmental Institute</td>
<td>Bard College, B.A., 1953; New York University, M.A., 1965</td>
<td></td>
</tr>
<tr>
<td>Sotterry, Theodore Walter (1956)</td>
<td>Professor of Chemistry</td>
<td>Dartmouth, B.N.S., 1946; University of Maine, M.S., 1966; Ph.D., 1966</td>
<td></td>
</tr>
<tr>
<td>Soule, William Hilton (1965)</td>
<td>Professor of Education and Director of Student Teaching, Secondary Education</td>
<td>Bowdoin College, A.B., 1936; Bates College, M.Ed., 1941; Boston University, Ed.D., 1967</td>
<td></td>
</tr>
<tr>
<td>Southworth, Robert S. (1963)</td>
<td>Professor of Educational Psychology</td>
<td>Boston University, B.A., 1951; Ed.M., 1958; Ed.D., 1965</td>
<td></td>
</tr>
<tr>
<td>Soychak, Anthony G. (1965)</td>
<td>Assistant Professor of Mathematics and Computer Science</td>
<td>University of Maine, B.S., 1959; Bowdoin College, M.A., 1963</td>
<td></td>
</tr>
<tr>
<td>Spanogle, John A., Jr. (1964)</td>
<td>Professor of Law, School of Law</td>
<td>Princeton University, B.S.E., 1957; University of Chicago, J.D., 1960</td>
<td></td>
</tr>
<tr>
<td>Stearns, Gene F. (1972)</td>
<td>Professor of Education and Director of Student Teaching, Elementary Education; Plymouth State College, B.Ed., 1962; University of New Hampshire, M.Ed., 1968; Ball State University, Ed.D., 1970</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steen, William Paul (1967)</td>
<td>Assistant Professor of Theatre and Chairman, Department of Theatre</td>
<td>University of Maine, B.S., in Ed., 1964; M.A., 1967</td>
<td></td>
</tr>
<tr>
<td>Steinman, Richard (1966)</td>
<td>Associate Professor of Social Welfare</td>
<td>University of Missouri, B.A., 1949; Columbia University, M.S., 1952; Brandeis University, Ph.D., 1968</td>
<td></td>
</tr>
<tr>
<td>Stone, Judith Thelma (1968)</td>
<td>Associate Professor of Nursing and Chairman, Department of Advanced Medical-Surgical Nursing</td>
<td>University of Maine, B.S., 1964; University of Pennsylvania, M.S.N., 1966</td>
<td></td>
</tr>
<tr>
<td>Sturgeon, Richard Howard (1962)</td>
<td>Associate Professor of Education and Assistant Director of Associate Degree Studies</td>
<td>University of Maine, B.S., 1960; M.Ed., 1966</td>
<td></td>
</tr>
<tr>
<td>Sullivan, David T. (1972)</td>
<td>Registrar</td>
<td>Tufts University, B.A., 1966</td>
<td></td>
</tr>
<tr>
<td>Sullivan, James Vincent (1959)</td>
<td>Professor of Physical Education and Chairman, Department of Physical Education</td>
<td>University of Maine, B.S., in Ed., 1951; University of Delaware, M.Ed., 1954; Boston University, Ed.D., 1971</td>
<td></td>
</tr>
<tr>
<td>Sytsma, Donald (1972)</td>
<td>Assistant Professor of Psychology</td>
<td>Arizona State University, B.A., 1965; University of Waterloo, Ph.D., 1971</td>
<td></td>
</tr>
<tr>
<td>Talbot, Franklin (1963)</td>
<td>Head Cataloger and Associate Professor of Library Service</td>
<td>University of Maine, B.A., 1946; Columbia University, M.S., 1949</td>
<td></td>
</tr>
<tr>
<td>Talbot, Jeanne Georghianna (1968)</td>
<td>Associate Professor of Nursing and Chairman, Department of Medical-Surgical Nursing</td>
<td>Boston College, B.S., 1964; M.S., 1967</td>
<td></td>
</tr>
<tr>
<td>Tatro, Suzanne E. (1972)</td>
<td>Instructor in Nursing</td>
<td>D'Youville College, B.S., 1968; University of Rochester, M.S., 1972</td>
<td></td>
</tr>
<tr>
<td>Tiedemann, Janet B. (1974)</td>
<td>Instructor in Nursing</td>
<td>Skidmore, B.S., 1956; Boston University, M.S., 1974</td>
<td></td>
</tr>
<tr>
<td>Tizon, Judith (1972)</td>
<td>Assistant Professor of Anthropology</td>
<td>University of Illinois, B.A., 1965; University of California, M.A., 1969</td>
<td></td>
</tr>
</tbody>
</table>
TRYON, PHYLLIS ARLEEN (1965) Associate Professor of Nursing and Chairman, Department of Maternal and Child Health Nursing; Boston University, B.S., 1958; Yale University, M.S.N., and C.N.M., 1962

