PART IV

School of Arts & Science

Dean: Joseph B. Spulnik, Ph.D.
Associate Dean: William E. Shankweiler, Ph.D.

PHILOSOPHY

The School believes that the purpose of men's lives is to know, to search, and to achieve, and that knowledge is necessary to the good life of free men. The School, therefore, provides an opportunity for each student to share in the accumulated experience of men of all times and places, hoping not only to lead each student to basic knowledge of the matter traditional to the School's major divisions of study, but also to stimulate students to exercise their own powers to range beyond the known — to dream a better possible human condition and devise ways of moving toward it.

To this end we hope to encourage students to be curious and wisely skeptical, learning that inquiry and intelligent doubt are often the first steps toward creation, achievement, and a fuller understanding of their own nature and potential.

OBJECTIVES

1. To offer programs of study leading to a baccalaureate degree in the Arts — Advertising Design, Art, Communication, English, History, Music, Political Science, Social Science, Social Work, Sociology, Theater Arts, and in the Sciences — Biology, Chemistry, Earth Science, Geology, Mathematics. Degrees available in the above areas, including the Secondary Education Options offered by all departments, include the Bachelor of Arts, Bachelor of Science, Bachelor of Fine Arts (in Art, Art Education, and Advertising Design), Bachelor of Music (in Music Performance, Music Education, and Music Theory and Composition), and Master of Arts in Secondary Education with majors in various departments. (See School of Education).

2. To offer undergraduate programs in Engineering, Physics, Home Economics, Forestry, and Wildlife Management.

3. To offer elective and service courses for students majoring in other schools.
ACTIVITIES

The Cold-drill

The Department of English, in addition to offering a chance for students to improve their creative, literary skills by studying under producing authors in classes aimed to increase the student's critical and creative abilities, publishes each year a Prize-winning magazine designed to display the best efforts of both the faculty and student body of Boise State University.

Western Writers Series

The Boise State University Western Writers Series is publishing a booklet introducing students and teachers to the character of the work of western American writers. Written by scholars from various colleges and universities, each pamphlet offers a brief account of an author's life, salient features of his works (stressing their regional aspects) and a bibliography listing valuable primary and secondary sources. This series provides the first real attempt to make important regional writers known to the country at large.

Performances, Exhibitions, Workshops

Membership in the various groups and organizations engaged in extracurricular activities is available to all students who qualify. These groups offer opportunities for growth and participation beyond curricular requirements. Students may participate in art exhibits in the Liberal Arts Building, Library, and Student Union gallery areas; extensive intramural and intercollegiate offerings of the Department of Communication including Debate, Reader's Theatre; and productions of plays from both the classical and modern repertoires in the University's unique Subal theatre and Special Events Center; and through the medium of student recitals, organizations, and ensembles of the Department of Music including Band, Orchestra, Choir, and Musical Theatre and Opera. Students may also join in "American Historical Tours" presented by the college each year, as well as science fairs, environmental workshops, etc.

DEPARTMENT OF ART

Chairman and Professor: Dr. Louis A. Peck; Professor: Takehara; Associate Professors: Huff, Killmaster, Kober, Oravez, Skov; Assistant Professors: Benson, Caldwell, Douglass, Ochi, Roberts, Russell, Schlaflly, Wania, Wright; Instructors: Christian, Proctor, Tai, Taylor.

ART MAJOR

Lower Division — All Degrees
(Suggested Program)

I. General Art

FRESHMEN YEAR:

<table>
<thead>
<tr>
<th></th>
<th>1ST SEM.</th>
<th>2ND SEM.</th>
</tr>
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<tbody>
<tr>
<td>Basic Design</td>
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<td>2</td>
</tr>
<tr>
<td>Elementary Drawing</td>
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<td>2</td>
</tr>
<tr>
<td>Elementary Painting</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Art History</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Lettering</td>
<td>2</td>
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<tr>
<td>English Composition</td>
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<tr>
<td>History (Area II)</td>
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<td><strong>Total</strong></td>
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II. Art Education

Freshman year (See General Art Freshman Year)

SOPHOMORE YEAR:

<table>
<thead>
<tr>
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<tbody>
<tr>
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<td>(Area III Sequence)</td>
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III. Advertising Design

Freshman year (see General Art Freshman year)

SOPHOMORE YEAR:

<table>
<thead>
<tr>
<th></th>
<th>1ST SEM.</th>
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</thead>
<tbody>
<tr>
<td>Intermediate Drawing</td>
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</tr>
<tr>
<td>Intermediate Painting</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Advertising Design</td>
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<td>2</td>
</tr>
<tr>
<td>Introduction to Music or Drama</td>
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<td>0</td>
</tr>
<tr>
<td>Social Science</td>
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</table>
## I. General Art—Bachelor of Arts Program

### 1. General University and Basic Core Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td></td>
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### 2. Art Major Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Painting and/or Watercolor</td>
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<tr>
<td>Drawing</td>
<td>6</td>
</tr>
<tr>
<td>Art History</td>
<td>9</td>
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<tr>
<td>Design</td>
<td>4</td>
</tr>
<tr>
<td>Ceramics</td>
<td>2</td>
</tr>
<tr>
<td>Sculpture</td>
<td>2</td>
</tr>
<tr>
<td>Printmaking</td>
<td>2</td>
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<tr>
<td>Crafts</td>
<td>2</td>
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<td>Senior Seminar</td>
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<td><strong>Total</strong></td>
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</table>

**b) Major Emphasis**

A total of 14 credit hours from any Fine Arts area will constitute the major emphasis, which include painting, watercolor, drawing, ceramics, sculpture, printmaking, crafts, photography.

### 3. Electives

<table>
<thead>
<tr>
<th>Credits</th>
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## II. Art Education—Bachelor of Arts Program

### 1. General University and Basic Core Requirements

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### 2. Art Major Requirements

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>Painting</td>
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<td>Watercolor</td>
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<td>Drawing</td>
<td>6</td>
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<td>Art History</td>
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</tr>
<tr>
<td>Ceramics</td>
<td>2</td>
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<tr>
<td>Sculpture</td>
<td>2</td>
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<tr>
<td>Printmaking</td>
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<tr>
<td>Crafts</td>
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<td>Lettering</td>
<td>2</td>
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<td>Senior Seminar</td>
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<td><strong>Total</strong></td>
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</table>

**b) Major Emphasis**

A total of 14 credit hours from any Art Field will constitute the major emphasis.

### 3. Electives

<table>
<thead>
<tr>
<th>Credits</th>
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<tbody>
<tr>
<td>33</td>
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## III. Art/Advertising Design—Bachelor of Arts Program

### 1. General University and Basic Core Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td></td>
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### 2. Art Major Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertising Design</td>
<td>10</td>
</tr>
<tr>
<td>Watercolor and/or Painting</td>
<td>8</td>
</tr>
<tr>
<td>Drawing</td>
<td>6</td>
</tr>
<tr>
<td>Advertising Illustration</td>
<td>4</td>
</tr>
<tr>
<td>Design</td>
<td>4</td>
</tr>
<tr>
<td>Lettering/Lettering and Layout</td>
<td>4</td>
</tr>
<tr>
<td>Art History</td>
<td>6</td>
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<tr>
<td>Printmaking</td>
<td>2</td>
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<tr>
<td>Creative Photography</td>
<td>2</td>
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<td><strong>Total</strong></td>
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### 3. Electives

<table>
<thead>
<tr>
<th>Credits</th>
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<tbody>
<tr>
<td>28</td>
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**SCHOOL OF ARTS & SCIENCES**

**Art**

### I. General Art—Bachelor of Fine Arts Degree

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<td></td>
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### 2. Art Major Requirements

<table>
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<th>Course</th>
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<tbody>
<tr>
<td>Painting</td>
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<tr>
<td>Drawing</td>
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<td>Art History</td>
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<td>Watercolor</td>
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<td>Design</td>
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<tr>
<td>Printmaking</td>
<td>2</td>
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<tr>
<td>Sculpture</td>
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</tr>
<tr>
<td>Ceramics</td>
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<tr>
<td>Crafts</td>
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<tr>
<td>Senior Seminar</td>
<td>3</td>
</tr>
<tr>
<td>Art Electives</td>
<td>16</td>
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</tbody>
</table>

**b) Major Emphasis**

A total of 20 credit hours in any art field will constitute the major requirements and a total of 14 credit hours in a second art area will constitute the minor emphasis.

### 3. Electives

<table>
<thead>
<tr>
<th>Credits</th>
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<tbody>
<tr>
<td>33</td>
</tr>
<tr>
<td>(Fifteen credit hours must be outside the art field.) 128*</td>
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## II. Art Education—Bachelor of Fine Arts

### 1. General University and Core Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td></td>
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### 2. Art Major Requirements

<table>
<thead>
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<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Painting</td>
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</tr>
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<td>Drawing</td>
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<tr>
<td>Art History</td>
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<td>Watercolor</td>
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<td>Design</td>
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<td>Printmaking</td>
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<td>Sculpture</td>
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<td>Ceramics</td>
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<td>Crafts</td>
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<tr>
<td>Lettering</td>
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<td><strong>Total</strong></td>
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**b) Major Emphasis**

A total of 14 credit hours from any Art Field will constitute the major emphasis.

### 3. Education Requirements for Qualification Toward State Certification

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>Audio-Visual Aids (optional)</td>
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<tr>
<td>Foundations of Education</td>
<td>3</td>
</tr>
<tr>
<td>Secondary School Methods</td>
<td>3</td>
</tr>
<tr>
<td>Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Art Methods in Secondary Schools</td>
<td>3</td>
</tr>
<tr>
<td>Elementary School Art Methods</td>
<td>3</td>
</tr>
<tr>
<td>Secondary Student Teaching</td>
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<td><strong>Total</strong></td>
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### 4. Electives

<table>
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<td>29-27</td>
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## III. Art/Advertising Design—Bachelor of Fine Arts

### 1. General University and Core Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>32</td>
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### 2. Art Major Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertising Design</td>
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<td>Design</td>
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<td>Lettering/Lettering and Layout</td>
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<td>Creative Photography</td>
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### 3. Electives

<table>
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37
III. Art/Advertising Design—Bachelor of Fine Arts
Degree Advertising Design Emphasis

1. General University and Core Requirements ..........................32
2. Art Major Requirements
   Advertising Design ............................................. 10
   Painting .......................................................... 8
   Drawing .......................................................... 6
   Watercolor ...................................................... 4
   Design ........................................................... 4
   Sculpture, Ceramics, or Crafts ................................... 3
   Lettering/Lettering and Layout .................................... 4
   Art History ...................................................... 12
   Creative Photography ............................................. 2
   Printmaking ..................................................... 2
   Advertising Illustration ......................................... 4
   Senior Seminar .................................................. 3

3. Professional Electives ..................................................29

   67

   * A minimum of 40 credit hours of a total 128 must be Upper Division.
   ** A total of 6 credits, 2 of each in drawing, painting, and design, may be applied to
the 20 hour major requirement in the areas of watercolor, ceramics, sculpture, printing.

MASTER OF ARTS IN SECONDARY EDUCATION*

Art Emphasis

Admissions and Program
A. The Master's Degree in Secondary Education, Art Education Emphasis, will be designed to meet the needs of the practicing junior high or high school art specialist. While teaching experience is not necessary in order to begin work on this degree, any applicant for the degree must ordinarily be currently certified as a secondary school art specialist, agree to begin the process toward attaining this certification while working on the degree, or obtain a waiver through the Dept. of Education.

B. The following will be submitted to the Art Department Admissions Committee:
1. The names and addresses of three art educators or professional persons who are acquainted with the student's academic qualifications to pursue graduate study.
2. A minimum of twenty (20) slides or a portfolio of recent art work.
3. A statement of the student's professional objectives and philosophy of art education and how these will be furthered by graduate study.

C. Program areas of study are as follows:
1. Required Courses
   AR-501 Art Appreciation in the Educational Program 3 credits
   AR-551 Special Methods: Curriculum Development in Art Education 3 credits
   AR-591 Project 6 credits
   AR-593 Thesis (or additional hours) 6 credits
   TE-560 Secondary Education Core courses 6 credits
2. Studio or Content: Six (6) credits in the studio. Studio concentration and emphasis will be determined by the student and his committee. Part of the program included in the art section could be that of a focus/emphasis.
   Example: Option I—Painting and Drawing
   Option II—Crafts and Sculpture
3. Electives: The remainder of the student's work may be elected in relation to his background, interests, and professional objectives in consultation with his major advisor and committee.

*The graduate level courses to support this program will be regularly offered in the fall and spring semesters when funded by the legislature.

COURSE OFFERINGS

AR ART

LOWER DIVISION

- 100 Basic Drawing and Painting for Non-Art Majors (2 credits). A one
  semester course with emphasis on media, techniques, and philosophy designed to
  acquaint the general college student with the basic fundamentals of drawing and
  painting. Four studio hours per week. Either semester.
- 101 Survey of Western Art I (3 credits). A historical survey of painting, sculpture,
  and architecture from Prehistoric art through the Middle Ages. Fall semester.
- 102 Survey of Western Art II (3 credits). A historical survey of painting, sculpture
  and architecture from the Renaissance to the present. Spring semester.
- 103 Introduction to Art (3 credits). A one-semester course designed to acquaint
  the general college student with the aesthetics of painting, sculpture, architecture, and
  related art forms. Either semester.
- 105 Basic Design (2 credits). A two-dimensional theoretical and applied study of the
  structural organization underlying painting, commercial and industrial art, and interior
  decorating. Scientific and aesthetic investigation of color are included. Four studio
  hours per week. Either semester.
- 106 Basic Design (2 credits). Theoretical and applied study of the structural
  organization underlying three dimensional art forms such as sculpture, architecture and
  related art forms. Four studio hours per week. Admissible to take AR 105 prior to AR
  106 either semester.
- 107 Lettering (2 credits). A study of lettering techniques and various alphabetical
  forms, emphasis upon modern styles, spacing and layout. Four studio hours per
  week. Either semester.
- 108 Lettering and Layout (2 credits). A study of lettering techniques used in
  advertising design, for advertising design majors. Four studio hours per
  week. Admissible to take AR 107 prior to AR 108 either semester.
- 111 Drawing (2 credits). Applied study of space, form, light and shadow, line,
  composition, and an exploration of the various drawing media. Four studio hours per
  week. Limited enrollment second semester. Either semester.
- 112 Drawing (2 credits). Introduction to the human figure. Four studio hours per
  week. Admissible to take AR 111 prior to AR 112. Spring semester.
- 113 Painting (2 credits). Emphasis on the techniques of oil, opaque and transparent
  water base media. Four studio hours per week. Admissible to take AR 113 prior to AR
  114. Spring semester.
- 114 Painting (2 credits). Emphasis on the techniques of opaque and transparent
  water base media. Four studio hours per week. Admissible to take AR 113 prior to AR
  114. Spring semester.
- 115 Landscape Painting (3 credits). Various styles and techniques in landscape
  painting in oil, watercolor and related media. Field trips. Six studio hours per week
  (semester basis). First summer session.
- 116 Landscape Painting (3 credits): (Description same as 115 above). Second
  summer session.
- 131 Interior Decorating (2 credits). Aid in understanding and appreciating interior
  design. The most basic components of home decorating will be studied. These
  include color, wallpaper, fabrics, carpet, and furniture. Two hours lecture, one-half
  hour demonstration per week. Either semester.
- 203 Advertising Design (2 credits). Special assignments in various techniques
  employed in advertising and commercial art; problems in layout, typography, and
  reproduction processes will be emphasized. Four studio hours per week. Admissible to
  take AR 105, AR 106, AR 107 and AR 108 prior to AR 203. Fall semester.
- 204 Advertising Design (2 credits). Advanced work in various techniques employed
  in advertising and commercial art. Four studio hours per week. Admissible to take
  AR 203 prior to AR 204. Spring semester.
- 209 Introduction to Printmaking (2 credits). A course designed to acquaint
  the student with methods of reproducing creative work in woodcut, lithography, and
  intaglio. Admissible to have some experience in drawing and design. Four studio
  hours per week. Each semester.
- 211 Drawing (2 credits). Further study of the human figure through anatomical
  rendering. Four studio hours per week. Admissible to take AR 111 and AR 112 prior to
  AR 211. Fall semester.
- 212 Drawing (2 credits). Drawing in various media from the human figure in
  relationship to creative composition. Four hours studio hours per week. Admissible to
  take AR 111 and AR 112 prior to AR 211. Spring semester.
- 216 Painting (2 credits). Painting in oil with emphasis on various techniques and
  subject matter. Four hours studio per week. Admissible to take AR 113 and AR 114 prior to AR 215. Fall semester.
- 218 Painting-Watercolor (2 credits). Major emphasis will be in the use of
  transparent watercolor. Work will be outdoors from nature as well as studio work.
  Four studio hours per week. Fall semester.
- 218 Painting-Watercolor (2 credits). Introduction to experimental techniques in the
  use of opaque waterbase media. Work will be outdoors from nature as well as studio
  work. Four studio hours per week. Admissible to take AR 217 prior to AR 218. Spring semester.
- 221 Crafts (2 credits). A creative exploration in design and construction problems.
  Various materials will be utilized, with primary emphasis on jewelry design and
  metals. Craftmanship, and the care and usage of tools will be stressed. Four studio
  hours per week. Admissible to take AR 109 & 106 prior to AR 221. Fall semester.
222 Crafts (2 credits). Continued exploration in design and construction work in metal and other media. Fabrication, forming and casting techniques will be emphasized. Four studio hours per week. Advisable to take AR 105, 106, and 221 prior to AR 222. Spring semester.

226 Ceramics (2 credits). An introduction to ceramics technique and materials. Molding, hand building, cutting, glazing, and firing will be given. Enrolment is limited. Four studio hours per week. Prerequisite: AR 105 and AR 106. Fall semester.

226 Ceramics (2 credits) Beginning the use of the potter's wheel, molding, casting, and constructing. Four studio hours per week. Prerequisite AR 105 and AR 106. Spring semester.

231 Sculpture (2 credits). Work in a variety of three dimensional material, with emphasis on the techniques of carving, modeling and casting. Four studio hours per week. Advisable to take AR 105 or 106 prior to AR 231. Fall semester.

232 Sculpture (2 credits). Continued work in a variety of three dimensional materials, with emphasis on the techniques of carving, modeling, and casting. Four studio hours per week. Advisable to take AR 105 or 106 prior to AR 232. Spring semester.

251 Introduction to Creative Photography (2 credits) An aesthetic approach to the basic photographic skills of camera operation, film development, and enlargement of negatives. All work is in black and white. Two hours lecture and two hours laboratory work per week. Adjustable camera required. Either semester.

Upper Division

301 Nineteenth Century Art History (3 credits). A study of important artists and movements from neoclassicism through Post-Impressionism. Fall semester.

302 History of Twentieth Century Movements in Art (3 credits). An analysis of important European artistic movements up to World War II, including Fauvism, German Expressionism, Futurism, Constructivism, Dada and Surrealism. Also.

303 Studio in Advertising Design (3 credits) and preparation of art for reproduction, techniques and studio practices. Six studio hours per week. Advisable to take AR 203 and 204 prior to AR 303. May be repeated once for credit. Either semester.

305 Studio in Visual Design (3 credits) Advanced exploration of two-dimensional and three-dimensional design, continuing with problems in line, form, color, texture, and space. Six studio hours per week. Advisable to take AR 105 and AR 106. Spring semester.

307 Studio in Metalsmithing (3 credits). Advanced study in metalsmithing with emphasis on forging, stoneworking, cutting, and mechanical techniques as further personal development of craftsmanship. Prerequisite: Advisable to take AR 221. Six studio hours per week. May be repeated once for credit.

309 Studio in Printmaking (3 credits). Advanced printmaking in any one of the following specialized areas: each of which may be repeated once for credit: intaglio, letterpress, serigraphy, relief, silkscreen, lithography, offered spring semester; relief, printing and woodcut, offered spring semester; silkscreen, lithography, offered spring semester.

311 Studio in Drawing (3 credits). Advanced drawing in various media. Six studio hours per week. Advisable to take AR 111, AR 112, AR 211. AR 212 prior to AR 311. May be repeated once for credit.

315 Studio in Painting (3 credits). Creative work in representational or non-representational areas in oil and related media. Six studio hours per week. Advisable to take AR 113-114. AR 215-216 prior to AR 315. May be repeated once for credit.

317 Painting-Watercolor (3 credits). Advanced work in opaque and transparent media with emphasis on experimental techniques. Six studio hours per week. Advisable to take AR 217 and AR 218 prior to AR 317. Fall semester.

318 Painting-Watercolor (3 credits). Advanced work in opaque and transparent media with emphasis on experimental techniques. Six studio hours per week. Advisable to take AR 317 prior to AR 318. Spring semester.

321 Elementary School Art Methods (3 credits). For students expecting to teach in the elementary schools. This course is especially designed to help prospective teachers construct outlines of courses for creative art activities in the elementary grades. Progressive methods and materials conducive to free and spontaneous expression are stressed. Two lecture and two studio hours per week. Either semester.

326 Studio in Ceramics (3 credits). Advanced study in the materials of ceramics, with emphasis on the exploration of clays, glazes, and firing as it applies to the creative artist or teacher. Six studio hours per week. Advisable to take AR 225 and 226 prior to AR 326. Individual instruction will be given. May be repeated once for credit.

331 Studio in Sculpture (3 credits). Advanced study in the materials and methods of the sculptor with emphasis upon welded steel and metal casting. Six studio hours per week. Advisable to take AR 231 and AR 232 prior to AR 331. May be repeated once for credit.

341 Studio in Creative Photography (3 credits). Advanced study of photographic techniques, emphasis on the creative approach to picture taking and printing. Two lecture hour, and four studio hours per week. Adjustable camera required. Advisable to take AR 251 prior to AR 341. May be repeated once for credit.

351 Secondary School Art Methods (3 credits) Art education on the junior high school and senior high school levels. Two lecture hours and two lab hours per week. Fall semester.

361 Studio in Advertising Illustration (3 credits). Advanced study emphasizing techniques and methodology of illustrating finished art for ads. Fundamental approaches to story, product, fashion and decor. Twelve studio hours with emphasis on building a portfolio. Four studio hours per week. Prerequisite: AR 203-204. May be repeated once for credit.

371 History of Twentieth Century American Art (3 credits). Beginning with a short survey of American art from the Ashcan School through the Thirties, there will be a concentration on Abstract Expressionism, Pop, Op, and Minimal. Class presentations will be expected of students; critical writings will be assigned. Fall semester.

384 Studio in Printmaking (3 credits). Concentrated work in any one of the following areas: woodcut, lithography, intaglio, and serigraphy. Six studio hours per week. May be repeated for credit.

411 Studio in Life Drawing (2 credits). An advanced life drawing class with emphasis on a classical anatomical study of the human figure. Four studio hours per week. Prerequisite: AR 111, AR 211 and consent of instructor. May be repeated for credit.

415 Studio in Painting (3 credits). Preparation for graduate study in opaque or transparent media. Six studio hours per week. Advisable to take AR 316 prior to AR 317. Spring semester.

415. May be repeated for credit.

417 Studio in Painting-Watercolor (3 credits). Advanced study in selected watercolor media. Six studio hours per week. Advisable to take AR 317 and AR 318 prior to AR 417. May be repeated for credit.

419 Studio in Metals (3 credits). Continued study in materials and methods (advanced) of jewelry-making and metalsmithing as they apply to the creative artist or teacher. Prerequisite: Advisable to take AR 321, 322, 307, 308. May be repeated for credit.

425 Studio in Ceramics (3 credits). Continued study in the materials of ceramics, with emphasis on the explorations of clays, glaze, and firing as it applies to the creative artist or teacher. Six studio hours per week. Advisable to take AR 325 and AR 326 prior to AR 425. Individual instruction will be given. May be repeated for credit.

431 Studio in Sculpture (3 credits). Continued study in the material and methods of the sculptor with emphasis on welded steel and metal casting. Six studio hours per week. Advisable to take AR 331 and AR 332 prior to AR 431. May be repeated for credit.

488 Senior Seminar (3 credits). Required reading and written and oral reports, relative to the senior art majors' area of interest within the visual arts. Each semester a NOTE: Course descriptions for graduate courses may be found on page 88 at the end of this Part.
# REQUIREMENTS FOR BIOLOGY MAJOR

## I. BACHELOR OF SCIENCE OPTION

1. General University and Baccalaureate Degree Requirements see pages 16-18.
2. Major Requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tr>
<td>A. Biology</td>
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<tr>
<td>1. Advanced General Biology</td>
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<td>2. Biology—any two courses</td>
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<tr>
<td>Bacteriology</td>
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<tr>
<td>Ecology</td>
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<td>Evolution</td>
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<td>3. Physiology—one course</td>
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<td>Plant Physiology</td>
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<td>4. Invertebrate Zoology—one course</td>
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<td>Entomology</td>
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<td>5. Natural History—two courses</td>
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<tr>
<td>Systematic Botany</td>
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<tr>
<td>Vertebrate Natural History</td>
<td>4</td>
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<tr>
<td>6. Morphology—two courses, plant</td>
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<td>Comparative Anatomy</td>
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<td>Vertebrate Embryology</td>
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<td>7. Biology Seminar—1 semester</td>
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<td>8. Biology electives to total 45</td>
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<td>credits. Any of the above courses or</td>
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<tr>
<td>Cytology, Mammalogy, Micro</td>
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<tr>
<td>technique, Ornithology, Parasitol-</td>
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<td>ogy, Ichthyology, F.W. Algae.</td>
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<td>B. Chemistry</td>
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<td>B. Chemistry</td>
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<tr>
<td>2. Elementary Organic Chemistry</td>
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<tr>
<td>C. Mathematics</td>
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<td>1. Mathematics 115-116</td>
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<td>3. Recommended Electives</td>
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<td>1. Introduction to Biophysics</td>
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<td>2. Earth Sciences</td>
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<td>3. Chemistry</td>
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<td>4. Area I &amp; Electives</td>
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<td>II. SECONDARY EDUCATION OPTION</td>
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<tr>
<td>1. General University and Baccalaureate Degree Requirements see pages 16-18.</td>
<td>32</td>
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<td>2. Major Requirements:</td>
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<td>A. Biology</td>
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<td>B. Chemistry</td>
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<td>Educational Psychology</td>
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<td>Secondary School Methods</td>
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</table>

## RELATED PROGRAMS

The following programs that have been developed by and presented through the Biology Department are now offered through the School of Health Sciences. Refer to Part VI of the catalog for full information.