TUKEY, GERALDINE M. (1970) Assistant Professor of Nursing; Mercy College of Detroit, B.S., 1957; Boston University, M.S., 1964

UBANS, JURIS K. (1968) Associate Professor of Art and Chairman, Department of Art; Director, Art Gallery; Syracuse University, B.F.A., 1966; Pennsylvania State University, M.F.A., 1968

UBANS, MARA (1970) Assistant Professor of German; Indiana University, A.B., 1960; University of Southern California, M.A., 1962

UPTHEGROVE, H. NELSON (1974) Senior Researcher, Center for Research and Advanced Study; California Institute of Technology, Ph.D., 1954

VAN AMBURG, GEORGE EDWARD (1960) Student Adviser; Portland University, B.S., 1956

VAN HAM, GLORIA (1972) Coordinator of Alumni Activities; Lassell Junior College, A.S., 1944; Boston University, B.S., 1946

VENTRESCO, FIORELLO B. (1966) Assistant Professor of History; Boston University, A.B., 1959; University of Michigan, M.A., 1961

VINCENT, STANLEY J. (1959) Assistant Professor of English; Boston University, B.A., 1949; Columbia University Teachers College, M.A., 1950


WALKER, PAUL R. (1970) Associate Professor of Reading and Acting Director, Secondary Education Department, and Director, Maine Teacher's Corps; Boston College, A.B., 1960; Gorham State College, M.S. in Ed., 1967; University of Maine, Ed.D., 1970

WALKLING, ROBERT A. (1969) Associate Professor of Physics; Swarthmore College, B.A., 1953; Harvard University, M.S., 1954; Ph.D., 1962


WEEKS, ERNEST E. (1967) Professor of English; Bowdoin College, A.B., 1939; Tufts University, M.A., 1949; Columbia University, Ph.D., 1965

WHITING, WILLIAM LAWRENCE (1947) Associate Professor of Communication and Coordinator of Administrative Affairs; University of Maine, B.A., 1937; Bates College, M.Ed., 1948; Northwestern University, M.A., 1954

WHITMORE, ALLAN RICHARD (1969) Associate Professor of History; University of Maine, B.A., 1962; Northwestern University, M.A., 1964; Ph.D., 1970

WHITTON, JAMES M. (1951) Associate Professor of Philosophy of Education and Chairman, Department of Foundations; Colby College, A.B., 1944; University of Maine, A.M., 1955

WHITTON, MAURICE M. (1955) Professor of Physical Science; Colby College, A.B., 1945; Columbia University, M.A., 1949; Ohio State University, Ph.D., 1971

WILLARD, NANCY LEE (1969) Assistant Professor of Physical Education; Russell Sage College, B.S., 1958; State University College, Plattsburg, N.Y., M.S., 1967

WILSON, NEVILLE (1968) Assistant Professor of English; Tufts University, B.A., 1965

WISE, WILLIAM B. (1966) Assistant to the President for Academic Affairs; University of Maine, B.S., 1961; University of Maine at Orono, M.Ed., 1971

WITHERILL, ROBERT D. (1966) Associate Professor of Economics; Colby College, A.B., 1947; University of Maine, M.A., 1953; M.Ed., 1962

WOLF, BARBARA BUCKLEY (1969) Assistant Professor of English; Grinnell College, B.A., 1946; State University of New York (Albany), M.A., 1967

WOHSINSKY, OLIVER H. (1971) Assistant Professor of Political Science; Oberlin College, B.A., 1961; Yale University, M.A., 1967; M.Phil., 1968; Ph.D., 1971

WROTH, L. KINVIN (1964) Professor of Law, School of Law; Yale University, A.B., 1954; Harvard University, LL.B., 1960


YORK, ROBERT M. (1962) Dean of Graduate Studies and Professor of History; Bates College, A.B., 1937; Clark University, M.A., 1938; Ph.D., 1941

YOUNG, ANNE P. (1965) Professor of History; Boston University, B.S., 1943; M.A., 1944; University of Chicago, Ph.D., 1951

YOUNG, ROSALIE M. (1968) Information Specialist; University of Maine in Portland, B.A., 1968

ZARR, MELVYN (1973) Associate Professor of Law, School of Law; Clark University, A.B., 1958; Harvard University, LL.B., 1963

ZANER, JOHN A. (1974) Assistant Professor of Wood Technology; Millersville State College, B.S., 1969; M.Ed., 1972

1on leave Fall Sem. 2on leave Spring Sem. 3on leave for Acad. Year
1. Law School and Center for Research and Advanced Study
2. Back Cove Farm House (Alumni House)
3. Payson Smith Hall
4. Bookstore
5. Science Building
6. Physical Education Building
7. Luther Bonney Hall & Library
8. Student Union Buildings
9 & 94 Bedford Street
9. Offices, 7 Chamberlain Avenue
10. Cooperative Extension Service
15. Chamberlain Avenue
11. Public Information and Offices
120 Bedford Street
12. 209 Deering Avenue
13. Offices, 3 Washburn Avenue
14. Offices, 25 Washburn Avenue
15. Offices, 38 Chamberlain Avenue
16. Offices, 11 Granite Street
17. Chancellor's Office
228 Deering Avenue
18. Offices, 39 Exeter Street
19. Offices, 45 Exeter Street
20. Offices, 55 Exeter Street
21. Offices, 59 Exeter Street
22. Offices, 63 Exeter Street
24. Central Heating Plant
NOTE: Small circles within dotted house-lot lines indicate houses or other buildings not owned by the University at the time this map was printed.
STUDENT PARKING LOTS

*indicates student parking lots, which are outlined by heavy borders on this map. From left to right, these are:

IE — Industrial Education Center
BN — Bailey Hall North
HG — Hill Gymnasium (outlined areas only)
AH — Anderson Hall
WH — Woodward Hall
UH — Upton Hall
HH — Hastings Hall
MH — McLellan House
SS — School Street

After 4:00 p.m., students may park in the southern half of the BS faculty parking lot or the RH faculty-staff parking lot. These lots must be restricted at other hours.

Lightly outlined parking areas coded RH and CH are for faculty and staff only; the BS area is for faculty only. Small areas restricted to faculty-staff parking are also provided close to the gymnasium, the Industrial Education building, and the Art Building.

Ten-minute parking for visitors is provided west of Corthell (WC), west of the Hill Gymnasium, near the entrance of the Bailey Library, and by the tennis courts.

Buildings:

1. Bailey Hall — Science Wing
2. Bailey Hall — Library Wing
3. Bailey Hall — Classroom Wing
4. Warren G. Hill Gymnasium
5. Anderson Hall
6. Woodward Hall
7. Russell Hall
8. Corthell Hall
9. President's Residence
10. All Faith Chapel — Art Gallery
11. Upton Hall
12. Hastings Hall
13. Robie Hall
14. Andrews Hall
15. Maintenance Building
16. Art Building (Academy)
17-18. Tennis Courts
19. Water Tower
20. Athletic Field
21. Industrial Education Center
22. McLellan House
23. Student Center — Dining Center
24. Dickey and Wood Towers
25. Heating and Sewage Plants
Index

A

Academic Policies ........................................... 31-36
Add-Drop ................................................. 33
Attendance .................................................. 31
Change of Major ........................................... 36
Class Standing ............................................. 34
Examinations .............................................. 31
Grading System ............................................ 32
Graduation Requirements .................................. 34
Probation ................................................... 33
Suspension ................................................... 33
Withdrawal from University ................................. 34

Accounting courses ........................................ 156, 158-159, 164
Activities, student .......................................... 24-25
Add-drop procedure .......................................... 33
Administration, officers of ................................. 5-8
Admission, Continuing Education Division ............. 209
Admission, Graduate Studies ................................ 201
Admission, School of Law ................................... 207
Admission, undergraduate .................................. 10-17
Adult Learning Center ....................................... 212
Advanced placement ........................................ 16
Advanced Study Center ..................................... 209
Advertising course .......................................... 160
Aesthetics course ........................................... 109
African History courses ..................................... 90
Anatomy courses ............................................ 51
Anthropology courses ........................................ 81-82