Medical Technology
Pre-Dental Hygiene
Pre-Dental, Pre-Medical Studies
Environmental Health

### BIOLOGY MAJOR

#### Bachelor of Science

(Suggested Program)

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<tr>
<th>Course</th>
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### BIOLOGY MAJOR

#### SECONDARY EDUCATION OPTION

Bachelor of Science

(Suggested Program)

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<td>SOPHOMORE YEAR:</td>
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<td>Advanced General Biology</td>
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<tr>
<td>Elementary Organic Chemistry</td>
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JUNIOR YEAR:

Vertebrate Natural History ........................................ 4  
Biology Electives .................................................... 7-8  
Systemic Botany ....................................................... 3  
Electives ...................................................................... 6  

Total Credits ......................................................... 17-18  

FORESTRY AND WILDLIFE MANAGEMENT

FRESHMAN YEAR:

English Composition ..................................................... 3  
Introduction to Chemistry Essentials ................................ 4  
General Forestry ........................................................... 2  
Mathematics .................................................................... 5  
Speech ........................................................................... 0  
Physical Education Activities ......................................... 1  

Total Credits ......................................................... 15  

Sophomore Year:

Principles of Economics ............................................... 3  
General Physics .............................................................. 4  
Advanced General Biology ............................................ 5  
Systemic Botany ............................................................. 4  
Digital Computer Programming ...................................... 2  
Plane Surveying ............................................................... 3  

Total Credits ......................................................... 17  

Lower Division Courses

BIOLOGY

100 Concepts of Biology (4 credits) An introductory course for non-majors planning to take only one semester of Biology. A survey of the plant and animal kingdoms with emphasis on topics such as evolution, genetics, and ecology and their application to contemporary environmental issues. May not be used to form a sequence with either B-101 or B-102. Students who have received credit for B-101 or B-102 may not receive credit for B-100. Three lectures and one 2-hour laboratory period per week. Each semester.

101-102 General Biology (4 credits). A general one year introduction into the study of biological sciences. Three lectures and one 2-hour laboratory period per week. Each semester.

200 Man and His Environment (3 credits). A course designed to reveal the impact of man on his environment with emphasis on the biological, economic, and social factors involved with the air, water, soil, and conservation of natural resources. May not be used to form a sequence with either B-101 or B-102. Students who have received credit for B-101 or B-102 may not receive credit for B-100. Three lectures and one 2-hour laboratory period per week. Each semester.

201 Systematic Botany (4 credits). A laboratory course in plant and animal life designed for biology majors and pre-professional students in medicine, dentistry, medical technology, forestry and other health sciences. Modern concepts of the structural and functional organization of living organisms and the relationships of organisms are emphasized. Prerequisite: B-101-102. Two lecture-discussion periods and one 3-hour laboratory period per week. Each semester.

205 Microbiology (4 credits). A survey of microbiology with emphasis on microbial diversity, structure, and metabolism; principles of microbial control, host-parasite relationships, and immunology, and a survey of medically important microorganisms. This course is designed for associate degree students within the School of Health Sciences. Biology majors may not substitute this course for General Bacteriology. Fall semester.

234 Genetics—Lecture (1 credit). A study of the principles of genetics as they relate to living organisms. Prerequisite: one year of General Biology or one year of Advanced General Biology or equivalent. Spring semester.

303 General Bacteriology (5 credits). A general survey of the field of bacteriology, designed for students in the general science courses and as a foundation for advanced work in the subject. Three lectures and two 2-hour laboratory periods per week. Prerequisite: Advanced General Biology and Elementary Organic Chemistry. Fall semester.

310 Pathogenic Bacteriology (4 credits). A course emphasizing host-parasite relationships, immunity, and those characteristics of medically important bacteria. Fall semester.

311 Advanced General Biology or equivalent. Genetics recommended. Spring semester.

343 Genetics—Lecture (3 credits). A study of the principles of genetics as they relate to living organisms. Prerequisite: one year of General Biology or one year of Advanced General Biology or equivalent. Spring semester.

344 Genetics Laboratory (1 credit). A practical course in the techniques of growing and analyzing genetic materials. The laboratory work will include exercises in culturing of Drosophila, and other animal and plant materials. Results of experimental work will be analyzed and reports submitted. Prerequisite: concurrent or prior enrollment in Genetics Lecture. Spring semester.

365 Cytology (4 credits). This course is a study of prokaryotic and eukaryotic cells, their specialization, and the structure, function, and variations in their cellular organelles, the mechanism of mitosis, meiosis, chromosomal aberrations, the interactions of nucleolus and cytoplasm, and cytological methods. Three 1-hour lectures and one 3-hour lab. Prerequisite: General Advanced Biology. Alternates with Microtechniques, Z-361, and is offered on an odd-numbered years. Fall semester.

401 Organic Evolution (3 credits). History of the development of the theory of evolution. A detailed treatment of the genetic evidence supporting the theory as derived from both plant and animal examples. A discussion of the evidence for vertebrate evolution including that for man. Prerequisite: one year of General Biology or equivalent. Genetics recommended. Alternates with Parasitology. Spring semester, odd numbered years.

410 Food Microbiology (2 credits). A lecture course designed for environmental health and home economics majors to introduce those microorganisms associated with foods; food processing and preservation; food spoilage; and food-borne infection and intoxication. Two lectures per week. Prerequisite: Microbiology or General Bacteriology. Fall semester.

411 Food Microbiology Laboratory (2 credits). A laboratory course taken by environmental health majors in conjunction with B-410. The course is designed to introduce those techniques necessary for the enumeration and identification of microorganisms associated with foods and food-borne illnesses. Two 2-hour laboratory periods per week. Concurrent enrollment in Food Microbiology. Fall semester.

412 General Parasitology (3 credits). A general study of parasitism including the parasites of man. Lectures devoted to a phylogenetic survey of the parasitic animal groups. Laboratory experience in examination of host animals, detection and identification of major locally occurring parasitic groups. Two lectures and one three-hour laboratory per week. Offered alternate years with Organic Evolution. Prerequisite: Advanced General Biology or consent of instructor. Spring semester, even numbered years.

423 Bioecology (3 credits). A survey of the ecological factors of the environment and the biological interrelationships of organisms and their effect on the mode of life and distribution of plants and animals. Three lectures per week. Prerequisite: One year of college biology, Advanced General Biology or consent of instructor. Fall semester.

424 Bioecology Laboratory (1 credit). Field Investigations into the broad areas of aquatic and terrestrial eco-systems. Study of population and community structures, fluctuations, etc. Weekend field trips will be taken. Prerequisite: concurrent or prior enrollment in Bioecology. Fall semester.

498, 499 Biology Seminar (1 credit). A review of pertinent literature on selected topics. Restricted to senior biology majors. Each semester.

BT BOTANY

201 Systematic Botany (4 credits). A laboratory course. Prerequisite: General Advanced Biology or consent of instructor. Spring semester.

302 Plant Anatomy (3 credits). This course is designed to acquaint the student with the internal structure of plant tissues, tissue systems and organs from a developmental standpoint. Two lecture-discussion periods and one laboratory period per week. Prerequisite: General Advanced Biology. Spring semester.

311 Plant Morphology (4 credits). The student will become familiar with the development, physiology, anatomy, reproductive cycle and economic importance of the various plant taxa Phylaegy and paleobotany will be introduced. Three one-hour lectures, two two-hour labs per week. Prerequisites: Advanced General Biology, Organic Chemistry, recommended. Fall semester.

322 Freshwater Algae (4 credits). A study of the various divisions of freshwater algae, with emphasis on collection, identification and pollution problems related to algae growth. The student will also include discussion of life cycles emphasizing how fresh water algae might be controlled to eradicate nuisance types and utilize beneficial types to recycle waste water. The course will consist of 2 lectures and 2 three-hour laboratory periods per week. Prerequisite: Basic Biology. Fall semester.

331 Plant Morphology, recommended. Spring semester.
SCHOOL OF ARTS & SCIENCES
Chemistry

401 Plant Physiology (4 credits). Plant physiology will emphasize the physical and chemical processes of plant body functions. It includes a study of cells, tissues and organs, functions, the mineral requirements of the plant, its metabolism, water uptake, photosynthesis, compounds synthesized by plants and a brief discussion of so chemisties. Three lectures and one three-hour lab per week. Prerequisite: Advanced General Biology. General Biology and Elementary Organic Chemistry. General Physics and Plant Anatomy are recommended. Fall semester.

FS FORESTRY
Lower Division
101 General Forestry (2 credits). A general survey of the entire field of forestry, the history and social importance of forestry, timber management and propagation of the important trees of the U.S. Two lectures per week. Spring semester.

Z ZOOLOGY
Lower Division
107 Human Physiology and Anatomy (5 credits). For students in Home Economics, Health Sciences and Physical Education. Designed to give a general knowledge of the basic physiological functions and of the anatomical structure of the human body. Two lectures and one three-hour laboratory periods per week. Not open for credit to students who have completed Advanced General Biology. Each semester.

Upper Division
301 Comparative Anatomy (4 credits). Dissection and study of representative types of vertebrates, together with lectures and discussions of general vertebrate anatomy with special reference to the evolution of the various organism systems. Two lectures and two 3-hour laboratory periods a week. Prerequisite: Advanced General Biology or consent of instructor. Fall semester.

305 Entomology (4 credits). A study of the biology of insects with emphasis on their ecological classification, morphology, physiology, and control. The course includes exercises in collecting and identification of local species. Two lectures and two 3-hour laboratory periods per week. Prerequisite: Advanced General Biology or consent of instructor. Students are required to meet the instructor sometime during the academic year which precedes their enrollment in this course in order that they may commence their collecting of specimens during the more productive summer months. Fall semester.

307 Invertebrate Zoology (4 credits). Morphology, phylogeny and natural history of the marine invertebrate animals and terrestrial arthropods exclusive of the insects. Two lectures and two three-hour laboratories per week. Prerequisite: Advanced General Zoology or consent of the instructor. Spring semester.

341 Ornithology (3 credits). A lecture, laboratory and field course dealing with the classification, identification, distribution and behavior of birds. Two lectures and one three-hour laboratory period each week. Prerequisite: Natural History of the Vertebrates or consent of the instructor. Alternates with Mammalogy and is thus offered on even numbered years. Spring semester.

351 Vertebrate Embryology (4 credits). An analysis of the development of vertebrates with special emphasis on the experimental approach to morphogenesis in lecture and classical descriptive embryology in the laboratory. Two lectures and two three-hour laboratories per week. Prerequisite: Advanced General Biology or consent of instructor. Spring semester.

355 Natural History of the Vertebrates (4 credits). A lecture, laboratory and field course dealing with the identification, morphology, life cycle and habitat of fish, amphibians, reptiles, birds and mammals. Special emphasis is placed on local forms. Two lectures and two three-hour laboratory periods per week, plus two weekend field trips. Prerequisite: One year of college biology, or equivalent. Fall semester.

361 Microtechnique (3 credits). A study of the theory and practical application of procedures involving fixation, staining, preparation of paraffin sections and whole mounts, and histochemical techniques. One hour lecture and two 3-hour laboratory periods. Prerequisite: Advanced General Biology or consent of instructor. Alternates with Cytology, B-365, and is offered on even numbered years. Fall semester.

400 Vertebrate Histology (4 credits). A course dealing with the microscopic anatomy of cells, tissues, and organ systems of vertebrates with major emphasis on mammalian systems. Two one-hour lectures and two 3-hour laboratory periods. Prerequisite: Advanced General Biology and either Comparative Anatomy or Vertebrate Embryology are recommended. Fall semester.

401 Mammalian Physiology (4 credits). Lectures and laboratory exercises in animal physiology dealing with the basic physiological functions of cells, tissues, and organ systems of vertebrate animals with emphasis on humans. Prerequisite: Advanced General Biology and Elementary Organic Chemistry. Three lectures and one 3-hour laboratory period per week. Spring semester.

409 General and Comparative Physiology (4 credits). A lecture and laboratory course in animal physiology. General physiological principles, using specific invertebrate and vertebrate groups as examples and physiological adaptations necessary to meet specific environmental challenges are discussed. Laboratory exercises utilizing a number of animal species are conducted. Three hours lecture and one three-hour lab per week. Prerequisites: Advanced General Biology and Organic Chemistry. Spring semester.

411 Ichthyology (4 credits). The taxonomic, morphological, physiological, ecological and economic aspects of the fishes. Three one-hour lectures and one three-hour laboratory per week. Prerequisite: Natural History of the Vertebrates. Fall semester.

421 Mammalogy (3 credits). A lecture, laboratory and field course dealing with the classification, identification, structure, distribution, and life habits of mammals. Two lectures and one three-hour laboratory period per week. Prerequisite: Natural History of the Vertebrates or consent of instructor. Alternates with Ornithology and is offered on odd numbered years. Spring semester.

DEPARTMENT OF CHEMISTRY

REQUIREMENTS FOR CHEMISTRY MAJOR

I. Liberal Arts Option:
1. General University and Baccalaureate Degree Requirements. See pages 16-18.

2. Major requirements:

A. Chemistry

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>General Chemistry</td>
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<tr>
<td>Organic Chemistry</td>
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<tr>
<td>Physical Chemistry</td>
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<tr>
<td>Analytical Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>Advanced Inorganic Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>Instrumental Analysis</td>
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</tr>
<tr>
<td>Chemistry Seminar</td>
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<tr>
<td>Independent Study</td>
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B. Mathematics

<table>
<thead>
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<th>Course</th>
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<tbody>
<tr>
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C. Physics

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<tbody>
<tr>
<td>Physics</td>
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3. Recommended Electives

Foreign Language
Upper Division Mathematics
Upper Division Physics
Life Science Courses

(Suggested Program)

FRESHMAN YEAR:

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<td>Mathematics</td>
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<td>Degree Requirements</td>
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<tr>
<td>Physics I</td>
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Sophomore Year:

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<td>Analytical Chemistry</td>
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<tr>
<td>Mathematics</td>
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<tr>
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<tr>
<td>Physics Lab I and II</td>
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Junior Year:

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Senior Year:

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<td>Instrumental Analysis</td>
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<td>Independent Study</td>
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II. Secondary Education Option:

1. General College and Baccalaureate Degree Requirements. See pages 16-18.
2. Major Requirements:

A. Chemistry

<table>
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<tbody>
<tr>
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<td>Physical Chemistry</td>
<td>8</td>
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<tr>
<td>Analytical Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>Advanced Inorganic Chemistry</td>
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B. Mathematics

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C. Physics

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3. Education Requirements

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<tr>
<td>Educational Psychology</td>
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<td>Secondary School Methods</td>
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(Suggested Program)

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<td></td>
<td>Mathematics</td>
<td>4</td>
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<tr>
<td></td>
<td>Physics I</td>
<td>3</td>
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<td></td>
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<td>2ND SEM.</td>
<td>English Composition</td>
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<tr>
<td></td>
<td>General Chemistry</td>
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<tr>
<td></td>
<td>Mathematics</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Physics I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Degree Requirements or Electives</td>
<td>6</td>
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<tr>
<td></td>
<td>Foundations of Education</td>
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<table>
<thead>
<tr>
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<tr>
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<td>Degree Requirements or Electives</td>
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<tr>
<td>2ND SEM.</td>
<td>Physical Chemistry</td>
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<td></td>
<td>Organic Chemistry</td>
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<tr>
<td></td>
<td>Educational Psychology</td>
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<td>Degree Requirements or Electives</td>
<td>6</td>
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<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>1ST SEM.</td>
<td>Advanced Inorganic Chemistry</td>
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</tr>
<tr>
<td></td>
<td>Chemistry Seminar</td>
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</tr>
<tr>
<td></td>
<td>Secondary School Methods</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Secondary Student Teaching</td>
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<tr>
<td></td>
<td>Degree Requirements or Electives</td>
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<tr>
<td>2ND SEM.</td>
<td>Advanced Inorganic Chemistry</td>
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<td></td>
<td>Degree Requirements or Electives</td>
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</tr>
</tbody>
</table>

MASTER OF SCIENCE IN EDUCATION

*CHEMISTRY EMPHASIS*

Admissions and Program

A. The degree program is intended to provide the high school chemistry teacher with academic courses that will enable him to perform more effectively in the chemistry classroom. Present secondary chemistry teachers have a varied background, so the program provides considerable flexibility for the individual.

B. Requirements for admission are the same as those for admission to Graduate School.

Course Offerings

A. Required courses

1. TE-560 Secondary Education Core - 6 credits
2. Thesis, project, or additional hours - 3-6 credits
3. Graduate chemistry courses - 12 credits

B. Elective courses

Additional courses as planned by the student and his graduate committee. GO-571 Geochemistry is to be included as an elective in the chemistry emphasis.

Additional Information

A. Students may use six (6) credits of 400G level courses to partially fulfill the degree requirements providing the graduate committee so approves.

*C The graduate level courses to support this program will be regularly offered in the fall and spring semesters when funded by the legislature.*

COURSES

C CHEMISTRY

Lower Division

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 Concepts of Chemistry (4 credits)</td>
<td></td>
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</tbody>
</table>

A descriptive non-mathematical course designed to acquaint students with the science of chemistry and chemistry's relationships to other fields of study and to modern life. This course cannot serve as a prerequisite to any other Chemistry course, nor will it serve a part of a Chemistry sequence. Students who have received credit for C-102 or C-112 may not receive credit for C-100. Three lectures and one 3-hour laboratory per week. Each semester.

101-102 Introduction to Chemistry (4 credits) A course designed for students whose curriculum does not require an intensive study of chemistry. The course deals with fundamental principles of chemistry. First semester - atomic and molecular structure, states of matter, general reactions, and solutions. Second semester - ionization equilibrium, redox, electrochemistry and an introduction to Organic Chemistry. The second semester also includes introductory, semimicro qualitative analysis. Three lectures and one 3-hour laboratory periods per week. Each semester.

111-112 General Chemistry (5 credits) A thorough study of the fundamentals and principles of chemistry involving their application to various elements. The second semester includes qualitative analysis on the semi-micro scale. This course is designed for those students whose curriculum requires a considerable knowledge of chemistry. Three lectures and two 3-hour laboratory periods per week. Recitations are included in the laboratory sessions. Prerequisite: high school chemistry. Each semester.

207-208 Elementary Organic Chemistry (3 credits) An introductory course covering the fundamental principles and applications of organic chemistry. Designed for those students who do not require an intensive study of chemistry. Two lectures and one 3-hour laboratory per week. Prerequisite: Chemistry C-102 or C-112. Each semester.

211 Quantitative Analysis (3 credits) Study of the equilibrium relationships and methods used in gravimetric, volumetric, and some instrumental analyses. Prerequisite C-112. Fall semester.

212 Quantitative Laboratory Techniques (2 credits) Practical applications of quantitative analytical techniques through the analysis of unknown samples using gravimetric, volumetric, and some instrumental methods. Prerequisite: Chemistry 211 or concurrent enrollment. Fall semester.

Upper Division

317-318 Organic Chemistry Lecture (3 credits) A comprehensive study of organic compounds with emphasis on reaction mechanisms and synthesis. Designed to fulfill the requirements of Chemistry majors, Chemical engineers, and professional and preprofessional students. Three lectures per week. Prerequisite: General Chemistry C-112. Each semester.

319-320 Organic Chemistry Laboratory (2 credits) The first semester will cover the basic lab techniques used in Organic Chemistry and organic preparations. The second semester will deal with the interpretation of spectra and qualitative analysis. Two three-hour lab periods per week. Prerequisite: Chemistry 317-318 or concurrent enrollment. Each semester.

321-322 Physical Chemistry Lecture (3 credits) The fall semester will cover gas laws, point symmetry, adsorption, molecular structure and quantum theory (briefly), and the first, second and third laws of thermodynamics. The spring semester includes thermodynamics, reaction kinetics, phase equilibria, electrochemistry and adsorption. Three lectures a week. Prerequisites: General Chemistry C-112, General Physics PH-102 or Physics 221 and Calculus and Analytic Geometry M-206 or equivalent. A year sequence (fall and spring).

323-324 Physical Chemistry Lab (1 credit) Laboratory experiments parallelizing the material covered by the lectures. Prerequisite: C-321, 322 or concurrent enrollment. A year’s sequence (fall and spring).
SCHOOL OF ARTS & SCIENCES

Communication

341, 342 Glassblowing (1 credit). Chemistry 341 is designed to acquaint the student with the basic techniques of scientific glassblowing. Practice in end to end joints, T-seals, ring seals, flaring, rounded ends and bulbs. Chemistry 342 is designed to give the student practice in the above techniques by the construction of more complicated apparatus such as distillation equipment. One three-hour lab per week. Prerequisite: Junior standing. Each semester.

401-402G Advanced Inorganic Chemistry (2 credits). The first semester will cover atomic and molecular structure, periodic properties, acid-base properties and the chemistry of the elements. The second semester includes coordination compounds, coordination compounds, nonaqueous solutions and nuclear reactions. Two lectures per week. Prerequisite: two years of college chemistry. Each semester.

411G Instrumental Analysis (4 credits). Theory and practice of the more common analytical and instrumental methods of analysis. Laboratory experience with commercial instruments. Two lectures and two three-hour labs per week. Prerequisite: Analytical Chemistry C-211. Spring semester.

431G Introduction to Biochemistry (3 credits). A study of the chemistry of biologically important compounds, and an introduction to metabolism. Three lectures per week. Prerequisite: C-208 or C-318. Fall semester.

432G Biochemistry Laboratory (1 credit). Identification, isolation, and reaction of biologically important compounds. One three-hour laboratory per week. Prerequisite: C-431 or concurrent enrollment. Fall semester.

433G Biochemistry (3 credits). The function of biological compounds, including intermediary metabolism and synthesis of proteins. Cellular control mechanisms of these processes are integrated into the material studied. Prerequisite: C-431. Spring semester.

498, 499 Chemistry Seminar (1 credit). Group discussions of individual reports on selected topics in the various fields of Chemistry. Prerequisite: Chemistry Major and Senior standing. Each semester.

Graduate

501 History of Chemistry (3 credits). The study of the development of chemistry from its early stages through alchemy. Emphasis will be placed on the development of chemical concepts, the important contributors to these concepts and the interrelationships between chemistry and the general course of history. Prerequisite: Two years of college chemistry and one year of history or instructor's permission.

503 Spectroscopy (3 credits). This course is designed to teach the concepts and practical usage of ultraviolet spectroscopy, infrared spectroscopy, and nuclear magnetic resonance spectroscopy. Emphasis will be on the use of instruments and the interpretation of spectra. Prior knowledge of spectroscopy will not be necessary for this course. Prerequisite: Eight hours of general chemistry required and six hours organic chemistry or instructor's permission. Fall semester.

509 Chemistry of Life Processes (3 credits). The course introduces the student to basic concepts of biochemistry associated with a coverage of current topics ranging from allied health field areas to environmental chemistry. Classroom demonstration material will be correlated with lecture material. Prerequisite: One year of general chemistry and organic chemistry. Fall semester.

511 Advanced Analytical Chemistry (3 credits). Stoichiometry involved in separations and instrumental methods of analysis. The course will be flexible in nature to adapt to the varied background of the expected students. Prerequisite: Analytical Chemistry or consent of instructor. One lecture and two labs per week. Fall semester.

515 Nuclear and Radiochemistry (3 credits) Atomic and nuclear structure, radioactivity, nuclear reactions, radioactive decay laws, interaction of radiation with matter, detection of radiation, applications. Prerequisite: One year of general chemistry. Spring semester.

*Certain courses cover somewhat similar subject matter, and credit cannot be granted for both courses. Credits for C-101, 102 will not be allowed if credit is given in C-111. 112. Credits for C-207, 208 will not be allowed if credit is given in C-317, 318.

A hyphen between course numbers indicates that the first numbered course is a prerequisite to the second numbered course; a comma between course numbers indicates either course may be taken independently of the other.

DEPARTMENT OF COMMUNICATION

Chairman and Professor: Dr. Robert R. Boren. Associate Professor: Boylan, Burk. Priman, Warwick. Assistant Professor: Barry, Gephart, Rayborn. Instructors: Craner, Demoux, Riley.

REQUIREMENTS FOR COMMUNICATION MAJOR

1. Completion of general university requirements for Bachelor of Arts degree as listed on pages 16-18.

2. Requirements for Communication major: all majors in the Department of Communication, regardless of their specific emphasis, shall complete the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CM 111 - Fundamentals of Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>CM 201 - Methods of Inquiry</td>
<td>3</td>
</tr>
<tr>
<td>CM 221 - Communication Process</td>
<td>3</td>
</tr>
<tr>
<td>CM 421 - Theories of Communication</td>
<td>3</td>
</tr>
<tr>
<td>CM 498 - Communication Seminar</td>
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<td>Courses for Area of Emphasis</td>
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COMMUNICATION MAJOR

Bachelor of Arts Program

(Suggested Programs)

INTERPERSONAL COMMUNICATION EMPHASIS

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<td>1. General College Requirements</td>
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<tr>
<td>2. Departmental Core Requirements</td>
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<tr>
<td>3. Suggested Courses, as follows:</td>
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</tr>
<tr>
<td>A. CM-131 Listening</td>
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</tr>
<tr>
<td>CM-251 Communication in the Small Group</td>
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<tr>
<td>CM-307 Interviewing</td>
<td>8-9</td>
</tr>
<tr>
<td>CM-431 Small Group Process</td>
<td>8-9</td>
</tr>
<tr>
<td>B. CM-171 Mass Communication: Concepts and Perspec</td>
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<tr>
<td>CM-341 NonVerbal Communication</td>
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<td>CM-351 Intercultural Communication</td>
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<td>CM-361 Organizational Communication</td>
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<td>CM-412 Persuasion</td>
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<td>CM-478 Public Relations</td>
<td>8-9</td>
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<td>C. CM-321 Rhetorical Theories</td>
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<tr>
<td>CM-331 Message Analysis and Criticism</td>
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<td>CM-332 Contemporary Public Communication</td>
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<tr>
<td>D. CM-112 Reasoned Discourse</td>
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<tr>
<td>CM-113 Competitive Speaking</td>
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<tr>
<td>CM-121 Voice and Diction</td>
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<td>CM-231 Message Composition and Presentation</td>
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<td>CM-241 Oral Interpretation</td>
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<tr>
<td>CM-271 Journalistic Communication: Theory and Practice</td>
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<td>CM-273 Reporting and News Writing</td>
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<td>CM-312 Applied Speech Communication</td>
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<td>CM-451 Communication Practicum</td>
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<td>CM-471 Radio-TV Newswriting</td>
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MASS COMMUNICATION EMPHASIS:

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<td>2. Departmental Core Requirements</td>
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<tr>
<td>A. CM-171-172 Mass Communication: Concepts and Perspectives</td>
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<tr>
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SECONDARY EDUCATION EMPHASIS:

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<tr>
<td>2. Departmental Core Requirements</td>
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<tr>
<td>3. Education requirements (See Section VI Secondary Education)</td>
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</table>
4. Suggested Courses, as follows:
   A. CM-241 Oral Interpretation .................................. 3
   A. CM-401 Methods of Teaching Communication .................. 3
   B. CM-112 Reasoned Discourse
   CM-113 Competitive Speech
   CM-121 Voice and Diction
   CM-131 Listening
   CM-231 Message Composition and Delivery
   CM-312 Applied Speech Communication
   CM-451 Communication Practicum ................................ 9
   C. CM-251 Communication in the Small Group
   CM-307 Interviewing
   CM-431 Small Group Process .................................. 2 or 3
   D. CM-321 Rhetorical Theories
   CM-331 Message Analysis and Criticism
   CM-332 Contemporary Public Communication .................... 3
   E. CM-171 Mass Communication: Concepts and Perspectives
   CM-271 Journalistic Communication: Theory and Practice
   CM-341 NonVerbal Communication
   CM-351 Intercultural Communication
   CM-412 Persuasion ............................................. 6
   Total ....................... 40-41

NOTE: A student with a single teaching field must complete at least 45 credits.