Applied Courses in the Arts
  Art .................................................... 45-47
  Music ................................................ 105-107
  Theatre ............................................... 144-145
Art Appreciation courses .................................. 44-45
Art courses ................................................ 44-48
Art Education courses ...................................... 48
Art Department ............................................. 42-48
Art Major Admission ........................................ 15
Art History courses ........................................ 44-45
Art shows and lectures ...................................... 28
Art Studio courses .......................................... 45-47
Associate Degree Programs ................................ 10, 147-148, 214
Astronomy courses .......................................... 116
Athletics ..................................................... 30

Automobile regulations ...................................... 27

B

Band .......................................................... 103
Bassoon instructor ........................................... 99
Biochemistry course ......................................... 118
Biological Science courses ................................. 51-53
Biology Department .......................................... 49-53
Black Studies courses ........................................ 89
Board of Trustees ........................................... 5
Botany courses ............................................... 52
Buildings, history and descriptions ........................ 216-219
Buildings, map locations .................................... 234-235
Business Administration courses
  in the four-year baccalaureate program .................. 158-161
Business Administration courses
  in the two-year associate program ........................ 156-158
Business Administration courses
  in the graduate M.B.A. program ........................... 163-164
BUSINESS AND ECONOMICS,
  SCHOOL OF ................................................. 146-164
Business Data Processing courses .......................... 160
Business Economics courses ................................. 161-162
Business Management
  Certificate program ........................................ 210
Bus service between campuses ............................... 9

C

Calculus courses ............................................. 95-96
Calendar of Academic Year
  1974-75 and 1975-76 ..................................... 2
Career Planning and Placement ............................ 26
Center for Advanced Research and Study ................... 209