JOURNALISTIC COMMUNICATION EMPHASIS

1. General College Requirements
2. Departmental Core Requirements ....................... 14 hours
3. Other Required Courses: ................................ 21 hours
   CM 277 - Photo Communication .................................. 3
   CM 273 - Reporting & Newswriting ............................... 3
   CM 378 - History of Mass Communication .................... 3
   CM 379 - Communication Graphics ............................... 3
   CM 481 - Ethics, Law and Communication ................... 3
   CM 493 - Internship - 6 ...................................... 6
4. Suggested Courses, chosen from the following ........... 15 hours
   CM 171, 172 Mass Communication: Concepts and Perspectives
   CM 271, 272 Journalistic Communication: Theory and Practice
   CM 274 Reporting and News Writing
   CM 307 Interviewing
   CM 371 Copyreading and Editing
   CM 372 Journalistic Communication Practicum
   CM 471 Radio-TV Newswriting
   CM 472 Editorial and Feature Writing
   CM 478 Public Relations
   Special area emphasis may be selected from the following programs; this must include a minimum of 9 credit hours in one area:
   History
   Economics
   English
   Political Science
   Psychology
   Social Science
   Performing and Spatial Arts
   OR any other program listed on page 20 of B.S.U. Catalogue
   (under Baccalaureate Degree Programs)

The selection of special area emphasis should reflect the career plans of the student, and should be made in consultation with his advisor.

COMBINED MAJOR:
COMMUNICATION—ENGLISH

A. With Journalism emphasis: Department requirements

COMMUNICATION

Fundamentals of Speech Communication, CM 111 .................. 3
Methods of Inquiry, CM 201 ...................................... 3
Journalistic Communication Theory
   & Practice, CM 271 or 272 ...................................... 3
Communication Process, CM 221 .................................. 3
Rhetorical Theories, CM 321 ...................................... 3
Theories of Communication, CM 421 ................................ 3
Communication electives (UD) ...................................... 3 27 hrs.

ENGLISH

Literature Survey1 .................................................. 6
Composition above the basic sequence2 ........................... 6
Introduction to Language Study, LI 305 .......................... 3
Literature electives3 (UD) ......................................... 12 27 hrs.

(Add Senior Seminar — either CM 498 or E 498 — 2 hrs.)
Total Hrs.: 56 (27 & 27 & 2)
* 3 hrs. in courses before 1800

B. With Communication emphasis. Departmental requirements

COMMUNICATION

Fundamentals of Speech Communication, CM 111 .................. 3
Methods of Inquiry, CM 201 ...................................... 3
Communication Process, CM 221 .................................. 3
Communication, CM 351 .......................................... 3
Organizational Communication, CM 361 ........................... 3
Theories of Communication, CM 421 ................................ 3

Electives (UD) ...................................................... 9 18 hrs.

ENGLISH

Literature Survey1 .................................................. 6
Humanities HU 207 or 208 ......................................... 3
Advanced Writing & Linguistics3 ................................. 9

Electives (UD) ...................................................... 9 27 hrs.

N.B. ELECTIVES:
1. If student does not elect another Humanities course (either HU 207 or HU 208), then he should take 9 additional upper division courses in each department.
2. If student elects the extra 3 hours in Humanities (either HU 207 or HU 208), then he would take 6 extra upper division hours in Communication or English and 9 upper division hours in the other department.

(Add Senior Seminar — either CM 498 or E 498 — 2 hrs.)
Total Hrs.: 56 (27 & 27 & 2)

COURSES

CM COMMUNICATION

Lower Division
111 Fundamentals of Speech Communication (3 credits). Fundamental principles of public speaking; audience analysis; interest and attention factors; listening; selection and organization of speech material; delivery. Practice in preparation and delivery of extemporaneous speeches. Students may not earn credits in this course and in Professional Speech Communication CM-102. Each semester.

45
112 Reasoned Discourse (3 credits). Introduction to logical reasoning and the role of the advocate in a free society. Analysis of propositions, issues, arguments, evidence, fallacies of arguments and various systems of reasoning. Preparation for and participation in activities designed to apply the principles of logical reasoning in the public forum.

113 Competitive Speaking (3 credits). A concentrated study of and practice in intercollegiate contest speaking; for example: expository, persuasive, oratorial, interpretative and extemporaneous speaking. Either semester.

114 Intercollegiate Debate (1 credit). Preparation for and participation in competitive debate using the current intercollegiate debate topics. Prerequisite: CM-112 or permission of the instructor. Each semester. CM-114 and 314 may be repeated for a total of 4 credits.


131 Listening (3 credits). Theory and practice of man's most used communication skill. Analysis of variables as they promote or impede the process of listening. Each semester.


201 Methods of Inquiry (3 credits). Introduction to the Philosophy of Science as applied to the study of communication. Emphasis on various techniques of research and the requirements for the conduct, reporting, and criticism of research.

221 Communication Process (3 credits). An examination of the nature of human communication. Focus through experiential learning, on awareness of self, communicative relationships and context.

231 Message Composition and Presentation (3 credits). Analysis of methods and techniques of message composition. Practice in the presentation of public speeches.

241 Oral Interpretation (3 credits). Practice in reading prose, poetry, and drama to help the student determine a logical and emotional meaning of a selection and project that meaning to his listeners. A portion of the time is spent in voice development. Either semester.

251 Communication in the Small Group (3 credits). A study of human interaction in small groups. Emphasis on actual experience in working in small groups. Includes concepts in planning, preparing, and participating in group discussion and decision making.


273-274 Reporting and News Writing (3 credits). Fundamentals of reporting, from techniques of interviewing and fact-gathering through the construction of the news story. Emphasis will be placed on accuracy, conciseness and clarity in writing. Includes study of elements of newspaper styles — usage, grammar, punctuation, capitalization — and the use of copyreading symbols. Prerequisite: CM-171 or 172, consent of instructor, and ability to use typewriter. Each semester.

276 Supervision of School Publications (2 credits). For prospective teachers who plan to be advisors of school newspapers and yearbooks, a study of fundamentals in writing, layout and management of scholastic publications. Spring semester.

278 Television; History and Aesthetics (3 credits). An examination of television as an entertainment medium: from critical and historical points of view. Course includes a study of dramatic and news types, the development of specialized programming, and the impact of social and commercial influences on program content.

279 Photo Communication (3 credits). A study of photography as a means of communication. Includes the planning and production of photography for publication and broadcast. Two hours lecture and two hours laboratory per week. Prerequisite: AR-251. Fall semester.

Upper Division

307 Interviewing (2 credits). An examination of the theories upon which communication behavior in dyadic situations is based. Practical experience in various types of interviews as confronted in business, in education, and in the professions. Spring semester.

311 Speech-Communication for Teachers (3 credits). A course to improve prospective teachers' command of the communication processes used in effective teaching. Emphasis on situations that confront teachers, assistance in self-improvement through the mastery of communication methods. Each semester.

312 Applied Speech Communication (3 credits). An application of basic principles of speech communication to real life situations involving current community problems and issues. Prerequisite: CM-111 or 102 or consent of instructor. Each semester.

314 Intercollegiate Debate (1 credit). Preparation for and participation in competitive debate using the current intercollegiate debate topics. Prerequisite: CM-114 or permission of the instructor. Each semester. CM-114 and 314 may be repeated for a total of 4 credits.

321 Rhetorical Theories (3 credits). An examination of theories concerning the complexity of interaction among ideas, messages, and men, including analysis of various message strategies.

331 Message Analysis and Criticism (3 credits). An evaluation of methods of analyzing and interpreting messages and their application to making critical appraisals of public address.

332 Contemporary Public Communication (3 credits). The nature, function, and influence of public communication in contemporary society. An examination of major events and issues and an attempt to identify particular characteristics of public dialog and effect, reinforce, and alter public opinion.

341 Non-Verbal Communication (2 credits). An examination of the function of non-verbal language codes in Communication. An analysis of space, time, color, form, and vocal language codes inherent in all areas of human communicative interaction. Emphasis on individual projects demonstrating non-verbal communication. Fall semester.

351 Intercultural Communication (3 credits) An analysis of societal and cultural influences on interpersonal communication. A critical examination of communication within and among subcultures as well as across cultural boundaries. Spring semester.

361 Organizational Communication (3 credits). The application of Communication theory and methodology to the study of Communication within the formal organization. Theories and problems of human Communication within and between organizations. Fall semester.

371 Copywriting and Editing (3 credits). Techniques of reading newspaper copy; the use of proper copyreading symbols; laboratory work in editing and rewriting copy for publication. Prerequisite: CM-273 or 274. Fall semester.

372 Journalistic Communication Practicum (1-4 credits). Designed for students who seek professional experience and professional careers. The course offers students training with professionals in the community. Prerequisite: Consent of the instructor. May be repeated for a total of 4 hours. Each semester.

375 Student Publications Techniques (2 credits). A survey of techniques of writing, editing, layout, and design. Students without formal training or experience in journalism will develop skills in both classwork and work on the student newspaper. Students will meet in regular class and lab session under the supervision of the instructor. Each semester.

376 Yearbook Techniques (1 credit). Techniques of layout planning, picture sizing, and writing copy for yearbooks. Recommended for members of the Les Bois staff and for students preparing to be publications advisors. Not intended for production of yearbook. Spring semester.

378 History of Mass Communication (3 credits). Traces the development of the concepts, technologies and practices of mass communication. Primary focus on the emergence of the mass media as a disseminator of news, opinion, entertainment and advertising. Prerequisite: Upper division standing. Fall semester.


401 Methods of Teaching Communication (3 credits). Analysis and planning of curriculum for speech communication. A study of instructional materials, classroom techniques and methods, development of behavioral objectives, and management of co-curricular programs. Intended primarily for the individual preparing to teach speech communication or direct forensic activities in the secondary school.

412 Persuasion (3 credits). Emphasis on theories of persuasion. Examination of variables and message strategies relevant to the persuasive process. Practical application of theory in the analysis and construction of persuasive messages.

421 Theories of Communication (3 credits). A critical evaluation of theories in the field of Communication. Examination of the interrelationships of definitions, models and theory. Analysis of the relationship of theory to communication, e.g., Anthropological, mass media, social-psychological. Fall semester.

431 Small Group Process (3 credits). An advanced study of specific variables and theories affecting the communication interaction of small groups. Focus upon small group behavior in terms of variables that affect group process: structure, interaction, transaction, role, norms, and cohesiveness. Fall semester.

461 Communication Practicum (1-4 credits). Directed study emphasizing the practical application of skills and theory relevant to human communication. An opportunity to focus on areas of special interest to the student. Prerequisite: Senior standing. May be repeated for a total of 4 credits.

461 Ethics, Law and Communication (3 credits). An in-depth study of the laws and ethics related to communication. Prerequisite: Upper division standing. Spring semester.

471 Radio-Newswriting (2 credits). Practice writing of radio-tv news, including timing and arrangement of material, adding script to film, techniques for condensing stories, deciding the importance of story material. Preparation of "headlines," five and ten second radio and television news stories. Prerequisites: Reporting and Newswriting CM-273-274. Fall semester.

472 Editorial and Feature Writing (3 credits). A study of methods of gathering material, constructing, and writing editorials, feature articles or programs and scripts for mass media. Fall semester.


489 Communication Seminar (2 credits). A study of speech communication problems together with presentation of papers. Communication research into problems. Prerequisite: Senior standing. Each semester.
DEPARTMENT OF ENGLISH

Chairman and Professor: Dr. Charles G. Davis; Professors: Chatterton, Wright; Associate Professors: Boyer, Peck, Wallace, E. Willis; Assistant Professors: Ackley, Burnmaster, Chambers, Coccois, Ewitt, Hadden, Hansen, King, Leahy, Magee, McGuire, Mullaney, Nickerson, Sahn, Sanderson, Sielden, Townsend, Trusky, Wanner, Wilkins

*1976-77 on leave

REQUIREMENTS OF ENGLISH MAJORS

Bachelor of Arts Degree

I. Completion of general university requirements for Bachelor of Arts. See Pages 16-18.

II. Completion of Departmental Core

1. Specific Courses
   a. Survey of British Literature (E-240 and E-260) 6
   b. Shakespeare (E-345 or E-346) 3
   c. Introduction to Language Studies (LI-305) 3
   d. History of Literary Criticism (E-393) 3
   e. Senior Seminar (E-498) 2

2. Area Requirements
   a. American Literature (E-270, E-377, E-378 or E-384) 3

III. Completion of Departmental Option

1. Liberal Arts Option
   a. Competence in a Foreign Language equivalent to two years of university instruction.
   b. History of the English Language (LI-309) 3
   c. Upper Division English Electives 15

2. Secondary Education Option
   a. Applied English Linguistics (LI-307) 3
   b. English Methods Courses (E-301 and E-381) 6
   c. Oral Interpretation (CM 241) 3
   d. Upper Division English Electives 9
   e. Idaho Certification requirements

Grand Total

1. Liberal Arts Option - General university requirements, plus 44 hours in major subject, plus equivalent of 2 years of a foreign language.
2. Secondary Education Option - General university requirements plus 35 hours in major subject, plus professional courses in certification. (See Part V for required Professional Education courses).

* Fulfills Area I requirements.
** Fulfills part of certification requirements.

Suggested Teaching Minor in English

Students who desire a teaching minor in English need no planned program to become certified, but in order to offer a student the best preparation and job qualification, the Department of English recommends the following program which it thinks constitutes a solid minor in English. An advisor in English will assist a student wishing to follow such a minor or portion of it, if the student prefers.

Advanced Composition
Linguistics
E-301 or E-381
Survey of American Literature
Lower Division Literature
Upper Division Literature

* Recommended: Humanities, HU 207 and HU 208; World Literature, E-230 and E-235; British Literature, E-240 and E-260.

E ENGLISH

SCHOOL OF ARTS & SCIENCES

Combined Major: Communication — English

The combined major is designed for students interested in jobs in business and industry or mass communication. It offers an opportunity to combine courses in complementary subject areas. Students may select an emphasis in Journalism or in Communication under the combined major.

Refer to page 44 under the Department of Communication for the listing of requirements.

Graduate Program

Master of Secondary Education

Applicants who have at least twelve semester credit hours of upper division work in English with a grade point of 3.0 in those courses and who meet general graduate school requirements will be accepted as regular graduate students. Students who do not have the required upper division English work will be admitted on a provisional basis and will be advised what steps to take to qualify for regular status.

Program Requirements

The course of study for the Master of Secondary Education with an English emphasis will consist of a minimum of 33 hours to be chosen by the student and his advisory committee from one of two alternatives.

1. An introductory seminar, twelve hours of graduate English courses, a thesis or project, six hours from the Education core, and nine hours of general graduate electives. At least nine hours of the English courses must be at the 500 level.

   E-500 3
   E-593 or E-595x 3-6
   Graduate English electives (except E-501) 12
   Education Core (TE-560) 6
   General graduate electives (may include E-501) 9
   — 33

2. An introductory seminar, fifteen hours of graduate English courses, six hours from the Education core, nine hours of general graduate electives and a written and oral examination on graduate English coursework. At least twelve hours of the English courses must be at the 500 level.

   E-500 3
   Graduate English electives (except E-501) 15
   Education Core (TE-560) 6
   General graduate electives (may include E-501) 9
   Examination on English coursework 9
   — 33

Candidates electing a thesis will defend it orally. Candidates electing a project will take a written and/or oral exam covering the project and graduate coursework in English.

The graduate level courses to support this program will be regularly offered in the fall and spring semesters when funded by the legislature.

COURSES

Lower Division

010 Developmental Writing (Non-Credit) The fundamentals of grammar, composition and reading required of students with ACT Group 1 Probability scores of below 20 or students whose first writing in E-101 is deficient. For students wishing basic review. Each semester.

101 English Composition (3 credits). Basic skills in writing, including use of supportive materials, source references, basic patterns of organization, and standard usage. Prerequisite: ACT score 20 or S in Developmental Writing. Each semester.
102 English Composition (3 credits). Advanced practice in expository writing, including analysis and interpretation of imaginative literature. Study of the relationship between literature and human experience. Prerequisite: E-101 or consent of Department Chairman.

111, 112 Honors English Composition (3 credits). Designed to provide the superior student a challenging course that emphasizes individual study and original writing. An introduction to critical writing and the study of ideas through literature. E-111 concentrates on 11th, and E-112, on epic drama, and the novels. All students must have an ACT of 80 or above for E-111. For E 112, prerequisites of E-111 or consent of Department Chairman.

120 English as a Second Language (3 credits). Basic skills in American English pronunciation, sentence structure, composition and reading for foreign students with TOEFL scores (or equivalent) of 500 or below. Practice in speaking and listening to current American English; reading and vocabulary development; elementary principles of the English language. Preceptor's permission. Admission to college recommendation of Foreign Student Advisor and consent of instructor. Credit not applicable to requirements toward graduation.

121 English as a Second Language (3 credits). Continuation of E-120 with special emphasis on vocabulary development, reading and development of skills in written English. For foreign students with TOEFL scores (or equivalent) of 500-550. Prerequisites: Admission to College, recommendation of Foreign Student Advisor and consent of instructor. Credit not applicable to requirements toward graduation.

122 Composition and Reading for Foreign Students (3 credits). Practice in college level reading and composition, development of special vocabulary skills related to individual needs. Advanced English for foreign students with TOEFL scores of 551-575. Prerequisites: Admission to college, recommendation of Foreign Student Advisor and consent of instructor. The sequence E-122/123 satisfies the English requirement for foreign students.


201 Advanced Expository Composition (3 credits). An advanced writing course for students who wish to develop skills beyond those acquired in Composition 1. Students examine specimens of professional writing as well as criticizing the work of other students. Extensive writing practice, stressing organization, clarity and effectiveness. Prerequisite: E-102 or consent of Department Chairman. Each semester.

205 Creative Writing-Poetry (3 credits). Prerequisite: Instructor's consent based on evaluation of student's original work. Spring semester.

206 Creative Writing-Fiction (3 credits). Short story or playwriting. Prerequisite: Instructor's consent based on evaluation of student's original work. Fall semester.

211 The Bible As Literature (3 credits). A study of selected portions of the Old and New Testaments as they illustrate primarily major literary types. Prerequisite: E-102. Spring semester.

213 Afro-American Literature (3 credits). The Black experience as reflected in the development of Black American literature. This course relates Afro-American writing to its salient social and cultural conditions. It explores recurrent and characteristic themes, and contrasts their reflection to the present. Emphasis on Black writing from the 1930's to the present day. Prerequisite E-102. Fall semester.

219 Far Eastern Literature, In Translation (3 credits). A survey of literature of Far Eastern countries with the emphasis on China, India, and Japan. Included will be an introduction to the cultural and religious milieu of each country covered in the course. Prerequisite: E-102. Spring semester.

223 Mythology (3 credits). Thematic approach to mythology. Covers creation myths, death rituals, and cultural concepts of the hero. Includes material relating religion to the religion, the occult, and psychological, literature, and general Western culture. Prerequisite: E-102. Fall semester.

226 North American Indian Folklore and Literature (3 credits). A comparative study of traditional Native American beliefs and practices as reflected in authentic oral narratives and written literature. The content, form, and style of oral narratives and the functions which these narratives serve in priliterate societies receive particular emphasis. Prerequisite E-102. Fall semester.

228 Asian World Literature (3 credits). This course is an introduction to the cultural and literary history of Western civilization through some of the best play, stories and novels written in English during the past 700 years. Emphasis is placed on the development of English literature as it relates to European, Greece, imperial Rome, medieval Europe, and Renaissance Europe. Prerequisite: E-102. Fall semester.

234 Western World Literature (3 credits). A continuation of E-230, which focuses on the conflict and reassertion of traditional Western values and attitudes along with the skepticism and rebellion which has become characteristic of modern times. Readings include classics from the Renaissance to the Industrial Revolution. Prerequisite: E-102. Spring semester.

240 Survey of British Literature to 1790 (3 credits). A study of the major works, authors, and developments in English literature of the past 200 years. The course continues the coverage of E-240 to the present. Prerequisite: E-102. Fall semester.

246 Survey of British Literature: 1790 to Present (3 credits). A study of the major works, authors, and developments in English literature of the past 200 years. The course continues the coverage of E-240 to the present. Prerequisite: E-102. Spring semester.

270 Survey of American Literature (4 credits). The course traces the artistic, philosophical, social, scientific, and intellectual influences on American writers and the emergence of an independent American outook. Reading is selected from American authors representative of their time and region. Prerequisite: E-102. Each semester.
The romances of Scott. The emergence of the most popular genre of literature
helped to understand how fiction reflects our assumptions about the world around us. Prerequisite: Three units lower division literature or consent of Department Chairman. Fall semester.

380 British Romantic Poetry (3 credits). A study of representative poems and
supplemental statements by the Romantics, Wordsworth, Coleridge, Shelley, Keats,
Byron, and selected contemporaries, including Southey. Three units lower division
literature or consent of Department Chairman. Fall semester.

385 Victorian Poetry (3 credits). A study of representative works from the writings
of Tennyson, Browning, Arnold, and their contemporaries, up to and including
Thomas Hardy. Prerequisite: Three units lower division literature or consent of
Department Chairman. Spring semester.

387 American Renaissance (3 credits). A study in the second generation of the
American literary experience when such leading writers as Hawthorne, Melville,
Emerson, Thoreau, and Whitman, acting under the impetus of impulses of Romanticism,
Realism, and Idealism, created the first universal vision of human experience to
appear in American literature. Prerequisite: Three units lower division literature or consent
of Department Chairman. Either semester.

388 American Realism (3 credits). A study of American literature written during the
period from the Civil War to World War I. Mark Twain, W. D. Howells, Henry James,
Kate Chopin, Theodore Dreiser, and a number of contemporaries relied their literary techniques on
to develop their individualistic belief that literature should be written about the average
person in the light of common day. Such related theories and ideas as Social
Darwinism, psychological realism, impressionism, and Howells' "doctrine of
naturalism" also receive attention in lectures and in discussions of novels.
Prerequisite: Three units lower division literature or consent of Department Chairman.
Either semester.

390 Methods of Teaching Secondary School English (3 credits). Study of
teaching modern theories and methods of teaching composition, language and
literature at the secondary level. Prerequisite: Introduction to Language Studies Li
305. Fall semester.

391 History of the American West (3 credits). Selected works by representative
writers of the American West. A study of such Western types as the mountain man,
Owen Wister, H. L. Davis, John Steinbeck, and Willa Cather. In addition to examining
the literary merits of the works studied, regional attitudes and values are analyzed and
discussed. Prerequisite: Three units lower division literature or consent of
Department Chairman. Either semester.

393 Twentieth-Century Anglo-American Fiction (3 credits). This course is
designed to acquaint both non-majors and majors in literature with typical
topics, subject matter, and stylistic innovations in British and American fiction since 1900.
Recent readings include selected novels and short stories by such authors as.
Cary, Eliot, Faulkner, Gandhi, Golding, Hemingway, Joyce, Lawrence, O'Connor,
Waltz, and others. Three units lower division literature or consent of
Department Chairman. Either semester.

394 Twentieth-Century Anglo-American Drama (3 credits). A study of plays that
reveal techniques and ideas used by the British and American writers. The course
will deal with representative works including the major plays of the last century. Prerequisite:
Three units lower division literature or consent of
Department Chairman. Either semester.

395 Folklore (3 credits). Study of what folklore is, its written and oral traditions, its
different genres. Prerequisite: E-102 and junior standing or consent of Department Chairman.
Either semester.

396 History of Literary Criticism (3 credits). A survey of critical approaches to
literature from Plato to the twentieth century. Prerequisite: Junior standing and a
literature survey or consent of the Department Chairman. Fall semester.

407 Twentieth-Century Anglo-American Poetry (3 credits). A study of representative works by important Twentieth-Century British and American Poets and
of philosophical and aesthetic concerns that the works reveal. Three units lower division
literature or consent of Department Chairman. Either semester.

485 Methods and Theories of Literary Criticism (3 credits). Prerequisite: E-393
and Junior standing or consent of Department Chairman. A detailed study and
application of major critical methods and theories of literary criticism.
Prerequisite: Three units lower division literature or consent of
Department Chairman. Either semester.

498 Major Seminar (3 credits). Required of all senior English majors. Prerequisite:
Senior standing in English or consent of Department Chairman. Spring semester.

Graduate

The introductory seminar (E-500) is prerequisite to other 500-level seminars. However, with the written consent of the candidate's committee, the student may concurrently take another seminar. With the exception of E-501 and E-597, all seminars will be in specified areas of American literature. However, many special topics are offered from other literature. A maximum of six hours in 500G English courses may be substituted for seminar work in the English core. E-501 may be taken as a general elective, but may not count toward a student's English core.

Since the content of courses E-510, E-520, E-530, E-540, E-550, E-560, E-570, and E-597, may vary from term to term, a student may repeat any of these courses for credit but may not count more than six hours toward his English core.

E-487G and E-488G see above.

E-500 Introductory Seminar (3 credits). An examination of a well-defined theme or
problem, or an investigation into a major author. Research projects and papers on aspects of
the controlling subject to be researched under the careful supervision of the
instructor. An introduction to bibliography and an orientation to bibliographic
sources. Prerequisite: Admission to the Graduate Program or consent of the English
Department Chairman.

E-501 The Teaching of Writing (3 credits). A study of theories and methods of
teaching writing for experienced teachers. Special emphasis on new discoveries
about the learning process in language. Prerequisite: Three units of literature
concentration or consent of Department Chairman. Spring semester.

E-505 Linguistics (3 credits). A study of modern linguistic theories and their appli-
cation to literary texts and to the teaching of English. An examination of the ways
in which traditional, structural, and transformational models deal with the complexi-
ties of language in the areas of syntax, morphology, and phonology, as well as the
recent application of such theory to stylistics and prosody. Prerequisite: E-300 and
Linguistics course equivalent to LI-305, or consent of English Department
Chairman.

E-510 Major Author (3 credits). A consideration of minor and major artistic cre-
ations of an author with attention devoted to major influences on his
writing. Aspects of his influence on the society and culture of the times, his place and stature in
the genres in which he worked, his use or disregard of tradition, as well as an inves-
tigation of contemporary criticism and critical evaluation since his time. Prerequi-
site: E-500 or consent of English Department Chairman.

E-520 Genre (3 credits). A study of a well-defined literary category, such as novel,
short story, epic, or tragedy. Examination of a significant writer or group of writers;
the evolution of a specific literary form. Prerequisite: E-300 or consent of
Department Chairman. Either semester.

E-530 Period (3 credits). A study in major authors, genres, or topics set within a selected period of American or British literature. Prerequisite: E-500 or consent of
English Department Chairman.

E-540 Myth in Literature (3 credits). An exploration of the use of myth in literature,
both as a structuring influence as well as a source of content. While attention will be
given to the nature and working of myth itself, focus will be on the ways it enters into
the conscious creation of fictive art. Mythic themes may be explored, such as the
quest, the initiation, the Arcadian myth in American literature, or the functions of myth in
the work of major authors such as Milton, Melville, T. S. Eliot, Joyce. Prerequisite:
E-300 or consent of the English Department Chairman.