Ceramic courses ............................................. 45
Certificate for teachers ..................................... 165
Certificate in Athletic Coaching ........................... 196
Chancellor and Chancellor's Office .......................... 215
Change of Major, College, or School ........................ 36
Chemistry courses ......................................... 117-118
<table>
<thead>
<tr>
<th>Course Category</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Development courses</td>
<td>178</td>
</tr>
<tr>
<td>Chorus courses</td>
<td>103-104</td>
</tr>
<tr>
<td>Clarinet instructor</td>
<td>99</td>
</tr>
<tr>
<td>Classics courses</td>
<td>72</td>
</tr>
<tr>
<td>Clubs and organizations</td>
<td>24-25</td>
</tr>
<tr>
<td>COLLEGE OF ARTS AND SCIENCES</td>
<td>37-145</td>
</tr>
<tr>
<td>Communication Courses</td>
<td>55-56</td>
</tr>
<tr>
<td>Communication Department</td>
<td>54-56</td>
</tr>
<tr>
<td>Comparative Literature courses</td>
<td>64-65</td>
</tr>
<tr>
<td>Computer and Data Processing courses</td>
<td>94</td>
</tr>
<tr>
<td>Computer Technology course</td>
<td>182</td>
</tr>
<tr>
<td>Congressional Internship course</td>
<td>129</td>
</tr>
<tr>
<td>Conservation course</td>
<td>119</td>
</tr>
<tr>
<td>Continuing Education Division</td>
<td>209-212</td>
</tr>
<tr>
<td>Cooperative Education</td>
<td>149, 213</td>
</tr>
<tr>
<td>Cooperative Extension Service</td>
<td>215</td>
</tr>
<tr>
<td>Counseling and psychological services</td>
<td>26-27</td>
</tr>
<tr>
<td>Criminal Justice courses</td>
<td>58-59</td>
</tr>
<tr>
<td>Criminal Justice program sequences</td>
<td>57-58</td>
</tr>
<tr>
<td>Dance courses</td>
<td>60</td>
</tr>
<tr>
<td>Data Processing and Computer courses</td>
<td>94</td>
</tr>
<tr>
<td>Dean's List</td>
<td>32</td>
</tr>
<tr>
<td>Debate courses</td>
<td>55</td>
</tr>
<tr>
<td>Deferred Degree Program</td>
<td>209</td>
</tr>
<tr>
<td>Degrees: Summary of undergraduate majors</td>
<td>10-11</td>
</tr>
<tr>
<td>(Details under respective schools, colleges, and departments)</td>
<td></td>
</tr>
<tr>
<td>Departments, Officers of</td>
<td>7</td>
</tr>
<tr>
<td>Deposits</td>
<td>19</td>
</tr>
<tr>
<td>Dormitories, general and costs</td>
<td>18-20</td>
</tr>
<tr>
<td>Dormitories, map locations</td>
<td>235</td>
</tr>
<tr>
<td>Drafting (engineering) courses</td>
<td>120</td>
</tr>
<tr>
<td>Drafting (industrial arts) courses</td>
<td>183</td>
</tr>
<tr>
<td>Dramatics courses</td>
<td>144-145</td>
</tr>
<tr>
<td>Dramatics, student performances</td>
<td>29</td>
</tr>
<tr>
<td>Drawing courses</td>
<td>45-47</td>
</tr>
<tr>
<td>(Art Department)</td>
<td></td>
</tr>
<tr>
<td>Drawing courses</td>
<td>183</td>
</tr>
<tr>
<td>(Industrial Arts)</td>
<td></td>
</tr>
<tr>
<td>Dropping courses</td>
<td>33</td>
</tr>
<tr>
<td>Earth Science courses</td>
<td>119</td>
</tr>
<tr>
<td>Ecology courses</td>
<td>119</td>
</tr>
<tr>
<td>Economics, Managerial (graduate course)</td>
<td>164</td>
</tr>
<tr>
<td>Economics courses (undergraduate)</td>
<td>161-162</td>
</tr>
<tr>
<td>Economics Department</td>
<td>146, 151-152</td>
</tr>
<tr>
<td>Economics majors (CLA and SBE)</td>
<td>60, 151-152</td>
</tr>
<tr>
<td>Education: Art Education courses</td>
<td>48</td>
</tr>
<tr>
<td>Education: Art Education curriculum</td>
<td>43</td>
</tr>
<tr>
<td>Education: Departmental Organization</td>
<td>165</td>
</tr>
<tr>
<td>Education: Elementary and Kindergarten-Primary courses</td>
<td>173-178</td>
</tr>
<tr>
<td>Education: Elementary and Kindergarten-Primary curriculum</td>
<td>167-172</td>
</tr>
<tr>
<td>Education: Industrial Arts courses</td>
<td>182-185</td>
</tr>
<tr>
<td>Education: Industrial Arts Department</td>
<td>179-185</td>
</tr>
<tr>
<td>Education: Music Education courses</td>
<td>107</td>
</tr>
<tr>
<td>Education: Music Education curriculum</td>
<td>100-103</td>
</tr>
<tr>
<td>EDUCATION, SCHOOL OF</td>
<td>165-188</td>
</tr>
<tr>
<td>Education: Secondary courses</td>
<td>173-178</td>
</tr>
<tr>
<td>Education: Secondary Programs</td>
<td>172-173</td>
</tr>
<tr>
<td>Education: Vocational Technical courses</td>
<td>187-188</td>
</tr>
<tr>
<td>Education: Vocational Technical Program</td>
<td>186-188</td>
</tr>
<tr>
<td>Educational Psychology courses</td>
<td>132-133, 177-178</td>
</tr>
<tr>
<td>Electrical Engineering courses</td>
<td>121</td>
</tr>
<tr>
<td>Electronics Technology courses</td>
<td>182</td>
</tr>
<tr>
<td>Embryology course</td>
<td>51</td>
</tr>
<tr>
<td>Emeriti</td>
<td>220</td>
</tr>
<tr>
<td>Energy and Transportation courses</td>
<td>182-183</td>
</tr>
<tr>
<td>Engineering courses</td>
<td>120-121</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>237</td>
</tr>
</tbody>
</table>
English Courses

Introductory courses ........................................ 62
Writing courses ........................................ 62
Criticism courses ........................................ 62-63
Linguistics and related courses ........................................ 63
Non-required Major Credit courses ........................................ 64-65
English Literature courses ........................................ 65-67
American Literature courses ........................................ 67-68
Modern Literature courses ........................................ 68-69
Experimental courses ........................................ 69
English Department ........................................ 61-69
Entrance Examinations ........................................ 12-15
Environmental courses ........................................ 119
Examination Policy ........................................ 31
Existentialism course ........................................ 110
Expenses ........................................ 18

F

Faculty ........................................ 220-223
Fees ........................................ 18-20
Finance courses ........................................ 156, 158-159, 164
Financial Aid and Scholarships ........................................ 22-23
Financial Information ........................................ 18-20
Financial Management courses (graduate) ........................................ 164
Fine and Applied Arts Area ........................................ 40
Flute instructor ........................................ 99
Foreign Language Education course ........................................ 75
Foreign Language and Classics courses ........................................ 71-76
Foreign Language and Classics Department ........................................ 70-76
Foreign students ........................................ 15, 27
Fraternities ........................................ 25
Free-hand drawing courses ........................................ 45-47
French courses ........................................ 73-75
French Horn instructor ........................................ 99
French literature in English translation (courses) ........................................ 72
French teaching methods course ........................................ 75

G

GENERAL AND INTERDISCIPLINARY STUDIES, SCHOOL OF ........................................ 189-190
General Education Requirements ........................................ 40
General Engineering courses ........................................ 120-121

General information
(University) ........................................ 9, 216-219
Goegraphy-Anthropology Department ........................................ 77-83
Geography courses ........................................ 82-83
Geology courses ........................................ 122
German courses ........................................ 75-76
Government courses (Political Science) ........................................ 126-127
Grading system ........................................ 32
Graduate Studies ........................................ 163-164, 201-206
Graduation requirements ........................................ 34-35
Graphic Communication courses ........................................ 183-184
Greek courses ........................................ 72
Greek literature in translation courses ........................................ 71
Guidance services for students ........................................ 26-27

H

Heads of Departments ........................................ 7
Health Services ........................................ 26
Histology course ........................................ 52
History courses ........................................ 85-91
History Department ........................................ 84-91
History of development of UMPG ........................................ 216-219
Honor societies ........................................ 25
Honors Program (Departmental) ........................................ 41
Humanities Area ........................................ 40

I

Ichthyology courses ........................................ 52-53
Industrial Arts Admission ........................................ 15
Industrial Arts courses ........................................ 182-185
Industrial Arts Department ........................................ 179-185
Industrial Arts Education courses ........................................ 185
Industrial Education Program, Vocational ........................................ 186-188
Instructional Television ........................................ 215
Instrumental Music courses ........................................ 105-107
Insurance for students ........................................ 18, 26
Intercampus Bus Service ........................................ 9
Interdisciplinary Studies ........................................ 189-190
International Affairs courses ........................................ 86, 129

L

Languages ........................................ 70-76
Language Laboratory ........................................ 70
Latin courses ........................................ 72-73
Latin literature in English ......................................... 71
Law Review ..................................................... 207
LAW, SCHOOL OF .............................................. 207-208
Libraries ........................................................... 30
Limnology courses .................................................. 52
Linguistics courses ................................................ 63
Literature courses .................................................... 62-69
Loan Funds .......................................................... 23

M
Machinery courses ................................................. 184
Maine History course ............................................. 89
Major Undergraduate Programs .................................. 10-11
Manufacturing and Construction courses ...................... 184-185
Marketing courses .................................................. 157, 159-160, 164
Master’s Degree Programs ........................................ 163-164, 201-206
Mathematics and Computer Science courses ................. 94-98
Mathematics and Computer Science Department ............. 92-98
Mathematics Education courses .................................. 98
Matriculation Fee ..................................................... 18
Metallurgy courses ................................................ 185
Meteorology courses ............................................... 119
Microbiology course ............................................... 52
Mineralogy courses ................................................. 122
Modern Language courses ....................................... 73-76
Modern Society courses ......................................... 138-141
Motor Vehicle Regulations ....................................... 27
Music courses ..................................................... 103-107
Music Department .................................................. 99-107
Music Education courses ........................................ 107
Musical organizations ............................................. 24, 103-104
Music Major Admission .......................................... 15

N
Natural Resource Management courses ...................... 119
Nurses’ Continuing Education ..................................... 194
Nursing courses .................................................... 193
NURSING, SCHOOL OF ......................................... 191-194

O
Oboe instructor ..................................................... 99
Oceanography courses ............................................ 119
Orchestra ............................................................. 103
Orchestration course ............................................... 105
Organ instructor ..................................................... 99
Organic Chemistry courses ....................................... 118
Organizations for students ....................................... 24-25
Ornithology course ............................................... 52