E-550 Literature and Culture (3 credits). A study of the reciprocal relationship
between a selected body of literature and the social, economic, and political forces
that characterize the culture from which it arose. An examination of the ways in
which literary form and content are influenced by culture as a whole. Prerequisite:
E-500 or consent of English Department Chairman.

E-560 Folklore (3 credits). An examination of materials selected from oral tradition
and custom with attention to be paid to aspects of collecting, classifying, comparing,
analyzing, and achieving. Theories of folklore composition, transmission, and
conservation. A scholarly paper and an oral report on pertinent articles in professional journals. For
teachers or prospective teachers of secondary schools. Prerequisite: E-102 or consent of
English Department Chairman.

E-586 Literacy Movements (3 credits). A focus on a significant literary movement,
the works of its major and minor contributors, its theories and its practice, its relation
to its time, its place in literary history, its influence on writers past and present.
Prerequisite: E-500 or consent of English Department Chairman.

E-593 Thesis (3 to 6 credits). A scholarly paper dealing with the results of original
research. Prerequisite: Admission to candidacy and approval of the student's
graduate committee.

E-595 Reading and Conference: (3 to 6 credits). A project may include, but is not
limited to a library research or experimental research on some aspect of
pedagogy or preparation of written curriculum with teaching materials. Prerequisite:
Admission to candidacy and approval of the student's graduate committee.

HU HUMANITIES

207, 208 Introduction to Humanities (3 credits). Definitions and redefinitions of
culture, man's pursuit of meaning in literature, art, music, and drama. The origins,
times, uses and limits of the various humanistic ideals. Prerequisite: E-102 or consent of
Chairman.

LI LINGUISTICS

205 Introduction to Language Studies (3 credits). A general survey of
current activities in linguistics. The topics to be included in this course will
emphasize a broad acquaintance with the fields of linguistics, anthropology, semantics, psychology, and
communication theory. Prerequisite: E-102 or consent of Department Chairman. Fall semester.

207 Applied English Linguistics (3 credits). Application of linguistic theory and
concepts to the teaching of English grammar. Analysis of specific
topics in the grammar of modern languages. Prerequisite: E-205 or
consent of Department Chairman. Spring semester.

306 History of the English Language (3 credits). A study of the periods in the
development of the English. Examination of Old and Middle English
written texts and sounds development of writing, internal and social forces of change, dialects of English. Concentrated work
with written documents in English language history. Prerequisite: E-205 or consent
of Department Chairman. Spring semester.

308 History of the English Language (3 credits). A study of the periods in the
development of the English. Examination of Old and Middle English
written texts and sounds development of writing, internal and social forces of change, dialects of English. Concentrated work
with written documents in English language history. Prerequisite: E-205 or consent
of Department Chairman. Spring semester.

405 Modern English Structure (3 credits). An approach to modern English based on
linguistic principles. The course will cover English phonology, morphology, and Syntax
with transformational emphasis, but including a survey of historical, traditional, and
neatly developing theories of grammar. Prerequisite: E-305, or consent of
Department Chairman. Either semester. Either year. To be offered 1977-78.
Department of Foreign Languages

Chairman and Associate Professor: Dr. George A. Jocums; Associate Professors: Robertson, Valvente; Assistant Professor: Schoonover; Instructor: Herbert. Emeriti: Power, deNeufville

REQUIREMENT FOR A FOREIGN LANGUAGE TEACHING MINOR

In order to be recommended by the Department of Foreign Language to teach a foreign language, the student must have completed the following: 6 hours of upper division composition and conversation in the foreign language; 6 hours of upper division literature or culture and civilization in the same language; 3 hours of methods of teaching foreign languages.

PLACEMENT TEST

Students with previous experience in foreign language are expected to take the FL Placement Test administered at the beginning of each semester (check the BSU Fall & Spring Calendars for specific dates). Placement into the proper course will be made on the basis of placement test results in consultation with foreign language placement advisors. Credit for previous work may be gained through regular University challenge procedures.

COURSES

FL FOREIGN LANGUAGE

110 Applied Phonology: French, German, Italian (3 credits). Phonetic description and phonemic analysis of French, German, and Italian languages, especially designed for students in vocal music and related areas. This course may be taken concurrently with any foreign language offered. Fall semester, alternate years. Offered in 1977-78.

310 Methods of Teaching Foreign Languages (3 credits). A lecture-discussion course intended for prospective and in-service language teachers. Various aspects of language teaching are considered, including class-room techniques, problems, audio-notebook, etc. Prerequisite: a minimum of two years of the same foreign language, or in-service teaching. Spring semester.

F FRENCH

Lower Division

101, 102 Elementary French (4 credits). This course is designed to develop the beginning student's abilities in understanding, speaking, reading, and writing French. Required laboratory practice (1 hour/week) develops pronunciation and listening skills. Classes meet 4 times a week. Students may not enroll in 101 for credit if they have had more than one year of high school French or equivalent. With permission of the instructors, it is possible for a student enrolled in 102 who lacks adequate preparation to drop back to 101. Each semester.

101-102 Intermediate French (4 credits). A continuation of the 101-102 sequence, designed to further develop language skills, both written and oral. Classes are conducted in French. Some outside reading may be required. One hour per week of laboratory practice is required. Class meets four times a week. Prerequisite: 102 or equivalent. Each semester.

103 Approaches to French Conversation and Composition (2 credits). A basic course in elementary conversation and composition designed to build written and spoken fluency for beginners. Grades will be based on oral work and written compositions rather than on examinations. Some work in the language laboratory is required. Prerequisite: 102 or concurrent registration. Students with more than one year of college French are not eligible. Not offered in 1976-77.

201-202 Intermediate German (4 credits). A continuation of the 1-102 sequence, designed to further develop language skills, both written and oral. Classes are conducted in German. Some outside reading may be required. One hour per week of laboratory practice is required. Class meets four times a week. Prerequisite: 102 or equivalent. Each semester.

201-202 Intermediate French (4 credits). A continuation of the 101-102 sequence, designed to further develop language skills, both written and oral. Classes are conducted in French. Some outside reading may be required. One hour per week of laboratory practice is required. Class meets four times a week. Prerequisite: 102 or equivalent. Each semester.

301-302 Survey of French Literature (3 credits). An introduction to the major works and trends of the French literary tradition. Selections and complete works of poetry, fiction, theater, and essay are studied. In the first semester, the Middle Ages through the 15th century are covered; in the second semester, the 16th and 17th centuries. Classes are conducted mostly in French. Prerequisite: F 201-202 or demonstrated proficiency. Meets the literature requirement for the baccalaureate degrees. Offered alternate academic years. Not offered in 1976-77.

303-304 French Composition and Conversation (3 credits). Intended to further stimulate clarity, simplicity, and precision in oral and written French; and to lay the foundations for literary studies and/or foreign travel. Classes conducted entirely in French. Prerequisite: F 201-202 or demonstrated proficiency. Offered in alternate academic years.

305 French Culture and Civilization (3 credits). Coverage of French civilization from pre-historic beginnings to the French Revolution. Special attention to contributions to the development of western civilization. Following topics are treated: Geography, history, French literature, Paris, art, sciences. French educational system, French life. All lectures and discussions are conducted in French. Some outside reading in English. Prerequisite: 2 years of college French or equivalent as determined by placement test. Fall semester. Offered in alternate academic years.

306 French Culture and Civilization (3 credits) Coverage of French civilization from the Napoleonic era to the present. Special attention to contributions to the development of western civilization. Following topics are treated: Geography, history, French literature, Paris, art, sciences. French educational system, French life. All lectures and discussions are conducted in French. Some outside reading in English. Prerequisite: 2 years of college French or equivalent as determined by placement test. Spring semester. Offered in alternate academic years.

G GERMAN

Lower Division

101-102 Elementary German (4 credits). This course is designed to develop the beginning student's abilities in understanding, speaking, reading, and writing German. Required laboratory practice (1 hour/week) develops pronunciation and listening skills. Classes meet 4 times a week. Students may not enroll in 101 for credit if they have had more than one year of high school German, or equivalent. With permission of the instructors, it is possible for a student enrolled in 102 and who lacks adequate preparation to drop back to 101. Each semester.

103 Approaches to German Conversation and Composition (2 credits). A basic course in elementary conversation and composition designed to build written and spoken fluency for beginners. Grades will be based on oral work and written compositions rather than on examinations. Some work in the language laboratory is required. Prerequisite: 102 or concurrent registration. Students with more than one year of college German are not eligible. Not offered in 1976-77.

201-202 Intermediate German (4 credits). A continuation of the 1-102 sequence, designed to further develop language skills, both written and oral. Classes are conducted in German. Some outside reading may be required. One hour per week of laboratory practice is required. Class meets four times a week. Prerequisite: 102 or equivalent. Each semester.

301-302 Survey of German Literature (3 credits). An introduction to the major works and trends of the German literary tradition. Selections and complete works of poetry, fiction, theater, and essay are studied. In the first semester, the Middle Ages through the 18th century are covered, in the second semester, the 19th and 20th centuries. Classes conducted mostly in German. Prerequisite: G 201-202 or demonstrated proficiency. Meets the literature requirement for the baccalaureate degrees. Offered in alternate academic years.

303-304 German Conversation and Composition (3 credits). Intended to further stimulate clarity, simplicity, and precision in oral and written German; and to lay the foundations for literary studies and/or foreign travel. Classes conducted entirely in German. Prerequisite: G 201-202 or demonstrated proficiency. Offered in alternate academic years.

305 German Culture and Civilization (3 credits). Coverage of German civilization from pre-historic times through the 18th century. Special attention to contributions of Germany, Austria and Switzerland to western civilization. Classes conducted entirely in German. Some outside readings in English. Prerequisite: 2 years of college German or equivalent as determined by placement test. Fall semester. Offered in alternate academic years.

308 German Culture and Civilization (3 credits). Coverage of German civilization from 1800 to the present. Special attention paid to contributions of Germany, Austria and Switzerland to western civilization. Classes conducted entirely in German. Some outside readings in English. Prerequisite: 2 years of college German or equivalent as determined by placement test. Spring semester. Offered in alternate academic years.

R RUSSIAN

Lower Division

101-102 Elementary Russian (4 credits). This course is designed to develop the beginning student's abilities in understanding, speaking, reading, and writing Russian. Classes meet 4 times a week. Students may not enroll in 101 for credit if they have had more than one year of high school Spanish or equivalent. With permission of the instructors, it is possible for a student enrolled in 102 and who lacks adequate preparation to drop back to 101. Each semester.

S SPANISH

Lower Division

101-102 Elementary Spanish (4 credits). This course is designed to develop the beginning student's abilities in understanding, speaking, reading, and writing Spanish. Required laboratory practice (1 hour/week) develops pronunciation and listening skills. Classes meet 4 times a week. Students may not enroll in 101 for credit if they have had more than one year of high school Spanish or equivalent. With permission of the instructors, it is possible for a student enrolled in 102 and who lacks adequate preparation to drop back to 101. Each semester.
103 Approaches to Spanish Conversation and Composition (2 credits). A basic course in elementary conversation and composition designed to build written and spoken fluency for beginners. Grades will be based on oral work and written compositions rather than on examinations. Some work in the language laboratory is required. Prerequisite: 102 or concurrent registration. Students with more than one year of college Spanish are not eligible. Not offered in 1976-77.

201-202 Intermediate Spanish (4 credits). A continuation of the sequence, to further develop language skills, both written and oral. Classes are conducted in Spanish. Some outside reading may be required. One hour per week of laboratory practice is required. Class meets four times a week. Prerequisite: 102 or equivalent. Each semester.

Upper Division

301-302 Survey of Spanish Literature (3 credits). An introduction to the major literature from the early Middle Ages to modern times. Reading and interpretation of major literary as well as socio-cultural trends, with oral and written reports. Development of powers of interpretation, critical insight. Lectures and class participation are in Spanish. Prerequisite: Intermediate Spanish S-201 and S-202. Meets the literature requirement for baccalaureate degrees. Offered in alternate academic years.

303-304 Spanish Conversation and Composition (3 credits). Intended to further stimulate clarity, simplicity, and precision in oral and written Spanish; and to lay the foundation for literary studies and/or foreign travel. Class conducted entirely in Spanish. Prerequisite: 201-202 or demonstrated proficiency. Each semester.

305 Spanish Culture and Civilization (3 credits). Coverage of Spanish civilization from earliest human beginnings to the present. Emphasis on Spain's history and its influence on present nation and people. Special attention to Spain's contributions to Western Civilization. All lectures and discussions conducted in Spanish; some readings in English. Outside readings and papers required. Prerequisite: 2 years of college Spanish or equivalent as determined by placement exam. Spring semester. Offered in alternate academic years.

306 Spanish-American Culture and Civilization (3 credits). Coverage of Spanish-American civilization. Lecture, discussion, and laboratory course dealing with cultural, social, economic and political developments in the Hispanic-American nations. The course gives the student an understanding of Hispanic cultural systems and affords insight into the perplexities and challenges facing Hispanic peoples today. Class conducted in Spanish. Prerequisite: 2 years college Spanish or equivalent as determined by placement exam. Spring semester. Offered in alternate academic years.

DEPARTMENT OF GEOLOGY

Chairman and Professor: Dr. Kenneth M. Holenbaugh; Professors: Warner Wilson, Associate Professor: Spinosa; Assistant Professor: Aplegate; Donaldson; Mink. Instructor: Deliso, Research Associate: Guillame.

The Department of Geology provides three degree programs: 1. Master of Science in Secondary Education, Earth Science emphasis; 2. Bachelor of Science in Geology; and 3. Bachelor of Science in Earth Science Education. Non-degree course offerings in geology meet the 15 credit requirement under the 30-15-15 Social Science Secondary Education degree program offered in the departments of Economics, History, Political Science and Societal and Urban Studies.

The curriculum leading to the M.S. in Secondary Education, Earth Science emphasis, is designed to provide advanced academic training in the topics of earth science to those students pursuing a teaching career. The curriculum has full national accreditation.

The curriculum leading to the B.S. degree in Geology is designed for those students who plan a career in applied geology or who plan to attend graduate school. The more generalized curriculum leading to the B.S. degree in Earth Science Education is designed to prepare the student to teach earth science in secondary school and to meet the teacher certification requirements of the State of Idaho. The curriculum has full national accreditation.

In addition to the courses formally offered in all degree programs, a student may acquire credit for independent study, internship or for participation in departmental research projects.

It is strongly recommended that high school students who plan to enter the geology or earth science program include chemistry, physics, and as much mathematics as possible in their high school program.

REQUIREMENTS FOR GEOLOGY MAJOR

Bachelor of Science

I. Geology Major:

1. General University and Baccalaureate Degree Requirements. See pages 16-18 for Graduation Requirements.

2. Major Requirements

A. Geology

<table>
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<tr>
<td>Physical Geology</td>
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<td>Historical Geology</td>
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<tr>
<td>Mineralogy</td>
<td>4</td>
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<td>Petrology</td>
<td>4</td>
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<tr>
<td>Sedimentology</td>
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<td>Stratigraphy</td>
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<td>Structural Geology</td>
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<tr>
<td>Invertebrate Paleontology</td>
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<tr>
<td>Field Geology</td>
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<td>Geology Seminar</td>
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B. Chemistry for Physical Sciences

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C. General Physics

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D. Recommended electives

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III. Upper Division

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<td>Paleontology</td>
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IV. JUNIOR YEAR

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V. SENIOR YEAR

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SCHOOL OF ARTS & SCIENCES

Geology

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<td>Upper Division Electives</td>
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<tr>
<td>Upper Division Electives in Geology</td>
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51
SCHOOL OF ARTS & SCIENCES
Geology

II. Earth Science Education Major:
1. General College and Baccalaureate Degree Requirements. See pages 16-18 for Graduation Requirements.
2. Major Requirements

A. Geology
   Physical Geology
   Historical Geology
   Introduction to Ocean Geology
   Meteorology
   Geology Seminar
   Geomorphology
   Geology Electives to total 30 credits
   CREDITS 30
   B. Introduction to Chemistry
   C. General Physics or General Biology
   D. Mathematics through M 112
   E. Astronomy
   F. Recommended Electives
   Geography
   Foreign Language
   Mathematics
   Communications
   Life Science
   CREDITS 6-8

EARTH SCIENCE EDUCATION MAJOR
(Suggested Program)

FRESHMAN YEAR:
1ST SEM.
English Composition
Physical Geology
Historical Geology
Chemistry
---
16
2ND SEM.
3
4
5
4
16

Sophomore Year:
1ST SEM.
Foundations of Education
Geography
General Physics or General Biology
Intro. to Ocean Geology
Meteorology
General Psychology
Degree Requirements
Astronomy
16
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3
4
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3
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6
4
4

2ND SEM.
111 Geology of Idaho and the Pacific Northwest (3 credits). A study of the
geologic setting and history of Idaho and its immediate surroundings. Emphasizes
major tectonic and structural features, stratigraphic and physical features, mineral
deposits, and current problems in natural resource products.
Prerequisite: Physical Geology. Fall semester.

103 Historical Geology (4 credits). A study of the origin and progressive
development of the earth and its major plate boundaries, the geologic
processes and environments represented thereby. Methods and instruments of ocean
floor investigation are also studied. Two one-hour lectures per week. Prerequisite: Historical Geology. Spring semester.

213 Introduction to Meteorology (3 credits). An introduction to the study of
weather phenomena in terms of origin, distribution, and classification. Instruments
and methods of study are also investigated. Prerequisite: Physical Geology. Spring semester.

221 Mineralogy (4 credits). A study of genesis, distribution, and classification of
minerals. Includes the study of crystallography, optical, and chemical methods.
Laboratory work includes analysis of mineral samples and observation of the use
of microscopes, chemicals, and models. Three one-hour lectures and one three-hour
lab per week. Prerequisite: Historical Geology and College Chemistry or concurrent registration in College Chemistry. Fall semester.

222 Petrology (4 credits). Study of igneous, sedimentary, and metamorphic rocks
with emphasis on physical and chemical conditions controlling the origin, occurrence,
and association of the various rock types. Field relationships, identification of rocks in
hand specimen, and introduction to microscope analysis. Three one-hour lectures
and one three-hour lab per week as well as two all-day Saturday field trips.
Prerequisite: Mineralogy. Spring semester.

MASTER OF SCIENCE, SECONDARY EDUCATION, EARTH SCIENCE EMPHASIS

The curriculum for the Master of Science in Secondary Education, Earth Science emphasis is intended to provide education for earth science teachers with the course offerings stressing current data and developments in the discipline. The planning, preparation, and conducting of laboratory investigations and out-of-field activities are emphasized. Because of the variety of background training of present secondary earth science teachers, the course offerings have been chosen and designed to allow maximum flexibility in planning individual programs. A preliminary examination, oral or written, will be administered to each candidate.

Required courses include TE 560, GO 598 and a final thesis, project, or additional courses as determined by the committee. All other courses to be taken in the degree program are planned by the student and his graduate committee. A final comprehensive oral or written examination over course work and the thesis or project is required.

*The graduate level courses to support this program will be regularly offered in the fall and spring semesters when funded by the legislature.
250 Principles of Paleontology (3 credits). A course designed for non-geology majors, especially those planning to teach in the biological sciences. The course provides an overview of the various fields of paleontology. Evolution, taxonomy, and depositional and diagenetic aspects of sedimentary rocks. Laboratory periods will be used to study small collections of the more important phyla and to introduce the student to simple museum techniques of fossil preparation and study. Two-hour lectures and one-three-hour laboratory per week. Prerequisites: Any introductory course in geology, biology, zoology, or botany or consent of the instructor. Either semester.

Upper Division

311 Sedimentology (4 credits). A study of the classification of sedimentary rocks and all processes that alter them in the geological earth's crust. Laboratory periods will be used for the study of small collections of the more important phyla, the transportation, deposition, and diagenesis. Geologic environments of each process and each rock type are studied. Laboratory work consists of microscopic, chemical, and analytical examinations of sediments and rocks. One-hour lectures and one three-hour laboratory per week. Prerequisites: Sedimentology. Fall semester.

312 Stratigraphy (3 credits). A study of the sedimentary strata with a focus on its special aim. Emphasis is placed on genetic environments, natural sequences of formations and facies, and correlation techniques. Lab work consists of field trips and special projects and a report required. Prerequisite: Sedimentology. Spring semester.

313 Geomorphology (3 credits). A study of the external physiographic features of the earth's surface such as mountains, valleys, beaches, and rivers and the process by which they are formed. Laboratory work consists of map studies and field investigations. Two lectures and one three-hour laboratory per week. Prerequisite: Historical Geology. Fall semester.

314 Structural Geology (4 credits). A study of the physical nature of rocks, the origin, description, classification, and interpretation of deformational structures in earth's crust, and the principal theories of deformation and orogeny. Lab problems in recognition and analysis of geologic structures, the geometry of faults and folds, construction of cross sections, and the use of aerial photos. Field trips. Three lectures and one three-hour lab per week. Prerequisite: Historical Geology and College Algebra and Trig. Fall semester.

321 Optical Mineralogy (4 credits). The theory and application of the polarizing microscope to the examination of minerals. An introduction to the general theory of crystal optics and the application of the polarizing microscope to qualitative and quantitative mineral examination. Laboratory experience in the preparation of materials for optical study and diagnostic techniques form sample identification. Systematic survey of the optical properties of minerals. Prerequisite: GO 222. Fall semester.

322 Petrography (4 credits). An introduction to the study of rocks in thin section by means of the polarizing microscope. The interpretation of the origin and history of igneous, metamorphic, and sedimentary rocks and identification from microscopic features observed in this section. A systematic survey of the major rock types with emphasis on textural, mineralogical, and classification. Prerequisites: GO 231. Spring semester.

351 Invertebrate Paleontology (4 credits). The study of the invertebrate phyla represented in the fossil record. Special emphasis is placed on hard-part morphology, ontogeny, phylogeny and taxonomy of the geologically more important groups. Laboratory work based on standard collections, and field trips conducted by the students during a field trip. Three hours of lectures, four hours of labs. Prerequisite: Historical Geology or Advanced General Biology. Fall semester.

403 Engineering Geology (3 credits). Application of geology to engineering projects. Aspects of geology of soil, rock, and water used in the various engineering projects. Emphasis is placed on practical problems, as well as theoretical aspects of the earth's crust. Laboratory work consists of field trips conducted by the students during a field trip. Three hours of lectures, four hours of labs. Prerequisite: Historical Geology or Advanced General Biology. Fall semester.

412 Groundwater Geology (3 credits). A study of the origin of water found beneath the earth's surface and the geologic conditions which permit the movement, work, and accumulation of water in subsurface materials. Emphasis is placed on structural, sedimentational, and stratigraphic conditions most conducive to the formation of ground water reservoirs. Three one-hour lectures per week. Prerequisite: Structural Geology and Stratigraphy. Fall semester.

410 Ore Deposits (3 credits). The genesis, structure, mineral associations and classification of economic deposits of minerals. Discussion of modern theories of ore deposition, origin and migration of ore-bearing fluids, and alteration processes. Secondary mineral formation and zoning. Consideration is given to the controls on ore occurrence and to the economics of exploration, development, and use of ores. Three lectures per week. Field trip required. Prerequisites: Mineralogy and structural geology. Spring semester.

431 Petroleum Geology (3 credits). A study of the nature and origin of petroleum, the geologic conditions that determine its migration, accumulation and distribution, and methods and techniques for prospecting and developing petroleum fields. Two one-hour lectures per week and one three-hour lab per week. Three field trips. Prerequisite: Structural Geology and Sedimentology. Alternate years. Spring semester. Offered 1976.

441 Introduction to Geophysical Methods (3 credits). The course will include material on basic geophysical principles and methods. It will include a general survey of the elementary theory, basic field practice, computation fundamentals, interpretation techniques and economic considerations of seismic, gravity, magnetics (inland and shallow), and electrical techniques. The applicability of the various techniques to the solution of geologic problems in exploration of economic (petroleum and economic geology), engineering geology, and ground water geology will be stressed. Prerequisite: one year of college physics. Spring semester.

471 Regional Field Study and Report Writing (1 credit). This course constitutes library research and preparation of reports, geological misc. maps, and logs, and a field trip. The guidebook containing to vary of geologic topics relative to a specific region. That region, to be designated at the beginning of the semester, is then visited and studied during a field trip, the trip is ordinarily taken during the spring semester. Two one-hour lectures and one three-hour laboratory per week. Prerequisites: Any introductory course in geology, biology, zoology, or botany or consent of the instructor. Either semester.

480 Field Geology (4 credits). Application of geologic principles and currently used field techniques to the solution of field problems. Work includes measurement and correlation of stratigraphic sections, plane table mapping, geologic mapping on aerial photographs and topographic maps, and special techniques for igneous, sedimentary and metamorphic terrains. Instruction will be appropriate specialized geologists. A formal report of each field trip is required. Prerequisites: Two laboratory courses. Field work on most weekends is required. Prerequisites: Senior standing and permission of Geology Department Chairman. Spring semester.

498, 499 Geology Seminar (1 credit). Research project based on field and/or literature studies. Fundamentals of geologic report preparation and oral presentations. Prerequisite: Geology major or Earth Science Education major. Each semester.

Graduate

511 Environmental Geology (3 credits). Environmental Geology deals with the geologic aspects of man's interaction with his environment. Topics considered include energy resources, conservation of non-renewable resources, soil and water conservation, the water cycle, earthquakes, and other processes and hazards. The course is designed to provide background and opportunity for development of the student's own research. Prerequisite: Graduate status or consent of the instructor. Spring semester.

521 Advanced Topics in Earth Science (3 credits). The study, review, and discussion of current literature, classroom and laboratory demonstrations, teaching aids and preparation of field trip itineraries relative to geology, astronomy, meteorology, and oceanography. The course will be offered on a pass/fail basis. Prerequisites: Graduate status or consent of the instructor. Either semester.

531 Regional Geology of North America (3 credits). A systematic study of the geologic provinces of North America, with special emphasis on structural and stratigraphic relationships and physical evolution. The uniqueness of each province is investigated in terms of its structural and geologic history and the mineral resources available for the region of society. Prerequisite: Graduate status or consent of the instructor. Spring semester.

541 Methods and Techniques of Gathering, Measuring and Testing Geologic Data (3 credits). A study of correct and approved ways to collect representative field samples of rocks, minerals, fossils, etc., to measure topographic, structural and stratigraphic entries, to analyze and classify statistically sedimentation, petrologic and mineralogical samples with laboratory techniques, and to log subsurface data from boreholes and by geophysical means. Prerequisite: Consent of the Department Chairman. Fall semester.

551 Current Topics in Geology (3 credits). An investigation of current research, debates and developments regarding practical, as well as theoretical, issues in geological science. Prerequisite: Graduate status or consent of the instructor. Spring semester.

661 Earth Science Teaching Techniques (3 or 4 credits). This course is a study of the objectives, methods, and materials of instruction in the earth sciences. Emphasis will be placed on the preparation and presentation of lecture, laboratory, and field lab. Sources of current teaching aids and methods available to the instructor will be compiled. Motivation of student interest by the incorporation of environmental problems and materials will be emphasized. This course is offered only in the spring semester. Prerequisite: Graduate status or consent of the instructor. Either semester.

571 Geochemistry (3 credits). The application of chemical principles to the understanding of earth materials and processes. The origin and distribution of elements in the earth and the solar system. Geochemical "cycles." Chemical principles of mineral formation and weathering. Geochemistry and the environments. Prerequisite: Graduate status, one year of college chemistry and one year of college geology, or consent of instructor. Spring semester.

591 Project (3-6 credits). A field, laboratory or library investigation. The student will select a project according to his own interest and pursue it to a logical conclusion. Weekly progress meetings and a final report is required. Prerequisites: Graduate status and 15 credits in Earth Science, or consent of the instructor.

593 Thesis (3-6 credits). The scholarly pursuit of original work on a field or laboratory project or the formulation of new and logical interpretations of existing data collected by the student. A final report suitable for presentation at a meeting of earth science professionals is required. Prerequisite: Admission to candidacy.

596 Independent Study and Research (1-4 credits). Field or library research project. Student may work on his own problem or select a list provided by instructor. Weekly progress meetings. Final report required. Prerequisites: Physical Geology or Fundamentals of Geology and/or consent of instructor.

598 Graduate Seminar (1-3 credits). Preparation and presentation of original and written reports on topics in earth science and/or science education. Presentation of oral reports may take the form of a debate. Preparation of visual aids and geological illustrations will be emphasized. Prerequisite: Admission to candidacy or consent of the instructor.
GG GEOGRAPHY

Lower Division

101 Introduction to Geography (3 credits). A comprehensive survey of various environments of man in a study of world patterns and major regions with emphasis on the utilization of globes, interpretation and construction of maps. The course introduces basic concepts and techniques used in geography, utilization of natural resources, distribution of population and outstanding problems of each region. Each section

102 Cultural Geography (3 credits). Cultural Geography is a study of the distribution and character of man's cultural activities throughout the world. These activities will be viewed in two respects: 1) how culture affects the physical world; 2) how the physical world affects culture. Lectures, slides, motion pictures and other audiovisual aids, along with appropriate readings, will comprise the course. Prerequisite: Intro to Geography or consent of instructor.

201 The Use and Interpretation of Maps and Globes (3 credits). The course consists in the intensive use and interpretation of maps and globes. The intent is to familiarize students in the great variety of maps and globes available and the particular advantages and disadvantages of each in particular situations. It is aimed at anyone who might have need of maps and globes, such as teachers and history, geology and archaeology majors. The course is non-technical, in that little math is required. Course materials consist of texts, slides, motion pictures, as well as maps and globes. Prerequisite: consent of the instructor.

221 Geography of Idaho and the Pacific Northwest (3 credits). The course deals with the physical and cultural geography of the Pacific Northwest, with particular emphasis on Idaho. Stress is placed on the continuing physical, biological, social, political and economic changes the region is undergoing. In addition, the role of the Pacific Northwest in relation to the rest of the United States is studied. Sources of information available to the student include: the textbook, readings from professional journals, the Idaho Historical Society, and slides, motion pictures and writings of area researchers. Prerequisite: Intro to Geography and consent of instructor.

231 Comparative Geography of Canada and Latin America (3 credits). The course is a comparative study of the physical and cultural geographies of Canada and Latin America. Comparisons and contrasts will be made between the resources, environments, peoples and potential of each region. Their relationships with the United States and the other countries of the world will also be explored. Films, slides, and guest speakers — along with appropriate texts will be used. Prerequisite: Intro to Geography or consent of instructor.

241 Comparative Geography of Africa and the Far East (3 credits). A study of the physical and cultural geography of Africa and the Far East, with emphasis on the relationships and changes within the regions. Lectures include the various landscapes, flora and fauna, peoples and geographic problems. Slide presentations, overhead transparencies, motion pictures, current researchers and native speakers, as available, are resources for the course. Prerequisite: Intro to Geography or consent of instructor.

Upper Division

301 Historical Geography (3 credits). Historical Geography is the study of the past geography of various places or regions. The course graphically reveals the constant theme of change inherent in both history and geography. Students will explore the dynamics of geographic change, the historical geography of particular regions of the earth, and the effects of past geographical circumstances on present geography. The course uses both geographical and historical resources, including those written by professional historical geographers. Prerequisite: GG-102 or consent of instructor.

311 World Economic Geography (3 credits). Economic Geography is the study of the distribution and variation of resources and man's activity related to producing, exchanging and consuming commodities and products. Economic activities and materials are studied in the context of where they are located, what their characteristics are, and to what national and international phenomena they are related. Prerequisite: GG-101 or consent of instructor.

321 Conservation of Natural Resources (3 credits). Resource conservation is a course aimed at developing the student's understanding of resource use and conservation. The course has five major thrusts: 1) A perspective on conservation, 2) a character of land resources, 3) character of water resources, 4) mineral resources, 5) the demand of population on the resource base. These topics may be viewed as a single entity, or as they act in concert. Prerequisite: GG-101 or consent of the instructor.

GP GEOPHYSICS

Upper Division

301 Introduction to Geophysics (3 credits). The course is a survey of surface and borehole-based geophysical methods. It will include a general survey of the elementary theory, basic field practice, interpretation techniques and economic considerations of seismic, gravimetric, magnetic, electrical and other geophysical techniques. The applicability of the various techniques to the solution of geologic problems in exploration, engineering, environment and groundwater geology will be stressed. Spring semester. Prerequisites: Physical Geography or consent of instructor.

325 Physics of the Earth (3 credits). The course will include a discussion of the earth's gravity, magnetism, electricity, seismicity, heat and radioactivity and the significance of these properties in understanding the complexity of the earth. Fall semester. Prerequisite: Physics 220 or consent of instructor.

451 Applied Geophysics I (5 credits). A detailed treatment of the application of geophysical methods used in petroleum and mineral exploration and geotechnical investigations. Practical laboratory and field studies will be conducted using geophysical instrumentation. The course stresses acquisition, data reduction, and interpretation will be emphasized. Four one-hour lectures and one three-hour lab. Fall semester. Prerequisites: GG-314, GP-301, PH-221 and 222, M-321.
B. Other History Courses (minimum of 15 U.D.)...18
To be chosen by student in consultation with
advisor from two out of three of the department's
offerings (U.S., European, Third World).

C. Other Courses
At least 15 hours must be taken in each of two allied
disciplines: Economics, Political Science, Anthro-
pology, Sociology, Geography. These courses should
be chosen by the students in consultation with their
advisor.

15 Hour History Option
Similar 30-15-15 academic majors are available in the
various social science disciplines in which their courses would
constitute the 30-credit core of the major and history would
serve as one of the associated 15-credit blocks. For such a major
the Department of History requires that at least 9 of the 15 his-
tory credits be upper division, and that courses be selected to
complement their major.

IV. History Minor Option
1. Lower Division Courses
   U.S. History, (HY 151, 152, or 251, 252).................. 12
   Western Civilization (HY 101, 102, 103, or 201, 202, 203)
2. Upper Division Courses
   To be chosen from two of the three major areas (U.S.,
   Europe, Third World) offered by the department.

In addition to the above the State Department of Education
may require additional courses for certification in the minor
field.

*Language equivalency required by the History Department will be determined by
the Department of Foreign Languages.
**Majors must have course work distributed between U.S., European and Third
World history with at least 12 hours in one area and at least 6 hours in each of the
other two.

MASTER OF ARTS, SECONDARY EDUCATION,
HISTORY EMPHASIS*

I. Admissions
See Part VIII Graduate School Information, page 130 in
catalogue.

II. Program Requirements
The Master of Secondary Education with a History emphasis
will consist of a minimum of thirty-three hours planned by
the student and his advisory committee from the following
alternatives.

A. 33 hour with thesis
1. Secondary Education Core............................ 6 hours
2. History Emphasis...................................... 12 hours
3. Free Electives........................................ 9 hours
4. Thesis (defended orally)............................. 6 hours
5. Written exam on work taken in the History
   Department toward the degree
B. 33 hour with project
1. Secondary Education Core............................ 6 hours
2. History Emphasis...................................... 15 hours
3. Free Electives........................................ 9 hours
4. Project.................................................. 3 hours
5. Written or oral examination covering aspects
   of his project and course work taken in the
   History Department toward the degree
C. 36 hour
1. Secondary Education Core............................ 6 hours
2. History Emphasis...................................... 18 hours
3. Free Electives........................................ 12 hours
4. Written examination covering course work
   taken in the History Department toward the degree

III. Course Offerings
A. Required courses
1. HY 500 Historians and Historical
   Interpretation............................................ 3 hours
2. HY 502 Teaching History in the
   Secondary Schools..................................... 3 hours
3. HY 510-11 History of Western Thought
   and Clark (2 credits). A survey of the "Corps of Discovery" from Wood
   River, Illinois, to the ocean and return, with study of the medical, scientific,
   anthropological and other aspects of the expedition. Alternate years, spring semester.
4. HY 520 Sources of American Values................... 3 hours
5. TE 560 Secondary Education Core.................... 6 hours

B. Elective courses
Additional courses from History or allied fields as plan-
ned by the student and his graduate committee to meet
program requirements.

C. Additional Information
1. Some students may be required to remove deficien-
cies before admission to candidacy. Students with
strong undergraduate history may apply to challenge
waive, or replace parts of the emphasis requirements.
2. Students electing a double emphasis will draw up
their program in consultation with their committee.
3. A maximum of six hours in 400G History courses
may be substituted for seminar work in the History
offerings.

*The graduate level courses to support this program will be regularly offered in
the fall and spring semesters when funded by the legislature.

HY HISTORY

Lower Division

101, 102, 103 History of Western Civilization (3 credits). First semester: The
development of European civilization from classical antecedents to the twelfth
century. A.D.; Second semester: The development of the early modern European
works from the twelfth century to 1815; Third semester: The development and
expansion of western civilization worldwide since 1815. Each semester.

181, 182 United States History (3 credits). First semester: The history of
American civilization from Pre-Columbian days to 1877 with emphasis given to the
significant factors influencing American development from the Civil War to the
present, including the growth of American business, and the emergence of the nation
to a world power. Each semester.

201 Problems in Western Civilization (3 credits). Selected problems in Western
Civilization from the Ancient Near East, Greco-Roman, and early Middle Ages with
emphasis on the influence of Hebrew monotheism, Athenian democracy, the Roman
constitution, and Medieval society and Western thought. Not open to students who
have credit in HY 101. Prerequisite: Course in high school or consent of instructor.
Either semester.

202 Problems in Western Civilization (3 credits). Selected problems in Western
Civilization from the High Middle Ages to 1815 with emphasis on the problems of
nation making and religious and political revolutions in Western society. Not open to students who
have credit in HY 102. Prerequisite: Course in high school or consent of
instructor. Either semester.

203 Problems in Western Civilization (3 credits). Selected problems in Western
Civilization from 1815 to the present with emphasis on the problems of nationalism,
imperialism, socialism, communism, the world wars, and the post war world. Not open to students who
have credit in HY 103. Prerequisite: Course in high school or consent of instructor. Either semester.

205 Lewis and Clark (2 credits). A survey of the "Corps of Discovery" from Wood
River, Illinois, to the ocean and return, with study of the medical, scientific,
anthropological and other aspects of the expedition. Alternate years, spring semester.

210 Introduction to the Study of History (3 credits). An introduction to the study
of history for liberal arts students, exploring the nature of the discipline, and dealing with
practical problems of historical research and writing, including the applications of
various methodological approaches to the analysis of data. Required of all history
majors, liberal arts option, prior to taking any upper division history courses. Either semester.

211 The Study and Methods of Teaching History (3 credits). An introduction to the
study of history for those who plan to teach. The course explores the nature of the
discipline, includes practical work in historical methods, and deals with particular
problems of uniting teaching methodology with substantive historical knowledge.
Required of all history majors-secondary education options, prior to taking upper
division history courses. Either semester.
SCHOOL OF ARTS & SCIENCES

History

251 Problems in U.S. History (3 credits). Selected problems in U.S. History from the colonial era through independence, nationalism, Jacksonianism, Civil War, and Reconstruction. Not open to students who have credit in HY 151. Prerequisite: Course in U.S. History in high school or consent of instructor. Fall semester.

252 Problems in U.S. History (3 credits). Selected problems in U.S. History from the second industrial and labor world through populism, imperialism, progressivism, world war, depression, and world leadership. Not open to students who have credit in 152. Prerequisite: Course in high school or consent of the instructor. Spring semester.

261 History of Minorities in the United States (3 credits). This course focuses on the problems encountered by ethnic minorities in their quest for equal opportunity and equal rights in American society. Public opinion and the national response within the American Dream to the aspiration for American History will be emphasized. Current legislation, judiciary proceedings, and power movements also will be included. Either semester.

298 American Heritage (2 credits). An introductory course to an Eastern seaboard trip; provides a survey of the early and contemporary contributions to our American heritage. Includes historical and governmental sites to be visited include Williamsburg, Washington, D.C., and New York City. The credit allowance in this course is subject to the student's participation in the tour and doing the required work. The course is open on an audit basis for other interested students. Spring semester or Summer.

Upper Division

303 The Age of Absolutism and Reason (3 credits). A study of European thought in the seventeenth and eighteenth centuries: The Age of Absolutism, ideas of the philosophes, and the crises of the old order leading to revolution. Prerequisite: HY 102. Suggested additional preparation, HY 101. Either semester, alternate years.

307 Germany and the Quest for Unity, 1848-1970 (3 credits). The struggle for Germany unity in modern times, and the relation of this issue to the origins of the two World Wars. The problem will be traced through the "opening to the east" inspired by Willy Brandt. HY 103 recommended. Either semester, alternate years.

308 France and the Quest for Stability, 1914-1986 (3 credits). The failure of Frenchmen in the 19th and 20th centuries to achieve political and social equilibrium. The course will probe through the establishment of the Fifth Republic by Charles de Gaulle. HY 103 recommended. Either semester, alternate years.

309 The Renaissance (3 credits). A study of European society, economic development, artistic expression and humanism, and political concepts, with attention to both the Renaissance in Italy and in the North. Prerequisite: HY 102 or consent of instructor. Spring semester; alternate years.

310 The Reformation (3 credits). Survey of Church-State relationships to include the Babylonian Captivity, the Great Schism, the impact of the national state, and the theological and political philosophies of reformers from Wycliffe to the Council of Trent. Consideration will be given to the world wide impact of Protestantism, the Catholic Reformation, and dissident minority sects. Prerequisite: HY 102 or consent of instructor. Spring semester; alternate years.

311, 312 History of England (3 credits). First semester: Survey of the major cultural, political, economic, and religious developments in England in the beginning from 1688 to 1888. Second semester: Major Britain from the seventeenth century to the present. Either semester, alternate years.

314 History of Russia (3 credits). First semester: Survey of the origins and development of the Kievan and Muscovite states to the eighteenth century. Second semester: A study of the major cultural and economic institutions as well as the governing political parties of the state from the eighteenth century to the present. HY 102, HY 103, HY 313 recommended. Either semester. Alternate years.

316 History of the Far East (3 credits). A survey of the major powers of the Orient — their internal political and cultural development. Either semester, alternate years.

318 Ancient Greece (3 credits). A study of the political, social, and cultural development from the Cretan civilization through the Hellenistic period, with stress on those tendencies and achievements which have influenced later developments in Western Civilization. Prerequisite: HY 101 or consent of instructor. Fall semester, alternate years.

320 Ancient Rome (3 credits). Political, social and cultural history from the Etruscans to the 5th century A.D., with stress on those tendencies and achievements which have influenced later on Western Civilization. Prerequisite: HY 101, or consent of instructor. Spring semester, alternate years.

321 Medieval History (3 credits). The political, economic and cultural development of Medieval Europe from the fifth to the fourteenth century. Prerequisite: HY 102 or consent of instructor. Suggested additional preparation, HY 101. Either semester, alternate years.

322 The Medieval Church (3 credits). A survey of the Christian Church from its apostolic foundations through the 11th century. HY 102 or consent of instructor. Suggested additional preparation, HY 101. Either semester, alternate years.

331 Islamic Civilization (3 credits). A history of the people, institutions and cultural development of the Near East and Middle East from the birth of Islam to the decline of the Ottoman and Safavid empires in the sixteenth century. Prerequisite: Upper Division standing. Fall semester, alternate years.

332 The Modern Middle East: Cultures in Conflict (3 credits). A history of the Near East and Middle East during the Nineteen and Twentieth Centuries: the decline of the Ottoman Empire, the breakdown of cosmopolitan Islam and the rise of Turkish, Arab and Israeli nationalism. Prerequisite: HY 103 recommended. Spring semester, alternate years.

334 United States Social and Cultural History (3 credits). Selected social and cultural themes from colonial times to the present. Attention will be given to the nature and meaning of the United States national experience by examining customs, traditions and intellectual developments within a historical context. HY 151, 152 recommended. Either semester, alternate years.

336 Diplomatic History of the United States (3 credits). Development of diplomacy from the foundation of the Republic to the present with emphasis on the emergence and consequence of the United States as a world power, and the impact of domestic developments upon the formulation of foreign policies. HY 151, 152 recommended. Either semester, alternate years.

338 United States Constitutional History (3 credits). A study of origins, writing and development of the American Constitution from colonial charters, through the Constitutional Convention, John Marshall, Civil War, Age of Industrial Development, Progressivism, World Wars, Cold War, and the Warren Court. Considerable emphasis is placed on the role of the Supreme Court. Prerequisite: HY 151, 152 or consent of instructor. Fall semester, alternate years.

339 History of Ireland (3 credits). The development of the concept of an Irish nationality, the effects of the long colonial relationship between Ireland and Great Britain, the struggle for Irish independence, the contemporary Ulster issue. Either semester, offered alternate years.

351 Colonial America (3 credits). Colonial rivalry in North America: an investigation of the political organizations, social institutions, economic development, and the war for American independence. Prerequisite: HY 151 or consent of instructor. Fall semester.

353 The National Era, 1815-1848 (3 credits). The development of American nationalism; the Era of Good Feelings; the emergence of Jacksonian Democracy; Manifest Destiny; the beginnings of sectional rivalry; and the Mexican War. Prerequisite: HY 151 or consent of instructor. Spring semester.

354 Civil War and Reconstruction (3 credits). A study of the origins of the conflict between the states and the development of the political organization and the promise of reconstruction. Prerequisite: Upper Division standing or completion of HY-151-52. Either semester, alternate years.

355 Western European History (3 credits). The frontier as a region in transit from the Atlantic seaboard to the Pacific. Emphasis will be on the migration of people in the Trans-Mississippi West. HY 151 recommended. Either semester, alternate years.

356 The Indian in American History (3 credits). Examination of the Indian's role in American development and the impact of white society on Indian culture. The course investigates early Indian-white contacts, the development of European rivalries in North America and the Indian's part in these rivalries, and the origins of United States Indian policy. The reservation system, land policy, termination, and the current Indian dilemma are studied. Opportunity is provided for the pursuit of depth study in a specific individual study. Prerequisite: Upper Division standing or completion of HY-151-52. Either semester, alternate years.

357 Idaho and the Pacific Northwest (3 credits). Political, economic and social development of the Pacific Northwest with emphasis upon the people, customs, and institutions of Idaho. HY 151 recommended. Either semester.

358 Emergence of Modern America, 1877-1917 (3 credits). The industrial growth of the United States: emergence as a world power; Roosevelt, Wilson, and the Progressive Era. Prerequisite: HY 152 or consent of instructor.

359 Recent United States, 1917 to Present (3 credits). Versailles and post-war disillusionment: boom and bust of the 1920's, the Great Depression and FDR's New Deal; reappearance on the world scene; World War II and its aftermath, HY-152 recommended Spring semester, alternate years.

360 Colonial Spanish America (3 credits). The development of distinctive Spanish American societies through the flowering of Spanish and Spanish with American and African cultures in South and Middle America, all within the context of Spanish and European political rivalries. The course concludes with the independence wars of the early nineteenth century. Prerequisite HY-102. Fall semester, alternate years.

361 Colonial America (3 credits). The political and economic development of the United States from colonial times to the present. Particular emphasis is given to the interaction of economic factors and other aspects of American society. Prerequisite: Principles of Economics, EC 201 and EC 202, or permission of instructor. May be taken for History or Economics credit, but not for both. Either semester.

417 United States Economic History (3 credits). Major factors in the economic growth and development of the United States from colonial times to the present. Prerequisite: Principles of Economics, EC 201 and EC 202, or permission of instructor. May be taken for History or Economics credit, but not for both. Either semester.

420 The Liberal Revolutions, 1776-1832 (3 credits). The restructuring of western European societies towards political democracy and freedom of economic opportunity, particularly as accelerated by the French Revolution and Napoleon. Prerequisite: HY 102. Recommended additional preparation. HY 303. Either semester, alternate years.

422 History of Socialism (3 credits). The course will examine the history of egalitarian revolutionary ideas and movements of the nineteenth and twentieth centuries. Emphasis will be given to the development of the ideas of Karl Marx, his predecessors and successors. Either semester, alternate years.

425 Twentieth Century Revolutions (3 credits). Reading and discussion of movements related to the origins and development of socialist, communist, socialist, political and economic movements in the twentieth century, particularly as they relate to alternative and counter-culture proposals and liberation issues. Either semester, alternate years.

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480 Seminar in U.S. History (3 credits). Selected period, topic, or problem in U.S. History. Consult current class schedule for specific selection of study to be offered. Seminar may be repeated. Either semester.

481 Seminar in European History (3 credits). Selected period, topic, problem or area in European History. Consult current class schedule for specific selection of study to be offered. Seminar may be repeated. Either semester.

482 Seminar in Third World History (3 credits). Selected period, topic, problem, or area in Third World History. Consult current class schedule for specific selection of study to be offered. Seminar may be repeated. Either semester.

Graduate

500 Historians and Historical Interpretation (3 credits). An examination of the major historians and schools of historical interpretation from Classical Greece to the twentieth century. Discussions will concern the historical writers and their works as well as problems of historical knowledge and the interpretation of history. Taught by several members of the history staff. This course offers variety and interpretation from specialists in many different fields of history. Prerequisite: Admission to the graduate program or consent of the department chairman.

510 History of Western Thought (3 credits). History of Western Thought beginning with the Ancient Near East to the Renaissance and Reformation. A study of intellectual and cultural trends reflected in Western religious and philosophical literature. Prerequisite: Admission to the graduate program or consent of the department chairman.

511 History of Western Thought (3 credits). History of Western Thought from 1500 to the present. A study of intellectual and cultural trends reflected in Western religious and philosophical literature. Prerequisite: Admission to the graduate program or consent of the department chairman.

520 Sources of American Values (3 credits). A study of the origins of American thought and culture. The Puritan mind, enlightenment ideas, the intellectual climate of the new nation, and an exploration of American values on the eve of the Civil War. Laissez-faire capitalism and the reaction to industrialism follow. Students then examine the evolutionary (or revolutionary) nature of a twentieth century topic of their choice: that is, the source of a contemporary political, economic, or social attitude or position. Prerequisite: Admission to the graduate program or consent of the department chairman.

580 Graduate Seminar in U.S. History (3 credits). A study of the principal themes or problems within well-defined periods or particular fields of U.S. History. Emphasis will be placed on reading, discussion, writing and research. Reports and discussion on various aspects of the controlling subject will be performed by the students with the assistance of the instructor. Prerequisite: Admission to the graduate program or consent of the department chairman.

581 Graduate Seminar in European History (3 credits). A study of the principal themes or problems within well-defined periods or particular fields of European history. Primary emphasis will be placed on reading, discussion, writing and research. Reports and discussion on various aspects of the controlling subject will be performed by the students with the assistance of the instructor. Prerequisite: Admission to the graduate program or consent of the department chairman.

582 Graduate Seminar in Third World History (3 credits). A study of the principal themes or problems within well-defined periods or particular fields of Third World history. The Third World scope includes Latin America, Far East, Middle East and Africa. Primary emphasis will be placed on reading, discussion, writing and research. Reports and discussion on various aspects of the controlling subject will be performed by the students with the assistance of the instructor. Prerequisite: Admission to the graduate program or consent of the department chairman.

591 Project (3 credits).

593 Research and Thesis (6 credits).
SCHOOL OF ARTS & SCIENCES
Mathematics

COURSES

HE HOME ECONOMICS

Lower Division

101 Introduction to Home Economics (1 credit). Designed to acquaint the freshman student with the field of home economics. Emphasis on opportunities in the professional fields, organization of program, choice of vocation, personal qualifications for living and working with people. One hour discussion each week. Fall semester.

103 Clothing and The Individual (2 credits). A study of the sociological and psychological foundations of clothing selection emphasizing principles of design as related to the individual's figure proportions, personality and need. Study of selection, purchase and care of ready-to-wear apparel, fabrics and accessories. Two hours lecture per week. Each semester.

107 Clothing and The Family (3 credits). Study of material and synthetic textile fibers, yarns and fabrics, selection of appropriate fabrics for various uses, considering wearing qualities and care required. Study will also be made of the relationship of raw materials, construction, and finish to quality and cost. Major textile laws and regulations will also be considered. Two hours lecture and one 2-hour laboratory each week. Spring semester.

111 Fashion Analysis and Design (2 credits). A course designed for the study of costume throughout history and its effect on today's fashions, a comprehensive study of design and its functional role: analysis of the figure and how to solve related problems through fabric selection and color. Contributions of fashion designers and opportunities in designing and related fields will also be studied. Two hours lecture each week. Fall semester.

203 House Planning (3 credits). Basic considerations in house planning for economy, comfort, convenience, and beauty. Evaluation of plan in relation to family needs, interior and exterior design, materials, financing and methods of construction. Housing in relation to the family and community. Three hours lecture each week. Spring semester.

207 Nutrition (3 credits). Study of fundamentals of nutrition as a factor in maintaining good health. Present day problems in nutrition are also discussed. Three lectures each week. Open to all students. Fall semester.

208 Food and the Individual (4 credits). A lecture, lab class in which assessment is made of the interrelationships of the nutritive value of foods, principles of food preparation and the human body. Laboratory experience includes approved techniques of food preparation to retain nutrients and enhance aesthetic qualities. Sanitary standards and procedures for handling food products will be stressed. Effective use of materials, time, energy and money will also be studied. Prerequisite: HE 207 or may be taken concurrently. Two hours lecture and two 3-hour laboratory periods each week. Fall semester.

Upper Division

302 Tailoring (3 credits). Basic principles used in garment construction applied through actual construction of a suit, coat or pants suit. At least one garment done using wool, other garments could be a choice between knits and woven fabric. Common fitting problems are studied and solutions derived. A personal master pattern is made of the interrelationships of the nutritive value of foods, principles of food preparation and the human body. Laboratory experience includes approved techniques of food preparation to retain nutrients and enhance aesthetic qualities. Sanitary standards and procedures for handling food products will be stressed. Effective use of materials, time, energy and money will also be studied. Prerequisite: HE 207 or may be taken concurrently. Two hours lecture and two 3-hour laboratory periods each week. Fall semester.