P
Painting courses ................................................... 46-47
Parasitology courses ............................................... 52
Part-time work for students ..................................... 23
Payment of bills ..................................................... 19
Personnel ............................................................ 220-233
Philosophy courses ................................................. 108-110
Philosophy Department .......................................... 108-110
Photographic technique courses ............................... 46-47, 177, 184
PHYSICAL EDUCATION AND INTERCOLLEGIATE ATHLETICS,
DIVISION OF ..................................................... 195-200
Physical Education courses ..................................... 195-200
Physical Education Requirements ................................ 166, 192
Physical Sciences and Engineering Department ............ 111-125
Physical Science courses (not including Physics or Earth Science) ........................................ 123
Physics courses ................................................... 124-125
Physiology courses ................................................ 51
Piano courses ....................................................... 103
Piano instructors ................................................... 99
Placement Operation ................................................ 26
Planetarium .......................................................... 29
Play Production courses .......................................... 145
Political Science courses ........................................ 126-130
Political Science Department ..................................... 126-130
Practicing Secretaries Certificate Program ..................... 211
Probation ............................................................. 33
Professional courses in Physical Education .................... 196-200
Psychology courses (including Educational Psychology) ........ 131-134, 177-178
Psychology Department .......................................... 131-134
Public Services ..................................................... 212
Public Speaking courses .......................................... 144
Publications, student ............................................... 24
Publications, University .......................................... 6

R
Ranking system ..................................................... 33
Refunds ............................................................. 19-20
Registration ........................................................ 18
Regulations for students ......................................... 27
Religious Organizations .......................................... 24
Requirements for admission ...................................... 10-16

239
Requirements for graduation .......... 34
Research Center .................................. 209
Residence and dining
    halls ........................................... 25-26
Residence in the State defined .......... 21
Residence requirements for
degrees ........................................... 39
Retailing course .................................. 157
Rhetorical Theory course ...................... 56
Romance Language courses ................. 73-76
Room and Board .................................. 18-19
Rural Sociology course ......................... 140

S
Saxophone instructors ......................... 99
Scholarships .................................... 22-23
Scholastic Aptitude and
    Achievement Tests ............................ 12-13
Scholastic Honor Societies .................... 25
SCHOOL OF BUSINESS AND
    ECONOMICS .................................... 146-164
SCHOOL OF EDUCATION ......................... 165-188
SCHOOL OF GENERAL AND
    INTERDISCIPLINARY STUDIES
        (SCOGIS) ................................... 190-191
SCHOOL OF LAW .................................. 207-208
SCHOOL OF NURSING ............................ 191-194
Science and Mathematics Area .............. 40
Sculpture courses ............................... 46-47
Semantics courses ............................... 63
Social Sciences Area ........................... 40
Social Welfare courses .......................... 135-137
Social Welfare Department ..................... 135-137
Sociology courses ............................... 135-137
Sociology Department ............................ 135-137
Sororities ....................................... 24
Southworth Planetarium ......................... 29
Spanish courses .................................. 76
Speech courses ................................... 55-56
Student activities .............................. 24-25
Student Aid ...................................... 24-25
Student Center ................................... 25
Student employment ............................. 23
Student expenses ............................... 18-19
Student Handbook ............................... 25
Student Life and Services ..................... 24-27
Student organizations ......................... 24-27
Student publications ............................ 24
Student religious organizations ............. 24
Student Teaching courses ...................... 75, 176-177
Student Union ................................... 25
Student volunteer services ..................... 25
Summer Sessions ............................... 211
Supervised Teaching
    courses ................................... 75, 176-177
Suspension ....................................... 33

T
Teachers Certificate ............................ 165
Technological courses ......................... 182-185
Tests, advanced placement ..................... 16-17
Tests, aptitude and
    achievement ................................... 12-13
Theatre courses .................................. 144-145
Theatre Department ............................. 142-145
Transfer credits and students ............... 16
Trigonometry courses ........................... 94
Trombone instructor ............................ 99
Trumpet instructors ............................. 99
Trustees, Board of ............................. 5
Tuition charges ................................. 18
Two-year Associate of Science
    Program in Business Administration ........ 10, 150-151

U
Upperclass membership ........................... 34
Urban Adult Learning Center ................... 212
Urban Sociology courses ....................... 140

V
Violin instructor ................................ 99
Vocal music courses ............................. 103-105
Vocational Technical Education
    courses .................................... 187-188
Vocational Technical
    Education program ........................... 186-188
Voice Instructors ................................ 99

W
Withdrawal ...................................... 33
Women’s athletics and
    recreation .................................... 30
Work-Study Program ............................. 23

Z
Zoology courses ................................... 51