305 Home Furnishings and Interior Design (3 credits). The primary emphasis of the course is planning home interiors. Study consists of: analysis of life styles, basic needs, space division, color and design, furniture selection, floor coverings, major structural elements and enrichment. The extended environment and historical heritage are also studied. Prerequisite: AR 106. Three hours lecture each week. Fall semester.

DEPARTMENT OF MATHEMATICS

Chairman and Associate Professor: Dr. William P. Mech; Associate Chairman and Associate Professor: Dr. Robert C. Jule; Professors: Malof, Takada; Associate Professors: Anderson, Ferguson, Furuyama, Hughes, Kev, Lamet, Sulanka, Tucker, Ward, Winans, Young. Assistant Professors: Ball, Kenny, Smartt, Sugiyama.

The Department of Mathematics provides two bachelor's degree programs. The curriculum leading to the bachelor's degree in mathematics is designed for those students whose career interests involve the use of mathematics or who plan to attend graduate school. The curriculum in secondary education is designed to prepare the student to teach mathematics in secondary schools and to meet Idaho teacher certification requirements. The master's program is to provide advanced education for junior and senior high school mathematics teachers.

REQUIREMENTS FOR MATHEMATICS MAJOR

Bachelor of Arts or Bachelor of Science Programs

I. Mathematics Degree:

1. College requirements for B.A. or B.S. degree, including electives.

2. Mathematics requirements

Lower Division

- Calculus through M-206 or M-212
- M-124 (Digital Computer Programming)
- M-225 (Applied Fortran Programming) or M-226 (Assembler Language)

Upper division mathematics: 27 or more credits

One or more of:
- M-301 Linear Algebra (4)
- M-302 Intro. to Abstract Algebra (3)
- M-306 Number Theory (3)

One or more of:
- M-314 Foundations of Analysis (3)
- M-406 Complex Variables (3)

One or more of:
- M-361 Fundamentals of Statistics (4)
- M-362 Probability Theory (4)
- M-431-432 Probability and Statistics (6)

Three or more semester courses, including a sequence, at the 400 level (9-12)

M-408 or M-431-432 which may be used in specific area requirements are also allowed in satisfying the overall requirement of 27 upper division hours in mathematics.

The particular mathematics courses used to satisfy the degree requirement may be chosen from specific courses in such areas of mathematics as: computer programming, applied mathematics, statistics, and theoretical mathematics. A degree program emphasizing one or more of these areas can be developed by the student with the assistance of his academic advisor.

Students interested in engineering can form a program leading to a Bachelor's degree in mathematics. This program could include many of the upper division physics or engineering courses offered at B.S.U. and satisfy most of the mathematics requirements with application oriented mathematics courses.

A mathematics degree program can also be developed by those students interested in a computer-related career. This program would include many business courses, the courses needed for the mathematics major, and M-124, M-226 and M-451.

The equivalent of a Bachelor's degree in statistics can be obtained by the student who is interested in statistics or in mathematical applications to business, biology, or physical science. This can be done through the proper selection of electives including M-431 and M-432.

For students preparing for graduate work in a mathematical field, both M-401-402 and M-441-442 are recommended. Additional courses should be selected with his advisor. A reading knowledge of at least one of French, Russian or German is highly desirable.

II. Secondary Education Degree

1. College requirements for B.A. or B.S. degree, including electives.

2. Mathematics requirements

- Calculus through M-206 or M-212
- M-124 (Digital Computer Programming)

Upper division mathematics

- M-301 Linear Algebra (4)
- M-302 Intro. to Abstract Algebra (3)
- M-311 Foundations of Geometry (3)
M-314 Foundations of Analysis (3) or M-406
Complex Variables (3)  
M-361 Fundamentals of Statistics (4) or M-362  
Probability Theory (4) or M-431-432  
Probability and Statistics (6)  
M-490 Mathematics in Secondary Schools (3)  

3. Electives (Recommended: M-225, M-226, M-306, M-312)

4. Education Requirements (See Part V) 20 credits  
(M-490 counts as an education elective)

5. A 45 semester hour major or a 30 semester hour major  
with a 20 semester hour minor.

In order for students to complete the requirements for the  
Secondary Education degree, certain course scheduling and or- 
dering are necessary. The following suggested program reflects 
these factors.

Secondary Education Degree  
(Suggested Program)

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>1ST SEM.</th>
<th>2ND SEM.</th>
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</thead>
<tbody>
<tr>
<td>English Composition</td>
<td>3</td>
<td>3</td>
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<tr>
<td>Calculus M-112, 205 or M-211, 212</td>
<td>5</td>
<td>4-5</td>
</tr>
<tr>
<td>Degree Electives</td>
<td>8</td>
<td>9-8</td>
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<td>16</td>
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<thead>
<tr>
<th>SOPHOMORE YEAR</th>
<th>1ST SEM.</th>
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<tr>
<td>Calculus M-206</td>
<td>0-4</td>
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</tr>
<tr>
<td>Programming M-124</td>
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<td>2</td>
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<tr>
<td>General Psychology</td>
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<td>—</td>
</tr>
<tr>
<td>Foundations of Education</td>
<td>—</td>
<td>3</td>
</tr>
<tr>
<td>Linear Algebra M-301</td>
<td>—</td>
<td>4</td>
</tr>
<tr>
<td>Elective</td>
<td>9-13</td>
<td>7</td>
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<td></td>
<td>16</td>
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<table>
<thead>
<tr>
<th>JUNIOR YEAR</th>
<th>1ST SEM.</th>
<th>2ND SEM.</th>
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<tbody>
<tr>
<td>Foundations of Analysis M-314</td>
<td>3</td>
<td>—</td>
</tr>
<tr>
<td>Intro. to Abstract Algebra M-302</td>
<td>—</td>
<td>3</td>
</tr>
<tr>
<td>Fundamentals of Statistics M-361</td>
<td>—</td>
<td>4</td>
</tr>
<tr>
<td>Probability Theory M-362</td>
<td>—</td>
<td>4</td>
</tr>
<tr>
<td>Educational or Adolescent Psychology</td>
<td>—</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>12</td>
<td>9</td>
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<thead>
<tr>
<th>SENIOR YEAR</th>
<th>1ST SEM.</th>
<th>2ND SEM.</th>
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</thead>
<tbody>
<tr>
<td>Secondary School Methods</td>
<td>3</td>
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</tr>
<tr>
<td>Foundations of Geometry M-311</td>
<td>—</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics in Secondary Schools M-490</td>
<td>—</td>
<td>3</td>
</tr>
<tr>
<td>Secondary Student Teaching</td>
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<td>6</td>
</tr>
<tr>
<td>Education Elective</td>
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<td>Electives</td>
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Teaching Minor in Mathematics  
(Suggested Program)

20 credits to include:

- M-124 2 credits
- M-112 or 211 5 credits
- M-205 or 212 4-5 credits

One of M-302 3 credits
- M-306 3 credits
- M-311 3 credits
- M-361 3 credits
- M-362 4 credits
- M-364 4 credits

Students who plan to teach in high school are recommended to take M-206 and a second of the 300 level courses listed above. All students are advised to contact a member of the mathematics faculty for assistance in planning a program.
SCHOOL OF ARTS & SCIENCES

Mathematics

112 Calculus and Analytic Geometry (5 credits). Analytic geometry of the straight line, functions, limits, continuity, differentiation of algebraic functions with applications, definite and indefinite integrals with applications. Prerequisite: Skill in algebra and basic knowledge of trigonometry. Each semester.

115-116 Mathematics for the Life Sciences (5 credits). Designed primarily for students in the life sciences. Functions and their graphs, curve fitting, systems of equations, trigonometric functions, triangles, discrete probability, calculus, continuous probability, and statistics. Prerequisite: Two years of high school math or equivalent, and satisfactory placement score. Placement to be determined by a test given on the first meeting of M-115 and by the ACT mathematics subcore. Each semester.

124 (EN-104) Digital Computer Programming (2 credits). Course for engineering, science or mathematics majors to introduce programming principles and logic. Introduction given to FORTRAN and Cobol. Programming and handling errors, function and subroutine subprograms, applied to problem solving. Prerequisite: M-111 or M-106 or having taken or taking mathematics beyond this level. Credit cannot be obtained for both M-124 and EN-104. Each semester.

205 Calculus and Analytic Geometry (4 credits). Transcendental functions, methods of integration, determinants, matrices and linear equations, analytic geometry of cones, polar and parametric equations. Prerequisite: M-112 or the passing of a placement test over the material of M-112. Each semester.


211-212 Accelerated Calculus (5 credits each). Analytic geometry, functions, limits, differentiation and integration with applications; transcendental functions, methods of integration. Vectors, solid analytic geometry, vector functions, partial derivatives, multiple integrals. Introduction to differential equations. This course is essentially an accelerated version of the three semesters course sequence M-112, M-205, M-206. Prerequisites: M-111 or M-106, M-116 with a grade of A, or strong high school background. Yr course M-211 Fall M-212 Spring.

225 (EN-225) Applied Fortran Programming (2 credits). A general course to illustrate advanced techniques in Fortran programming with applications drawn from astronomy, physics, chemistry, geology and mathematics. Prerequisite: M-124 (EN-104) and M-205. Credit cannot be obtained for both M-225 and EN-225. Fall semester.

226 Assembly Language (4 credits). Assembler language for the IBM System-360-370. Binary integer, floating point, and decimal arithmetic are considered. Other topics include the writing of subroutines, editing, linking and addressing modification. Non-academic applications are considered, and an introduction to RPG is included. Prerequisite: M-124. Each semester. M-224 and EN-225 Spring semester.

301 Linear Algebra (4 credits). Linear algebra, vector spaces and matrices. Prerequisite: M-205 or 212. Each semester.

302 Introduction to Algebraic Structures (3 credits). Sets. Boolean algebra, integral domains, groups, fields, rings and ideals. Prerequisite: M-205 or 212. Spring semester.

306 Number Theory (3 credits). Primes, congruences, Diophantine equations, residues, quadratic forms. continued fractions. Prerequisite: M-205 or 212. Spring semester.

311 Foundations of Geometry (3 credits). Euclidean, non-Euclidean, and projective geometries from an axiomatic point of view. Prerequisite: M-205 or 212. Fall semester.


316 Advanced Engineering Mathematics (4 credits). Ordinary differential equations with emphasis on closed form and series solutions; transform methods and electrical and mechanical circuit differential equations; Fourier series and harmonic analysis. Vector calculus with line and surface integrals. Prerequisite: M-206 or 212. Spring semester.

331 Differential Equations (4 credits). Ordinary and partial differential equations with applications to physical sciences and engineering. Emphasis on numerical methods and solution techniques, Prerequisite: M-124 (EN-104) and M-206. Recommended M-225 (EN-225) or M-126. Fall semester.

340 Numerical Analysis (4 credits). The application of numerical methods, to interpretation and analysis of data, general iterative methods: approximation of functions, error analysis. Approximation of solutions of equations, implementation of computer programming. Fortran programming will be utilized. Prerequisite: M-124 (EN-104), or M-314. Each semester.


362 Probability Theory (4 credits). The algebra of sets, set functions, probability functions, random variables, distributions, densities, generating functions, conditional probability, Markov's inequality, central limit theorem, strong and weak laws of large numbers. Prerequisite: One of M-106, M-116, M-205 or M-212. Spring semester.

401-402 Advanced Calculus (3 credits). The real number system, continuity, functions of several variables, partial differentiation, multiple integrals, line and surface integrals, integral theorems, advanced series, Fourier analysis, and ordinary differential equations. Prerequisite: M-206. Each semester.

406 Theory of Functions of a Complex Variable (3 credits). Complex numbers, point sets, functions of a complex variable, analytic functions, infinite series, integration, conformal mapping. Prerequisite: M-206 or 212. Fall semester.


432 Probability and Statistics (3 credits). Basic concepts of probability theory, sample spaces, random variables, mathematical expectation, central limit theorem, stochastic processes, estimation, and testing of hypotheses. Prerequisite: M-206 or 212. Sequence beginning each Fall.

441 Abstract Algebra I (3 credits). Homomorphisms, prime ideals, prime radical, rings, groups, modules, irreducible rings of endomorphisms, R-modules, Jacobson radical, descending chain condition. Prerequisite: M-301, M-302. Fall semester. Even numbered years.

442 Abstract Algebra II (3 credits). Polynomial rings, simple extensions, algebraic extensions, splitting fields, separable extensions, automorphisms of fields, normal extensions, Galois theory, finite fields, generic polynomials. Prerequisites: M-301, M-302. Spring semester, odd numbered years.

451 Systems Programming (4 credits). Introduction to machine language programming, compiled languages, program optimization, computer logic and design. Prerequisite: M-126 and M-206 or 212. Fall semester.

456 Linear Programming (4 credits). Simplex algorithm, duality theory, postoptimality problems, and transportation problems. Prerequisite: M-301. Spring semester, alternate years.

496 Mathematics in Secondary Schools (3 credits). Objectives, content, and methods of secondary school mathematics programs. Prerequisite: Six hours of Mathematics completed at or above the three hundred level. Fall Semester.

Graduate


503 Algebraic Systems (3 credits). Number systems and other algebraic systems from a modern point of view. Prerequisite: Each semester.

511 General Topology (3 credits). Sets, separation axioms, topologies, connectedness, compactness, convergence, continuity, product spaces. Prerequisite: M-401 or M-501 or consent of the instructor. Summer and Fall semester.

541 Abstract Algebra I (3 credits). Mappings, the Integers, Semigroups, Groups, Subgroups, Rings. Prerequisite: M-301 and M-302 or the consent of the instructor. Summer.

542 Abstract Algebra II (3 credits). Integral Domains, Polynomial Rings, Principal Ideal Domains. Prime Ideals, Maximal Ideals, Modules, Chain conditions, Fields, Field Extensions, Galois Theory. Prerequisites: M-541 or consent of the instructor. Summer.

547 History of Mathematics (3 credits). The course is designed for mathematics teachers in the secondary schools. The course consists of two parts: the first part traces the development of algebra, geometry, analytic geometry and calculus to the 19th century; the second part gives a brief introduction to, and history of, some of the developments in mathematics during the last century. Prerequisite: consent of the instructor. Fall semester.

548 Mathematics for Operations Research (4 credits). An introduction to mathematical techniques designed to solve practical problems based on evaluation of several variables. Matrices, calculus, probability and statistics from the user's point of view. Solution of deterministic problems by linear and nonlinear programming and the simplex method with emphasis on applications in management decision situations. Introductory dynamic programming as a method for solution of stochastically controlled systems. Prerequisite: Consent of instructor. Summer and Fall semester.

546 Mathematical Modeling (3 credits). A brief introduction to digital computer programming in FORTRAN or BASIC. Difference equations, their solutions, stability, equilibrium values, and their use in computer simulation. Applications to demography and economics. Prerequisite: Consent of instructor. Summer.

571 Mathematics Curriculum: 7-12 (3 credits). The history of the 7-12 mathematics curriculum; content, special problems, and trends in mathematics programs; organization of the curriculum, study of reports and recommendations; curriculum development projects. Prerequisite: one year's experience in teaching junior or senior high mathematics. Spring semester.

583 Thesis (3 to 6 credits). A major paper of original work in mathematical research or the formulation of a new interpretation or novel exposition of extant mathematics. Prerequisite: admission to candidacy.

586 Reading and Conference (3 to 6 credits). A "project" may include, but is not limited to, Independent research or written curriculum with teaching materials. Prerequisite: admission to candidacy.

591 Project (3 to 6 credits). A "project" may include, but is not limited to, a library research paper, educational research, or written curriculum with teaching materials. Prerequisite: admission to candidacy.

598 Seminar in Mathematics (3 credits). The content will vary within a format of student presentation and discussion of relatively advanced mathematical topics selected from texts or mathematical journals. This will not be a seminar in mathematics education. Each semester.
DEPARTMENT OF MUSIC

Chairman and Professor: Mr. Wilber D. Elliott; Associate Chairman and Associate Professor: Oakes; Professors: Best, C.G. Bratt, Meyer. Taylor; Associate Professors: Baldwin, Cleveland, Sheltan; Assistant Professors: J.W. Bratt, Hopper, Hsu, Russell; Instructors: Baldassare, Blood, Thomason; Special Lecturer: Stern (Conductor-in-Residence).

Gifts and Memorials to the Music Department

The Music Department has been the recipient of many fine gifts of instruments, music and record collections from friends and supporters of the Department. In the Music Auditorium is housed the J.W. Cunningham Memorial Pipe Organ, a three-manual Austin organ of 45 ranks and 54 registers, given to the University by Laura Moore Cunningham. It is used for concert, teaching, and practice purposes. Also in the Auditorium is the console for the Harry W. Morrison Memorial Carillon, built by Meas-Rowe. Given as a memorial to her husband by Mrs. Velma Morrison, the Grand Symphony Carillon system chimes the hours and half-hours and twice daily plays a short program of carillon music. A familiar but unusual gift, seen in area parades and at home football games, is the BSU calliope, given by Mr. Michael A. Compton.

Other gifts to the Music Department include several grand pianos, electronic equipment, instruments, record collections and music. The Department is grateful to those donors who have given so generously:

Dr. and Mrs. Robert deNeuville
Alice Gould
Dr. and Mrs. Arthur C. Jones
Senator Lan-Jordan
Bryant S. Martineau
Marjorie Palmquist
Mr. and Mrs. Edward Utley
Mrs. Eli Weston

REQUIREMENTS FOR MUSIC MAJOR

Bachelor of Arts Program
A. Completion of general college requirements for the Bachelor of Arts degree as found on page 17 of the catalog.

B. Minimum Music Requirements:
- Performance Studies ........................................ 8
- Materials of Music I, II, III, IV .......................... 12
- Beginning and Advanced Ear Training .................... 4
- Music History/Literature Courses ......................... 6
- Ensemble ................................................................ 4
- Concert Class (each semester) .............................. 0
- Performance, Theory, Music Education, or General Music Electives ............................................. 10
- Senior Recital* or Senior Project ........................... 1

Total ................................................................. 45

*Senior Recital option requires approval of the student’s private instructor. Senior Recital (MA-444) requires a minimum of 3 years of study or equivalent in the area prior to enrollment.

**An Independent Study terminal project under faculty supervision and with the approval of the Department Chairman in the areas Theory, Music History/Literature, or Music Education.

MUSIC MINOR

The Music Department will recognize as a minor in music (in conjunction with a major in a non-music area) a minimum of 20 hours of music credits completed. Emphases are possible in Performance, Music Theory, History/Literature, or Music Education. Details of the individual student’s curriculum are to be determined by the student in consultation with an assigned Music Minor advisor and subject to the approval of the Music Department Chairman.

MUSIC MAJOR IN PERFORMANCE, THEORY-COMPOSITION, AND MUSIC EDUCATION

Bachelor of Music Program

1. The Bachelor of Music Degree (Performance and Theory-Composition Emphasis) is designed to train performers and composers and performing artist teachers. It is the basic degree for preparing students for graduate work in the performing and creative fields as well as teaching at the college and university level. It is essentially a preprofessional degree.

2. The Bachelor of Music Degree (Music Education Major) is designed to prepare students for teaching careers in the secondary and elementary educational systems. It also prepares the students for graduate work in Music Education.

3. All full-time music students will be required to attend Concert Class during each semester of residency at Boise State University. (See course description for MA 010 for complete details). All students will perform on their major instrument before a faculty jury at the end of each semester. Students presenting MA-444, 445, or 446 recitals are exempt from faculty jury during the semester in which the recital is given.

4. All Bachelor of Music non-keyboard majors, no later than the end of the Junior year, are required to pass one of the levels in the Piano Proficiency examination before a faculty committee. The particular level is determined by the student’s major. A grade of C or better in MU213 will meet levels I and II requirements for Music Education Majors. A grade of C or better in MU 314 will meet level II requirements for Performance and Theory-Comp majors. Details are available from the Music Department.

5. All Bachelor of Music Majors are required to register for one of the three major ensembles (band, choir, or orchestra) each semester, totaling a minimum of 8 credits over a normal 4-year course of study, except that performance majors in Piano, Voice or Guitar will take only 6 credits of major ensembles. Piano performance majors will take 2 credits of accompanying (ME 180, 380) toward the required 6 credits. Guitar majors may take 2 credits of Guitar Ensemble (ME 167, 367) toward the required 6 credits. Other ensembles may be taken as electives in addition to the required major ensembles.

6. The following Core of Music Courses will be included in all Bachelor of Music curricula:

- Concert Class (Attendance required each semester of residency - see MA 010 course description for details) .............................. 0
- Materials of Music I, II, III, IV and Ear Training (L.D.) .................. 16
- Basic Conducting (L.D.) ........................................... 1
- Ensemble ......................................................... 6-8
- Elements of Form (Upper Division) ............................ 3
- Music History Courses (Upper Division — 3 credits will count toward Area I Requirements; see page 17) .................. 12
- a. History and Lit. of 20th Century (MU 306) .................. 3
- b. Other Music History selected from MU 305, 307, 309, 310 .............................................. 9

Total ................................................................. 40

I. Performance Emphasis Requirements

- 1. General University and Basic Core Requirements
  (including 3 credits of Music History in Area I) .......................... 29-32

- 2. Music Requirements:
  A. Music Core ................................................. 38-40
  B. Lower Division Performance Studies .......................... 14
  1. All Performance Majors will take 2 credits of Performance Studies the first semester Freshman Year and perform a 4-credit jury prior to enrolling in 4-credit performance studies second semester.
  C. Upper Division Courses ................................... 29-34
  1. Performance Studies ........................................ 16
  2. Keyboard Harmony and Basic Improvisation ................. 4
  3. Counterpoint .................................................. 4
  4. Choral or Instrumental Conducting .......................... 2
  5. Major Instrument Literature .................................. 2
  6. Major Instrument Pedagogy I & II ............................ 4
  7. Advanced Form and Analysis .................................. 2
  8. Senior Recital ............................................... 2

Total ................................................................. 128
II. Theory-Composition Emphasis Requirements

1. General University and Basic Core Requirements
   (including 3 credits of Music History in Area I) . . . . . . . . . . . . . . . 29-32

2. Music Requirements:
   A. Music Core ........................................................................... 40
   B. Lower Division Courses .......................................................... 16
      Performance Major Studies ....................................................... 8
      Performance Minor Studies (To be piano, unless major is a keyboard
      instrument) ....................................................................... 8
   C. Upper Division Courses .......................................................... 32
      Performance Major Studies ....................................................... 4
      Advanced Form and Analysis ..................................................... 2
      Band and Orchestra Arranging ............................................... 2
      Canon and Fugue .................................................................... 2
      Choral and Instrumental Conducting ...................................... 2
      Counterpoint ......................................................................... 4
      Keyboard Harmony and Basic Improv .................................. 4
      Music Composition ................................................................... 4
      Senior Composition Recital or Music Seminar ...................... 2
   3. Electives (Any Area) .................................................................. 11-14
      Total: 128

III. Music Education Emphasis Requirements

(Fulfillment of the requirements below will qualify the student for Idaho State Certification in Secondary Schools and as an Elementary School Music Specialist.)

1. General University and Basic Core Requirements
   (including 3 credits of Music History in Area I) . . . . . . . . . . . . . . . 29-32

2. Music Requirements:
   A. Music Core ........................................................................... 40
   B. Lower Division Courses .......................................................... 15
      Functional Piano ................................................................... 2
      Instrumental Techniques & Methods ....................................... 4
      Orientation to Music Ed ........................................................... 1
   C. Upper Division Courses .......................................................... 23
      Performance Major Studies ....................................................... 8
      Band & Orchestra Methods & Materials ................................... 2
      Band Arranging .................................................................... 2
      Choral and Instrumental Conducting ...................................... 2
      Choral Methods and Materials ............................................... 2
      Instructional Techniques and Methods .................................. 4
      Teaching Music in the Elementary Classroom ...................... 2
      One-half Senior Recital ............................................................ 1
   D. Education School Requirements ............................................. 12
      (General Psych — Area II) ......................................................... (3)
      (Educational Psych — Area II) .................................................. (3)
      Foundations of Education ...................................................... 3
      Secondary School Methods ................................................... 3
      Practice Teaching ................................................................... 6
   3. Electives (Any Area) .................................................................. 9-12
      Total: 128

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MASTER'S DEGREE IN SECONDARY EDUCATION*

Music Emphasis Admissions and Program

A. The Master's Degree in Secondary Education, Music Education emphasis, is designed to meet the needs of the practicing junior high or high school music specialist. While teaching experience is not necessary in order to begin work on this degree, any applicant for the degree must either be currently certified as a secondary school music specialist or agree to begin the process toward obtaining this certification while working on the degree. Before Advancement to Candidacy can be granted, the student must ordinarily show eligibility for certification by the State of Idaho (or any other State). Admission will be granted to applicants who hold a bachelor's degree from an accredited college or university, and who give promise of meeting the standards set by the Music Department.

B. All regular and provisional graduate students will be required to take diagnostic examinations during the first part of their first semester in attendance. The purpose of these examinations is to determine the student's strengths and weaknesses so that the student and his committee will be able to set up a program according to the student's needs. The examinations will be in the areas of music education, music theory, music history, and performance. The results of these examinations will be interpreted by the Music Department Faculty. The student's advisor will consult with the student about action towards remedying any deficiencies. Any undergraduate course used to make up the deficiencies will not count toward the Master's Degree. A student who has any deficiencies will be granted Provisional Status only, in the graduate program; when all deficiencies are removed, he may then seek Regular Status. A description of the material covered on these examinations is available from the Music Department.

Course Offerings*

A. Required Courses
   1. MU-503 Introduction to Research Materials in Music Education ........ (3 credits)
   2. MU-570 New Development in Music Education .............................. (3 credits)
   3. Culminating activity ** or additional course work ......................... (3-6 credits)
   4. TE-560 Secondary Education Core courses (6 credits)
   5. Total hours: ................................................................. (30-33 credits)

B. Elective Courses

Additional courses as planned by the student and his graduate committee.

*The graduate level courses to support this program will be regularly offered in the fall and spring semesters when funded by the legislature.

** A thesis or final project

COURSES

MA MÚSIC APPLIED — PERFORMANCE STUDIES

Major Area practice requirements:
For 4 hrs. credit—18 hrs. practice per week.
For 2 hrs. credit—12 hrs. practice per week.

Minor Area practice requirements:
For 2 hrs. credit—6 hrs. practice per week.

010 Concert Class (no credit). The class meets weekly. Required of all full-time Music Majors and Minors, but attendance is open to any person. Minimum attendance per semester: 10 sessions for all Music Majors; 6 sessions for all Music Minors. As a part of this course, attendance at a minimum of 6 Music Department-sponsored, on-campus concerts-recitals is required. Participation in the concert-recital will not constitute attendance for meeting this requirement. Each semester.

Students planning to enroll in upper division performance studies (MA-300 levels) must have completed two years or equivalent of the lower division level and must have passed the Junior Standing Proficiency Exams for those studies. All MA courses may be repeated for credit. Students transferring into the Music Department as music majors from some other college, university or conservatory, or from another department within BSU and requesting advanced standing in performance must successfully complete a performance examination before a faculty jury prior to the possible granting of such advanced standing. Details may be obtained from the music office.
Music

127 Beginning Guitar Class (1 credit). This is a course in the technical fundamentals involved in playing the acoustical guitar for the beginner. Making use of popular and folk songs, the course is based on written notation and aural instruction, stressing chordal playing and correct posture. Students are required to provide their own instrument. Meets twice a week. May be repeated once for credit; each semester.

128 Intermediate Guitar Class (1 credit). A continuation of MA 127. Emphasis is given to understanding fret-board theory, reading musical notation for the guitar and solo playing. The concept of form levels is introduced and developed as it relates to upper position work. Students must provide their own instrument. Meets twice a week. May be repeated once for credit. Prerequisite: MA 127 or permission of instructor. Each semester.

237 Advanced Guitar Class (2 credits). A study of musical and technical problems inherent in solo guitar playing. Chord construction and progression are studied in depth through intervalic analysis and functional harmonic relationships. Theoretical principles of guitar transcriptions are covered and improvisation is introduced. Meets three times a week. Students must provide their own instrument. May be repeated once for credit. Prerequisite: MA 128 or permission of instructor. Either semester.

328 Jazz Guitar Class (1 credit) A course in jazz improvisation for the guitarist with at least 1 year of playing experience. The use of the guitar in jazz is approached within a historical perspective beginning with the 1930's. Students must provide their own instrument. Meets twice a week. May be repeated once for credit. Prerequisite: MA 128 or permission of instructor. Either semester.

Brass

109, 309 Applied Brass — 2 credits
110, 310 Applied Brass — 4 credits
111, 311 Horn — 2 credits
112, 312 Horn — 4 credits
113, 313 Trombone — 2 credits
114, 314 Trombone — 4 credits
115, 315 Trumpet (or Trumpet) — 2 credits
116, 316 Trumpet (or Baritone) — 4 credits
117, 317 Tuba — 2 credits
118, 318 Tuba — 4 credits

Woodwinds

189, 389 Applied Woodwinds — 2 credits
190, 390 Applied Woodwinds — 4 credits
191, 391 Bassoon — 2 credits
192, 392 Bassoon — 4 credits
193, 393 Clarinet — 2 credits
194, 394 Clarinet — 4 credits
195, 395 Flute — 2 credits
196, 396 Flute — 4 credits
197, 397 Oboe (or English Horn) — 2 credits
198, 398 Oboe (or English Horn) — 4 credits
199, 399 Saxophone — 2 credits
200, 400 Saxophone — 4 credits

Organ

131, 331 Organ — 2 credits
Prerequisite: Level 3 Piano proficiency.
132, 332 Organ — 4 credits
Prerequisite: Level 3 Piano proficiency.

Percussion

141, 341 Percussion — 2 credits
142, 342 Percussion — 4 credits

Piano

150 Piano Class — 1 credit
Maximum 2 credits allowed.
151, 351 Piano — 2 credits
152, 352 Piano — 4 credits

Voice

180 Voice Class — 1 credit
Maximum 2 credits allowed.
181, 381 Voice — 4 credits
182, 382 Voice — 4 credits

410 Music Composition (2 credits). Instruction and supervised experience in composing for various instruments and voices, individually and in combination, utilizing small and large musical forms. May be repeated for a total of 8 credits. Prerequisite: Permission of instructor. Each semester.

144 Music Education Bachelor of Arts Senior Recital (1 credit). All students under the Music Education Emphasis will be required to present a half (1/2) recital on their performance major area during their senior year. This recital may also serve the Bachelor of Arts Music Major program. Prerequisite: three years or its equivalent of study in the area. Each semester.

446 Recital (2 credits). Music Performance majors may elect to perform a solo recital for two credits prior to the required senior solo recital at any time subsequent to the freshman year. The student must have permission of his teacher and the chairman of the music department. Each semester.

446 Senior Performance Recital (2 credits). Students majoring in Performance Studies will be required to present a senior recital on their major instrument. Prerequisite: Major in Performance and permission of the student's supervising private teacher. Each semester.

447 Senior Composition Recital (2 credits). A recital for the performance of original compositions by the Theory-Composition Major. Students must make their own arrangements with personnel required for the recital. Required of Theory-Composition Majors. Prerequisite: Major in Theory-Composition and permission of supervising faculty member. Each semester.

GRADUATE LEVEL PERFORMANCE STUDIES

Private lesson study in voice or on keyboard, string, wind or percussion instruments.

Students will be assigned on the basis of the audition. Performance, technical, study, musical interpretation, literature and teaching technique will be stressed.

All MA-500 level courses are repeatable for credit to a maximum of 6 credits.

ME 580 Applied Brass (2 credits)
ME 581 Applied Strings (2 credits)
ME 582 Applied Keyboard (2 credits)
ME 583 Applied Percussion (2 credits)
ME 584 Applied Voice (2 credits)
ME 585 Applied Woodwinds (2 credits)
ME 586 Advanced Percussion Class (2 credits)
ME 587 Jazz Ensemble (1 credit) A course designed to promote playing in and repertoire knowledge of jazz. A public performance will be required each semester. Prerequisite: study of music of all periods. Varying groups will be established as demand warrants. A public performance can be expected each semester. Prerequisite: permission of instructor and concurrent enrollment in ME 101. 301 or ME 105. 305. Maximum credits: ME 110, and or ME 310. 8 cr. Each semester.

ME 588 Band (1 credit) An elective open to all students who can play a band instrument. Maximum credits: ME 120, and or ME 320. 8 cr. Each semester.

ME 589 Jazz Ensemble (1 credit) A course designed to promote playing in and increasing repertoire knowledge for small brass ensembles. A public performance is required each semester. Maximum credits: ME 125, and or ME 325. 8 cr. Prerequisite: permission of instructor. Each semester.

ME 589 Percussion Ensemble (1 credit) A course designed to promote playing in and repertoire knowledge of percussion ensembles. A public performance will be required each semester. Prerequisite: consent of instructor. Maximum credits: ME 126, and or ME 326. 8 cr. Each semester.

ME 590 Woodwind Ensemble (1 credit) A course designed to promote playing in and increasing repertoire knowledge for small woodwind ensembles. A public performance is required each semester. Maximum credits: ME 130, and or ME 330. 8 cr. Prerequisite: permission of instructor. Each semester.

ME 590 Percussion Ensemble (1 credit) A course designed to promote playing in and repertoire knowledge of percussion ensembles. A public performance is required each semester. Prerequisite: consent of instructor. Maximum credits: ME 140, and or ME 340. 8 cr. Each semester.

ME 591 Keyboard Percussion Ensemble (1 credit). In conjunction with the preparation of music for public performance, students will acquire a first-hand knowledge of phrasing, meter selection and application, general ensemble techniques, musical style and interpretation, and repertoire. Students will also be encouraged to compose original music and/or arrange or adapt existing music for the ensemble. Each semester.

ME 590 Orchestra (1 credit). The Boise State University Community Symphony is composed of both students and experienced musicians in the community and prepares several concerts each season from the standard symphonic repertoire. An elective for non-music majors. Audition is required of new students. Maximum credits: ME 150 and or ME 350. 8 cr. Each semester.
160. 360 String Ensemble (1 credit). A course designed to promote playing in and increasing repertoire knowledge for small string ensembles. A public performance is required each semester. Maximum credits: ME 150, and or ME 360. 8 or 9. Prerequisite permission of instructor. Each semester.

167. 367 Guitar Ensemble (1 credit). A course designed to promote playing in and repertoire knowledge of ensembles of or including guitarists. Prerequisite: Second year guitar proficiency and permission of instructor. Maximum credits: ME 167 and or 367. 8 or 9. Each semester.

180. 380 Accompanying (1 credit). Practical experience in accompanying vocal and instrumental students. Open to keyboard students with sufficient technique. Maximum credits: ME 180 and or ME 380. 8 or 9. Each semester.

185. 385 Duo-Piano Ensemble (1 credit). A basic survey of duo-piano literature from the Baroque to the present. The student will learn how to cope with ensemble problems and concerns in rehearsal and performance. Class sessions will include performance, listening and discussion. One paper will be prepared by each student. A public performance will be presented. Meets once a week, but at least one hour per week. Prerequisite: Consent of instructor. Maximum credits: ME 185 and or 385. 8 credits.

Graduate

SCHOOLS OF ARTS & SCIENCES

MU MUSIC, GENERAL

101 Music Fundamentals (2 credits). Primarily for Education Department students. Open to all non-music majors. Learning to read music through study of music notation symbols. Study of all scales and keys, major and minor, and elementary chord structures. Basic conducting patterns are learned and practiced. A remedial course for credit majors. Each semester.

119 Materials of Music I (3 credits). This course includes music fundamentals (notation, intervals, triads, scales and modes, key signatures). Melodic cadences, musical construction and decoration, 2- and 3-voice textures (linear and vertical aspects). Emphasis on aural and visual recognition, analysis and compositional skills involving the above. Prerequisite: Piano proficiency to play simple melodies and harmonies. Corequisite enrollment in piano study, or permission of the instructor. Fall semester.

120 Materials of Music II (3 credits). This course includes 4-voice textures (linear and vertical aspects); homophonic textures; diatonic chords and harmonic relationships; cadences, inversions, dominant sevenths and secondary dominants; a cursory survey of binary, ternary and through-composed forms. Modulation and relationships: cadences, inversions, dominant sevenths and secondary dominants; a cursory survey of binary, ternary and through-composed forms. Modulation and relationships: cadences, inversions, dominant sevenths and secondary dominants. Prerequisite: MU 119 or equivalent competency and piano as per MU 119. Spring semester.

121-122 Beginning Ear Training (1 credit). A course designed to correlate with Materials of Music I and II which emphasizes auditory training in scales (including the modes and major and minor) and all intervals. The course includes drill in soffegio and sight singing leading up to aural recognition of 3-part and 4-part harmonic structures. Students are expected to play at the keyboard. Prerequisite: Previous or concurrent enrollment in Materials of Music I and II. Fall and Spring semesters.

133 Introduction to Music (3 credits). An elective course open to all students and fashioned to familiarize the listener with a variety of musical expression. The emphasis is laid upon the enjoyment of music through the understanding of recorded and live music. Each semester.

147 Survey of Opera and Music Theatre (1 credit). An historical survey of the development and growth of opera and music theatre through chronological study of scores, recordings, sound films and literature. Library resource materials from the beginning of the Baroque period to the present. Prerequisites: MU 101; MU 140. Meets twice a week. Fall semester.

213 Functional Piano (2 credits). Class instruction for Music Education majors; designed to build fundamental keyboard skills through scales, chords, arpeggios and other studies. Building of a repertoire of songs useful in teaching classroom music. Prerequisite: Materials of Music II MU 120. One year of piano study recommended prior to enrollment. May be repeated once for credit. Each semester.

219 Materials of Music III (3 credits). This course is a continuation of 4-part textures begun in MU 120. It includes diatonic sevenths, introduction to altered chords, the augmented sixth and Neapolitan chords, cadence firmus techniques, the remote mode, the more simple forms of the basic chords in four parts. Prerequisite: MU 120 or equivalent competency and piano per MU 119. Fall semester.

220 Materials of Music IV (3 credits). This course includes introductions to invention of fugue, form, and thirteenth century melody and harmony; atonality and serial techniques; compositional skills involving the above. Prerequisite: MU 219 or equivalent competency and piano per MU119. Spring semester.

221-222 Advanced Ear Training (1 credit). A continuation of Beginning Ear Training; the student will take dictation in more advanced rhythms, soffegio and dictation in two, three, and four parts. Students are expected to play at the keyboard, the more simple forms of the basic chords in four parts. Prerequisite: Materials of Music II MU 120. Beginning Ear Training MU 121 and MU 122, and at least one year of piano, or concurrent piano study. Fall-Spring semester.

257 String Instrument Techniques and Methods (2 credits). Primarily for Music Education Majors. This course deals with methods and materials of string-class teaching, providing the student with a basic performing technique on two or more of the orchestral string instruments: violin, viola, cello, and string bass. 1 hour lecture, 2 hours lab per week. Fall semester.

261 Basic Conducting (1 credit). Fundamental techniques of conducting baton fundamentals, group rehearc, and simple score reading. Meets twice a week. Prerequisite: Materials of Music II MU 120 and Beginning Ear Training MU 121-122. Either semester.

266 Woodwind Techniques and Methods (2 credits). Primarily for Music Education majors. This course deals with methods and materials of the various woodwind instruments in the public schools, while providing the student with a basic pedagogical technique on two or more of the woodwind instruments. Meets three times per week. Fall semester.

271 Orientation to Music Education (1 credit). A look at school music programs to include all levels, primary through secondary programs. Meets twice a week—a lab week and one formal class period. Lab period will be visitation in public schools. Either semester.

290 History and Literature of the Romantic Era (3 credits). Study and representation of representative musical works from Schubert and Beethoven to Mahler and Richard Strauss. The relationship of these works to parallel movements in literature and the other arts. Prerequisite: Materials of Music II MU 120. Fall semester.

300 History and Literature of the Twentieth-Century (3 credits). Styles and characteristics of music from the last decades of the previous century to the present. Works from Mahler and Debussy to contemporary developments in electronic music. Consideration of jazz and other recent influences in American music. Prerequisite: Materials of Music II MU 120. Spring semester.

305 History and Literature of the Baroque Era (3 credits). The development of understanding style and characteristics of music of this period through score reading, analysis and discussion. Works from the Gabriels through Bach and Handel will be considered. Prerequisite: Materials of Music II MU 120. Either semester.

310 History and Literature of the Classic Era (3 credits). Works from the early classical school through Haydn and Mozart will be the basis of the course. Attention will be given to the evolution of classical forms through score reading, analysis and discussion. Prerequisite: Materials of Music II MU 120. Spring semester. (Not offered 1975-76).

313-314 Keyboard Harmony and Basic Improvisation (2 credits). The student will learn to play in strict four-part harmony from figured basses and melodies, from unfigured basses and melodies, to modulate, to play familiar tunes in four parts in various keys and be instructed in the basic materials for improvising at the piano and organ. Prerequisite: Materials of Music II MU 120 and Beginning Ear Training. Prerequisite: Previous or concurrent enrollment in Materials of Music I and II. Fall semester.

321-322 Countertune (2 credits). A study of the 16th century composition techniques. The C clefs will be used and the student will write in two, three, and four parts, using the five classic species of counterpoint. If time permits the writing will be extended to include five and six parts and counterpoint in all clefs. Prerequisite: Materials of Music IV MU 220. Composition of MU 221 and MU 222 is desirable. Fall-Spring semester.

345 Opera Theatre (1 credit). A course in the study and production of operas. Permission of instructor required to register for course. Maximum 4 credits. Each semester.

365 Choral Conducting (1 credit). A course designed to deal with the problems and techniques of choral conducting. Students will work with ensemble groups as laboratories for conducting experience. Meets twice a week. Prerequisite: Basic Conducting MU 261. Fall semester.

366 Instrumental Conducting (1 credit). A course designed to deal with the problems and techniques of instrumental conducting. Includes dictation technique and score reading. Students will work with ensembles as laboratories for conducting experience. Meets twice a week. Prerequisite: Basic Conducting MU 261. Fall semester.

368 Percussion Techniques and Methods (2 credits). Primarily for Music Education majors. This course deals with methods and materials of teaching the various percussion instruments in the public schools, while providing the student with basic performing techniques. Meets three times per week. Spring semester.

369 Brass Techniques and Methods (2 credits). Primarily for Music Education majors. This course deals with methods and materials of teaching the various brass instruments in the public schools, while providing the student with basic performing techniques. Meets three times per week. Spring semester.

370 Guitar for Classroom Teachers (2 credits). A course designed for teachers or prospective teachers who wish to use the guitar in their classroom. Emphasis is on accompanying skills, elementary skills, elementary choral theory, melody playing, proper hand position and note reading. Musical material is drawn from folk styles useful in elementary classes. Maybe repeated once for credit. Either semester.

372 Teaching Music in the Elementary Classroom (2 credits). Designed for the music education major, this course will deal with curriculum design, teaching methods such as Orfi, Kodaly, "Threshold to Music," materials and evaluative techniques for early music education. The general student in elementary schools included in the course will be planning and preparation of classroom and general music, music appreciation courses, and the use of music in related arts and humanities courses. The course will be based on lectures plus one lab period per week. Prerequisite: Orientation to Music Education MU-211. Fall semester.

385 Choral Methods and Materials (2 credits). Designed for Music Education majors who will be teaching vocal groups in junior and senior high schools. A practical workshop and in-service training of choral materials, rehearsal techniques, use of small ensembles, planning and organization of vocal groups. Meets three times a week. Prerequisite: Basic Conducting MU-261. Spring semester.

387 Band and Orchestra Methods and Materials (2 credits). The study of the organization, management, and conducting of band and orchestra at the secondary school level; includes equipment purchasing, budgets, public relations, planning, rehearsal techniques, scheduling, programming, and emergency repairs of instruments. Fall semester.

409 Elements of Form (3 credits). Elements of form from both design and harmonic structure standpoints. Detailed analysis of the phrase and the simpler binary and ternary forms; cursory examination of larger forms. Prerequisite: Materials of Music IV MU-220. Fall semester.

410 Advanced Form and Analysis (2 credits). Analysis of harmonic and formal structures of the larger binary and ternary forms; the sonata, the symphony, the concerto, Baroque forms. Prerequisite: Elements of Form MU-409. Spring semester.

413-414 Continual Realization and Improvisation (2 credits). Designed especially for instrumental methods classes. The study will be given to improving the harmonies from the figured basses in the choral scores of the Baroque Period. Original work in improvisation will also be stressed. Prerequisite: Keyboard Harmony and Basic Improvisation MU-261. Fall-Spring semesters.

421 Canon and Fugue (2 credits). An analytical study of the formation of canons and fugues. The student will study and write canons and canonic devices at all intervals. Fugal expositions, and complete fugues will be studied and written in three and four voices. Prerequisite: Elements of Music IV MU-220, and Counterpoint MU-321 and MU-322. Either semester.

455 Band Arranging (2 credits). Required of majors in Music Education and in theory and Composition. A study of scoring and notation for brasswood, woodwind and percussion instruments and their textures in various combinations. Prerequisite: Materials of Music IV MU-220. Fall semester.

456 Orchestra Arranging (2 credits). Required of Theory and Composition majors but open to other students who can qualify on the basis of scoring and notation for strings and for voices in various combinations with primary emphasis on the orchestra. Prerequisite: Band Arranging MU-455. Spring semester.

457 Major Instrument Literature (Piano, Voice, Guitar) (2 credits). A survey course to acquaint the student with the important literature from all periods for Piano, Voice, or Guitar. Section 1 Piano Literature. Section 2 Guitar Literature, Section 3 Vocal Literature. Prerequisite: Upper division standing in performance.

463 Major Instrument Pedagogy (Piano, Voice, Guitar) II (2 credits). A survey and comparative study of pedagogical materials, principals and procedures. The course will consist of reading, lecture, listening and observation in teaching studios. Prerequisite: Upper division standing in performance. Offered in years alternating with MU-467.

464 Major Instrument Pedagogy (Piano, Voice, Guitar) II (2 credits). Practical application of pedagogical methods and procedures through supervised studio teaching. Emphasis will be placed on the development of instructional techniques and on the study of the problems and needs of the individual student. Prerequisite: MU 463 Pedagogy I. Offered in years alternating with MU 467.

498 Music Seminar (2 credits) A Seminar project under faculty direction. Prerequisite: Senior standing. Either semester.

*No more than three of the following courses will be offered in any one semester. MU 457, MU 463, MU 464.

Graduate

501 History of Music in the United States (3 credits). Designed for either the non-specialist or specialist in music, this course will survey the role which music has played in the development of the American culture. Among the topics covered will be new " ¯ English music, music of the Blacks, Indians, and other ethnic groups. Social and historical relationships with music will be examined and discussed.

503 Introduction to Research Materials in Music Education (3 credits). Designed for the secondary school music specialist, this course will provide an introduction to the basic research literature within music education. Interpretation of research findings, basic research techniques, problems in educational research, and a review of literature pertinent to students' major area of interest will be included.

505 Seminar in Choral Music: Performance Practices and Styles (3 credits). An historical, generic survey of the repertoire and choral literature. Emphasis will be placed on the role of interpretation through study of a variety of representative compositions from the standpoints of performance practice, analytic techniques, and the reading of primary sources of pertinent information.

506 Seminar in Instrumental Music: Performance Practices and Styles (3 credits). An analysis will be made of representative instrumental works of four stylistic periods: the Baroque, the Classical, the Romantic, and the Contemporary. Emphasis will be placed on the role of interpretation through study of a variety of representative compositions from the standpoints of performance practice, analytic techniques, and the reading of primary sources of pertinent information.

511 20th Century Musical Studies (3 credits). A study of 20th century compositional techniques and performance practices through analyses, discussion of aesthetics, listening, performance, and transcription of music. Contemporary techniques (and their notation) such as serial harmonies, serial music, microtones, and multi-media, will be explored and applied to the appropriate repertoire.

512 Advanced Conducting (3 credits). Designed for second year music educators, this course will provide an introduction to the secondary school classroom and instrumental or choral classroom. Emphasis will be given to the choral and instrumental literature of the 20th century. Prerequisite: Music Education MU-261. Spring semester.

513 Band and Orchestra Methods and Materials (2 credits). The study of the organization, management, and conducting of band and orchestra at the secondary school level; includes equipment purchasing, budgets, public relations, planning, rehearsal techniques, scheduling, programming, and emergency repairs of instruments. Fall semester.

537 Major Instrument Literature (Piano, Voice, Guitar) (2 credits). A survey and comparative study of pedagogical materials, principals and procedures. The course will consist of reading, lecture, listening and observation in teaching studios. Prerequisite: Upper division standing in performance. Offered in years alternating with MU 467.

601 History of Music in the United States (3 credits). Designed for either the non-specialist or specialist in music, this course will survey the role which music has played in the development of the American culture. Among the topics covered will be new " English music, music of the Blacks, Indians, and other ethnic groups. Social and historical relationships with music will be examined and discussed.

603 Introduction to Research Materials in Music Education (3 credits). Designed for the secondary school music specialist, this course will provide an introduction to the basic research literature within music education. Interpretation of research findings, basic research techniques, problems in educational research, and a review of literature pertinent to students' major area of interest will be included.

605 Seminar in Choral Music: Performance Practices and Styles (3 credits). An historical, generic survey of the repertoire and choral literature. Emphasis will be placed on the role of interpretation through study of a variety of representative compositions from the standpoints of performance practice, analytic techniques, and the reading of primary sources of pertinent information.

606 Seminar in Instrumental Music: Performance Practices and Styles (3 credits). An analysis will be made of representative instrumental works of four stylistic periods: the Baroque, the Classical, the Romantic, and the Contemporary. Emphasis will be placed on the role of interpretation through study of a variety of representative compositions from the standpoints of performance practice, analytic techniques, and the reading of primary sources of pertinent information.

611 20th Century Musical Studies (3 credits). A study of 20th century compositional techniques and performance practices through analyses, discussion of aesthetics, listening, performance, and transcription of music. Contemporary techniques (and their notation) such as serial harmonies, serial music, microtones, and multi-media, will be explored and applied to the appropriate repertoire.

612 Advanced Conducting (3 credits). Designed for second year music educators, this course will provide an introduction to the secondary school classroom and instrumental or choral classroom. Emphasis will be given to the choral and instrumental literature of the 20th century. Prerequisite: Music Education MU-261. Spring semester.

637 Advanced Practices and Principles in Teaching Music in the Elementary School (3 credits). The course is designed to extend the professional teacher's knowledge of teaching techniques and curriculum of the elementary school classroom music program. Included will be problems in teaching elementary school, the teaching of reading skills in music, the non-singer in the classroom, creative musical activities to be used in the classroom, new approaches to music education such as the Threshold to Music and Manhattanville Music Curriculum Program. The course will consist of two lectures plus one lab period per week. Prerequisite: School Music, MU-211 or special experience in classroom teaching, or consent of instructor. Fall semester.

672 Listening and Singing Experiences for the Elementary School (3 credits). The course is designed to present in-depth experiences in musical works and songs which can be used in the elementary classroom. A list of music which is appropriate for the upper primary and lower elementary levels will be selected by the instructor. Special attention will be given to the choral and instrumental elements. Additional materials will be used to meet the needs of classroom teaching. Prerequisite: Basic Conducting MU-261. Offered in years alternating with MU-463.

673 Advanced Practices and Techniques for the Choral Instructor (3 credits). A study of causes and solutions for problems occurring in the choral rehearsal. Areas to be covered include instrumental methods and techniques, rehearsal techniques, organization and repertoire planning. Prerequisite: Music Education MU-211 or special experience in classroom teaching, or consent of instructor. Fall semester.

674 Advanced Practices and Techniques for the Instrumental Instructor (3 credits). A study of causes and solutions for problems occurring in the choral rehearsal. Areas to be covered include instrumental methods and techniques, rehearsal techniques, organization and repertoire planning. Prerequisite: Music Education MU-211 or special experience in classroom teaching, or consent of instructor. Fall semester.

676 Administration of School Music (3 credits). A seminar in problems of music supervision and administration covering areas such as budget, scheduling, curriculum, personnel, and philosophy.

691 Culminating Project (3 credits). A project may be defined as, but is not limited to, any of the following:

1. A library research paper which fits the educational needs of the student.
2. A curricular proposal in written form which could be considered for implementation in the schools.
3. A lecture/recital with a written paper discussing aspects of music which is pertinent to the student's artistic considerations.
4. A written examination on five questions chosen by the student's student's classroom chairman from a list of twenty submitted by the student.

693 Thesis (6 credits). A scholarly paper embodying results of original research which are used to substantiate a specific view.

DEPARTMENT OF PHYSICS, ENGINEERING AND PHYSICAL SCIENCE

Chairman and Professor: Dr. Gary R. Newby, Professor; Dahm. Associate Professor. Hahn; Luke. Severance; Assistant Professors: Allen, Parks. Rainman, Smith.

ENGINEERING CURRICULUM

The following curriculum is as nearly as possible identical to that at the University of Idaho. The minimum time required to earn a BS degree in engineering is 4 years and the following program is designed to do this along with 2 years at the University of Idaho. This is, however, a very rigorous demanding program and depends upon the student being able to handle a heavy work load plus having the necessary background to start with the prescribed initial courses. Many students find it desirable or even necessary to take 4 1/2, 5 years or more to earn the degree. Therefore, a convenient option based on 3 years at
SCHOOL OF ARTS & SCIENCES

Engineering

BSU followed by 1 1/2 years at Idaho U. is available and students may consult an engineering advisor about this program. This 5-year option is also advised for students needing to work while attending school. Engineering curricula are very similar all over the country and students can readily transfer to other engineering colleges. Students should consult their advisor about possible program modifications if they plan to go to some school other than University of Idaho to complete their degree.

COMMON FRESHMAN YEAR:

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<tr>
<th>SEM.</th>
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<tr>
<td>English Composition (E-101-102)</td>
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<td>Introduction to Chemistry (C-101-102)</td>
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<td>Calculus and Analytic Geometry (M-113-114)</td>
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<td>Engineering Fundamentals (EN-107-108)</td>
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<td>Digital Computer Programming (EN-104)</td>
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<tr>
<td>Physics (PH-220)</td>
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<td>Physical Education</td>
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COMMON SOPHOMORE YEAR:

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<th>SEM.</th>
<th>1ST</th>
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<tr>
<td>Physics II and III (PH-221-222)</td>
<td>3</td>
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<tr>
<td>Wave Motion and Heat Lab (PH-223)</td>
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<td>Electricity and Magnetism Lab (EN-224)</td>
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<td>Humanistic-Social Elective</td>
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<td>Introduction to Mechanics (EN-205)</td>
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<td>Introduction to Electrical Engineering (EN-201)</td>
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<td>3</td>
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<tr>
<td>Calculus and Analytic Geometry (M-206)</td>
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<tr>
<td>Advanced Engineering Math (M-321)</td>
<td>5</td>
<td>7</td>
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<td>(Branch Variation — See Below)</td>
<td>17</td>
<td>16-18</td>
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*Electrical Engineers taking EN 223 will not take EN 224 (PH 224). All other branches will take EN 224.

**During first semester, Chemical Engineers substitute C-217. Civil Engineers substitute EN-215.

Branch Variations:

- **Agricultural Engineering**
  - Life Science Elective
  - Dynamics of Rigid Bodies (EN-206)

- **Civil Engineering**
  - Dynamics of Rigid Bodies (EN-206)
  - Engineering Measurements (EN-216)
  - Humanistic Social Elective

- **Mechanical Engineering**
  - Dynamics of Rigid Bodies (EN-206)
  - Principles of Economics (EC-201)

- **Chemical Engineering**
  - Organic Chemistry (C-317)
  - Principles of Economics (EC-201)

- **Electrical Engineering**
  - Network Analysis (EN-223)
  - Humanistic Social Elective

JUNIOR YEAR:

*Three junior level engineering science courses (EN 301 Fluid Mechanics, EN 306 Mechanics of Materials, and EN 320 Thermodynamics and Heat Transfer) are offered. These courses, along with usual Engineering requirements in mathematics, science, humanities, and social sciences, make it feasible for many students to complete a third year before transferring. Consult an engineering staff advisor for details.

PHYSICS

A Baccalaureate Degree is not yet offered in Physics. However, with the PH-220 through PH-224 series, three upper division Physics courses, related Mathematics courses and required Humanities and Social Science courses, a student could complete 2 or 3 years at BSU before transferring elsewhere to complete degree requirements in physics. As mathematics serves such a fundamental role in physics, the interested student may wish to follow the applied mathematics option for a bachelor's degree in mathematics. (Refer to Requirements for Mathematics Major.)

ARCHITECTURE

Boise State does not offer an Architectural degree program. In Idaho there is an accredited Architectural program at the University of Idaho, which is combined with Art to form one department. Therefore, students planning to transfer to University of Idaho should confer with a BSU Art department advisor.

A number of schools offer a degree in Architectural Engineering. If interested in earning a degree of this type, confer with an Engineering department advisor.

COURSES

EN ENGINEERING

Lower Division

**100 Concepts and Consequences of Energy Utilization (4 credits)** An introductory course for non-science majors designed to acquaint students with the basics of energy utilization technology and its cultural and environmental impacts. The course will demonstrate the role of technology in our society by developing a conceptual understanding of the operation and limitations of the technological machines which supply our society's energy. Three hour lectures and one two-hour projects lab each week. Fall semester.

**104 (M-124) Digital Computer Programming (2 credits)** Course for engineering, science or mathematics majors to introduce fortran programming principles and logic. Consideration and subroutine subprograms, applied to problem solving. Prerequisite: M-106, M-111 or M-115 or having taken or taking mathematics beyond this level. Credit cannot be obtained for both EN 104 and M 125. Each semester.

**107-108 Engineering Fundamentals (2 credits)** An integrated course covering relating such topics as professional and social responsibilities of the engineering computations, graphics and introduction to the design process. Two 2-hour lecture laboratory periods per week. Each semester.

**201 Technical Drawing (2 credits)** A basic course of technical drawing procedures for those with little or no high school or work experience background in this area. Covers lettering, use of drawing instruments, geometric construction, orthographic projections, sectioning, dimensioning, pictorial drawings, working drawings and graphic solution of point line and plane problems. Two 2-hour lecture laboratory periods per week. Each semester.

**205 Introduction to Electrical Engineering (3 credits)** Covers basic statics including equilibrium, static friction, centroids, moment of inertia plus dynamics by particle motion analysis. Kinetics of particles including concepts of force, mass, acceleration, work and energy, impulse and momentum. Corequisite: M 225. Prerequisite: EN 221. Spring semester.

**206 Dynamics of Rigid Bodies (2 credits)** Analysis of forces and the resulting motion as pertains to rigid bodies undergoing rotary and general plane motion. Prerequisite: EN 205. Spring semester.

**215 Basic Surveying (2 credits)** A basic course in surveying serving as both a preliminary course for engineering majors and a complete course for forestry and other non-engineering majors. Course covers use of transit, level, plane table, and computations related to elevation, traverse and stadia surveys. One lecture and one 3-hour lab. Prerequisite: M-111 or equivalent. Fall semester.

**216 Engineering Measurements (2 credits)** Advanced topics in surveying plus theory and practice relating to types of errors, distribution of errors and precision in measurement. One lecture and one 3-hour lab. Prerequisite: EN-215. Spring semester.

**221 Introduction to Electrical Engineering (3 credits)** Basic electrical theory for all engineering students. Covers both d.c. and a.c. circuits. Three lectures per week. Prerequisite: EN-221. Fall semester.


**224 Electricity and Magnetism Lab (1 credit)** (See PH 224).

**226 (M 225) Applied Fortran Programming (2 credits)** A general course to illustrate advanced techniques in Fortran programming with applications drawn from engineering, physics, chemistry, geology and mathematics. Prerequisites: EN-104 and M-205. Credit cannot be obtained for both EN 226 and M 225. Fall semester.
301 Fluid Mechanics (3 credits). Physical properties of fluids: fluid mechanics and measurements; viscous and turbulent flow, momentum, lift, drag, and boundary layer effects; flow in pipes and open channels. Three recitations per week. Prerequisites: Calculus M-206 and Intro to Mechanics EN 205. Spring semester.


320 Thermodynamics and Heat Transfer (3 credits). First and second laws of thermodynamics; thermodynamic properties of fluids; flow processes: heat to work conversion; refrigeration, conduction and radiation. Three recitations per week. Prerequisites: Calculus M-206 and Physics II-Wave Motion and Heat PH 221. Fall semester.

PS PHYSICAL SCIENCE

Lower Division

100 Foundations of Physical Science (4 credits). Selected concepts of matter and energy that are widely applicable toward understanding our physical and biological environment. A one-semester course for non-science majors. Three lectures and one laboratory experiment per week. Each semester.

501 Basic Physical Science for Elementary Teachers (3 credits). An introduction to the basic ideas of physical science including matter, motion, energy, electricity, magnetism, heat, light, sound, wave motion, atomic energy, and astronomy. Elementary concepts to be discussed and demonstrated with emphasis on methods that can be used by elementary school students. Students will be expected to make one demonstration to present to the class during the course. Prerequisite: None.

PH PHYSICS

Lower Division

100 A Cultural Approach to Physics (4 credits). Designed for liberal arts students. Students should gain an appreciation for the basic ideas in physics and how these ideas have contributed to the development of western culture by their influence on philosophy, religion and technology. Three lectures and one laboratory experiment per week. Spring semester.

101-102 General Physics (4 credits). Mechanics, sound, heat, light, magnetism, and electricity. This course satisfies the science requirement for the Bachelor of Arts and Bachelor of Science Curricula, and may be taken by pre-medical and pre-medic students. Three lectures and one 3-hour laboratory period per week. Prerequisite: Algebra and Trigonometry or acceptable score on ACT Mathematics Subscore. Each semester.

103 Radiological Physics (3 credits). A course designed primarily for those who are studying to be X-Ray or radiologic technicians. Topics covered will be fundamental physical units, energy, electricity and magnetism, atomic and nuclear physics, X-Ray production, radiation shielding and detection, radiography, isotope, and health physics. Summer session.

105 Introduction to Descriptive Astronomy (4 credits). A study of galaxies, stars and planets and their physical relationships, beginning with our own solar system and moving outward. Three lectures and one two-hour laboratory. Several scheduled evening viewing sessions and planetarium visits are required. A one-semester course for non-science majors. Each semester.

207 Introduction to Biophysics (4 credits). A course relating physical principles to biological applications. Lectures stress concepts of atomic physics, basic electricity, energetics, heat and optics. The variety of instruments normally found in biological laboratories are used in lab to study biological systems. Three 1-hour lectures and one 3-hour lab. Prerequisite: It is recommended that the students have taken Math 111 or 115 or its equivalent.


221 Physics II — Wave Motion and Heat (3 credits). Wave motion on strings, and acoustical phenomena, geometrical optics, optical instruments, interference, diffraction, polarization, heat and the first and second laws of thermodynamics. Three 1-hour lectures and one 1-hour recitation per week. Prerequisite: PH 220. Either semester.

222 Physics III — Electricity and Magnetism (3 credits) Coulomb’s law electric fields, electric potential, magnetic fields, magnetic induction and simple circuits. Three 1-hour lectures and one 1-hour recitation per week. Prerequisite: PH 220. M-205. Either semester.

223 Wave Motion and Heat Lab (1 credit). A lab designed to be taken concurrently with PH 221. Basic experiments in mechanics, wave motion, sound, optics and heat. One three-hour lab per week. Prerequisite: PH 220 and concurrent enrollment in PH 221. Fall semester.

224 (EN 224) Electricity and Magnetism Lab (1 credit). A lab designed to be taken concurrently with PH 222. Basic experiments in electricity, simple circuit analysis, and instrumentation. One three-hour lab per week. Prerequisite: PH 220 and concurrent enrollment in PH 222. Spring semester.

Upper Division

301 Electronics Lab (3 credits). Electrical measurements, power supplies, amplifier circuits, oscillators, servosystems, digital and computer electronic switching and timing. One 1-hour lecture and two 3-hour laboratories, periods per week. Prerequisite: PH-222 and PH-224. Fall semester.

311-312 Modern Physics (3 credits). A brief introduction to the special theory of relativity, basic ideas and methods of elementary quantum mechanics with applications to atomic and nuclear physics, and properties of matter. Three lectures per week. Prerequisite: PH-221, PH-222, C-102 or C-112. Corequisite: M-321 or M-311. Each semester.

381-382 Electricity and Magnetism (3 credits). Electrostatic fields, potentials, Gauss’ law, solutions of Laplace’s equation, electrodynamics of conductors and dielectric materials, magnetic materials, vector potentials, Maxwell’s equations, and electromagnetic radiation. Three one-hour lectures per week. Prerequisites: PH-221, PH-222 and M-321 or M-311. Each semester.

DEPARTMENT OF POLITICAL SCIENCE

The program of the Department of Political Science is designed to provide the student with a knowledge of political values, of the American political system, of the political systems of other areas of the world, and of international politics and institutions; to provide an understanding of the interactions of institutions, groups, and the individual within the framework of the diverse political systems and political relationships; to develop a comprehension of the methodology relevant to the discipline of Political Science in the various substantive areas of concentration, including political philosophy, American governmental systems and processes, political behavior, comparative government and politics, international relations, and public law; to offer special concentration in the area of public administration.

The Department of Political Science seeks also to provide innovative opportunities to extend further the student’s understanding of the political environment on the local, national, and international levels.

The Political Science program prepares students for careers in the various levels of government service, in teaching, in law, and in related professions. The undergraduate program prepares students for graduate study in Political Science and related disciplines. It also offers electives in support of major programs in other disciplines.

In addition to the several optional major programs in Political Science, the College offerings in the classical discipline of Philosophy are provided through the Department of Political Science.

A Master of Public Administration degree program is also offered through the Department of Political Science.

REQUIREMENTS FOR POLITICAL SCIENCE MAJOR

Bachelor of Arts Program

A major program in Political Science is to be defined for each student in terms of a general foundation of knowledge in the discipline of Political Science, accommodating the developmental interests of the student but reflecting a concentration in any one of the following four “areas of emphasis” as available options for a major program in Political Science:

I. Political Philosophy
II. American Governmental Systems and Processes
III. International Relations
IV. Public Administration

As an additional option, major emphasis in Political Science is provided in teacher education preparation.

V. Political Science

Social Science Secondary Education

The basic requirements applicable to all major programs in Political Science, irrespective of the selected area of emphasis, are to include the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PO 101</td>
<td>Federal Government</td>
<td>3</td>
</tr>
<tr>
<td>PO 141</td>
<td>Contemporary Political Ideologies</td>
<td>3</td>
</tr>
<tr>
<td>PO 229</td>
<td>Comparative European Governments</td>
<td></td>
</tr>
<tr>
<td>PO 231</td>
<td>International Relations</td>
<td></td>
</tr>
</tbody>
</table>

67
PO 498 Seminar (Scope and Methods of Political Science) 3 credits

The Seminar is not applicable to public administration area of emphasis.

At least 3 Semester credits in Western Political Theory PO-441, PO-442 strongly recommended for all students with a major program in Political Science.

The course requirements applicable to each of the four designated areas of emphasis, offered as optional major programs in Political Science, are described below.

I. Political Science - Political Philosophy emphasis.

Political philosophy as an area of emphasis is designed to accommodate students whose principal interest in Political Science is the fundamental political thought, past and present, in the development of political institutions in society.

A. General College and Core Requirements.

B. Political Science Major Requirements (45 credits)

1. Lower Division Courses (12 credits)

   PO 101 Federal Government 3 credits
   PO 141 Contemporary Political Ideologies 3
   PO 229 Comparative European Governments and Politics 3
   PO 231 International Relations 3

2. Upper Division Courses (33 credits)

   PO 301 American Parties and Interest Group Politics 3 credits
   PO 401 Constitutional Law 3
   PO 431 American Political Theory 3
   PO 441 Western Political Theory I 3
   PO 442 Western Political Theory II 3
   PO 451 Comparative Legal Systems 3
   PO 498 Senior Seminar (Scope and Methods of Political Science) 3
   Political Science electives 9

II. Political Science - American Governmental Systems Processes emphasis.

This area of emphasis is offered to students who wish to concentrate their attention on National, State, and local political institutions of the United States. The course requirements and electives in this area of emphasis seek to provide the student with an understanding of American government.

A. General College and Core requirements.

B. Political Science Major Requirements (45 credits)

1. Lower Division Courses (18 credits)

   PO 101 Federal Government 3 credits
   PO 102 State and Local Government 3
   PO 141 Contemporary Political Ideologies 3
   PO 221 Voting Behavior and Public Opinion 3
   PO 229 Comparative European Governments and Politics 3
   PO 231 International Relations 3

2. Upper Division Courses (27 credits)

   PO 301 American Parties and Interest Group Politics 3 credits
   PO 303 Introduction to Public Administration 3
   PO 412 Legislative Behavior 3
   PO 401 Constitutional Law 3
   PO 431 American Political Theory 3
   PO 498 Senior Seminar (Scope and Method of Political Science) 3
   Political Science electives 9

III. Political Science - International Relations emphasis.

The area of emphasis in international relations is available for students wishing to obtain a general understanding of international affairs for a more intelligent citizenship in the modern world society. Students enrolling in this option are advised to prepare themselves adequately in modern foreign languages. The course requirements in Political Science are intended to provide a basis for an interdisciplinary program with additional courses drawn from foreign languages, history, economics, and sociology.

A. General College and Core requirements.

B. Political Science Major Requirements (45 credits)

1. Lower Division Courses (12 credits)

   PO 101 Federal Government 3 credits
   PO 141 Contemporary Political Ideologies 3
   PO 229 Comparative European Governments and Politics 3
   PO 231 International Relations 3

2. Upper Division Courses (33 credits)

   PO 311 Comparative Foreign Policy 3 credits
   PO 324 Comparative Communist Party-State Systems 3
   PO 333 Comparative Governments and Politics of the Developing Nations 3
   PO 335 United States Foreign Policy 3
   PO 421 International Law 3
   PO 422 International Organization 3
   PO 451 Comparative Legal Systems 3
   PO 498 Senior Seminar (Scope and Methods of Pol. Sci.) 3
   Political Science electives 9

IV. Political Science - Public Administration emphasis.

As an optional area of emphasis in Political Science, the course requirements are designed to provide a broad foundation in the discipline of Political Science with special concentration in the area of Public Administration. Special interdisciplinary course patterns can be arranged for students interested in such complementary areas as public administration and economics, public administration and sociology, public administration and psychology, public administration and communications. Appropriate course selections for all students opting for the Public Administration area of emphasis should include electives in computer science, psychology, sociology, history, economics, and communications.

A. General College and Core requirements.

B. Political Science Major Requirements (45 credits)

1. Lower Division Courses (12 credits)

   PO 101 Federal Government 3 credits
   PO 102 State and Local Government 3
   PO 141 Contemporary Political Ideologies 3
   PO 229 Comparative European Governments and Politics 3
   PO 231 International Relations 3

2. Upper Division Courses (30 credits)

   PO 303 Introduction to Public Administration 3 credits
   PO 310 Public Finance 3
   PO 320 American Policy Processes 3
   PO 325 Regional Administration 3
   PO 465 Comparative Public Administration 3
   PO 467 Administrative Law 3
   PO 487 Organization Theory and Bureaucratic Structure 3
   Political Science electives 9

V. Political Science — Social Science Secondary Education Option

Each academic department in the social sciences (History, Political Science, Societal and Urban Studies, and Economics) provides a major emphasis with the Social Science Secondary Education Option. Students must have a minimum of 30 credits in the department's subject matter plus two additional fields of
THE DEGREE OF MASTER OF PUBLIC ADMINISTRATION

Department of Political Science

The Master’s degree in Public Administration is an interuniversity cooperative graduate program offered jointly by Boise State University, Idaho State University, and the University of Idaho. The purpose of the program is to provide present and prospective public administrators with the basic intellectual preparation necessary to understand and to adjust to a changing and challenging environment through an introduction to the theories and practices of administration, management, and social science research as these relate to effective performance in public organizations. The MPA program is coordinated through an INTER-UNIVERSITY COMMITTEE, comprised of the chairs of the departments of political science or government at the cooperating universities; a representative of the Office of the State Board of Education, and a representative of cooperating government agencies. The essential features of this inter-university cooperative program are: (1) general coordination and policy control by the INTER-UNIVERSITY COMMITTEE; (2) unrestricted transferability of credits earned at any of the participating universities; (3) coordination among universities in scheduling and offering courses in the MPA program; and (4) the establishment of a basic core of courses at all three cooperating institutions plus optional areas of emphasis which may vary among the universities and which reflect the particular areas of specialization available at the respective universities.

The inter-university MPA program has been designed in accordance with the Guidelines and Standards for Professional Master’s Degree Programs in Public Affairs and Public Administration prescribed through the National Association of Schools of Public Affairs and Administration (NASPAA).

Admission to the MPA Program

Students may enroll in the MPA by applying to one of the participating universities. Acceptance by any of the three universities admits a student into the MPA program. A matriculated student should complete graduate studies at the institution which offers the area of specialization which he or she wishes to emphasize. The specific program which each student will pursue will be established by an advisory committee consisting of three faculty members, one of whom will be from a university other than that of the chairman of the student’s advisory committee. No specific undergraduate program is required in preparation for the MPA program. It is anticipated that students will come from widely differing academic preparations.

However, some coursework in humanities and social sciences (political science, sociology, economics and psychology) is essential to the foundation of the MPA program for all students; also a student must provide evidence of proficiency in skills of statistics, data processing, or accounting, either through undergraduate preparation or previous work experience. Deficiencies in these areas will be made up outside of the required curriculum. A student may be required to remove other deficiencies related to specified areas of emphasis in the MPA program, as determined by the Inter-University Committee.

Specific Admission Requirements for Applicants to the MPA Program

All applicants to the MPA program at Boise State University must meet the following requirements prior to enrollment in MPA courses.

A. Possession of a baccalaureate degree from an accredited institution.

B. Demonstration of satisfactory academic competency by attaining an overall GPA of 2.75 and recommendation for admission by the Department of Political Science. Students with a lower GPA may be admitted on provisional status on approval of the Graduate School. Final determination on the retention in the MPA program of a student with provisional status will be made after the completion of twelve (12) credits of approved study, with the general requirements of a grade of “B” or better in the course work taken.

C. Receipt of three letters of personal evaluation from individuals qualified to evaluate the applicant’s academic potential. Evaluators may include current or former employers, as well as professors. The letters are to be addressed as follows: Chairman, Department of Political Science, Boise State University, Boise, Idaho 83725.

D. Submission of a brief statement by the applicant indicating his/her career objectives and the area of emphasis to be undertaken in the Master of Public Administration program.

E. Completion of the following prerequisite courses in undergraduate preparation or their equivalent (applicable to all students applying for admission to the MPA program).

1. Federal Government - 3 semester credits
2. State-Local Government - 3 semester credits
3. Introduction to Public Administration - 3 credits
4. At least three semester credits in each of the following areas:
   a. Sociology
   b. Economics
   c. Psychology
5. At least three semester credits in one of the following areas:
   a. Accounting
   b. Data Processing
   c. Social Statistics
6. For those students selecting “Human Services Administration” as their “area of emphasis” for specialized preparation in Public Administration, at least 9 semester credits in Sociology.
7. For those students selecting “Criminal Justice Administration” as their “area of emphasis” for specialized preparation in public administration, at least 9 semester credits in Criminal Justice.

Students who are deficient in any of the prerequisites indicated above must remove these deficiencies prior to enrollment in MPA graduate-level courses for credit.

The student may be required to remove other deficiencies as determined by the Inter-University Committee established for administrative coordination of the MPA program.
THE GRADUATE DEGREE PROGRAM

The MPA degree may be achieved through the successful completion of at least 30 semester credit hours of approved course work plus 6 credits of public service internship. Eighteen credit hours must be completed in courses selected from prescribed "core areas" with 12 additional credit hours completed in designated optional areas of emphasis. Students may follow a thesis or non-thesis option in pursuing the MPA. The thesis counts as 6 credits toward completion of the degree in lieu of course work selected from the student’s area of emphasis. All MPA candidates must complete final examinations. Those following the thesis option will complete an oral examination covering the thesis and program course work. The non-thesis option requires a written and oral examination over program course work.

The academic program of each student must be approved by the MPA advisory committee and must satisfy the general requirement of an integrated program designed to meet career objectives of the student in public administration.

Core and Optional Area Requirements

The specific course requirements of the MPA program are set forth in a list of courses which has been approved by the INTER-UNIVERSITY COMMITTEE. This list is available through the chairperson of the Department of Political Science at Boise State University, the chairman of the MPA program at the University of Idaho, or the chairman of the Department of Political Science at Boise State University. (The student is advised to consult the appropriate section of the bulletin for any special requirement or conditions prescribed by the Graduate School.)

I. DESIGNATED CORE AREAS

(Note: Selection of courses is to be made in consultation with the student's major professor in the preparation of a MPA Program Development Plan for each individual student.)

A. Administrative Theory, Organization, and Behavior
   PO-487 (G) ORGANIZATION THEORY AND BUREAUCRATIC STRUCTURE

B. Public Management Techniques
   PO-510 FISCAL PROCESSES AND PUBLIC BUDGETING PROCESS
   PO-511 PROGRAM EVALUATION AND QUANTITATIVE ANALYSIS

C. Public Policy and Policy Analysis
   MB-541 PERSONNEL POLICY
   MB-542 COMPUTER APPLICATIONS FOR MANAGEMENT

II. OPTIONAL "AREAS OF EMPHASIS" IN THE MPA PROGRAM

(Areas of emphasis are provided to accommodate those students desiring preparation in public administration as a "generalist" rather than a "specialist" in a particular area of specialization. At Boise State University the student may select the remaining 12 credit hours of course work from the courses listed below.)

A. General Public Administration
   PO-465 (G) COMPARATIVE PUBLIC ADMINISTRATION

B. Administrative Law
   PO-467 (G) ADMINISTRATIVE LAW

C. Comparative Public Administration and Planning Systems
   PO-469 (G) INTERGOVERNMENTAL RELATIONS

D. Community and Regional Planning
   PO-450 (G) COMMUNITY AND REGIONAL PLANNING

E. Intergovernmental Relations
   PO-469 (G) INTERGOVERNMENTAL RELATIONS

F. Comparative Public Administration and Planning Systems
   PO-465 (G) COMPARATIVE PUBLIC ADMINISTRATION

III. OPTIONAL "AREAS OF EMPHASIS" IN THE MPA PROGRAM

(Note: Some of the courses provided in designated "areas of emphasis" are also provided in designated "core areas," as shown above. In such cases, a course may satisfy a general core area requirement or a specific "area of emphasis" requirement in the MPA program but NOT both.)

A. General Public Administration
   This area of emphasis is provided to accommodate those students desiring preparation in public administration as a "generalist" rather than a "specialist" in a particular area of specialization. At Boise State University the student may select the remaining 12 credit hours of course work from the courses listed below.

   PO-465 (G) COMPARATIVE PUBLIC ADMINISTRATION
   PO-467 (G) ADMINISTRATIVE LAW
   PO-469 (G) INTERGOVERNMENTAL RELATIONS
COURSES

PO POLITICAL SCIENCE

Lower Division

101 Federal Government (3 credits). A study of the institutions and processes of the American political system, emphasizing the social, ideological, and constitutional background. Each semester.

102 State and Local Government (3 credits). A study of the institutions and processes of state and local government with emphasis on constitutionalism, legislatures, governors and reapportionment. Each semester.

141 Contemporary Political Ideologies (3 credits). An examination of liberalism, communism, fascism, and Nazism, with emphasis on the principal ideas characteristic of each 'ideology.' Fall semester.

221 Voting Behavior and Public Opinion (3 credits). The course will explore the development of public opinion and electoral behavior. Empirical research from a variety of fields will be used in an attempt to understand and analyze the factors that mold popular attitudes and political behavior. Fall semester.

229 Comparative European Governments and Politics (3 credits). A comparative study of the political systems of selected European nation-states, including Great Britain, France, the German Federal Republic, Italy and the Scandinavian states. The patterns of political culture, political interest, political power, and selected public policy issues will be analyzed. Prerequisite: Federal Government PO-101 or consent of instructor and approval of Department Chairman. Each semester.

231 International Relations (3 credits). A study of the nature of relations among nations with particular reference to contemporary international issues; an analysis of motivating factors including nationalism, imperialism, communism, a study of the problem of national sovereignty and its relation to international cooperation. Prerequisite: Federal Government PO-101. Each semester.

Upper Division

301 American Parties and Interest Group Politics (3 credits). The major objective of this course is to develop an understanding of the nature, functions, organization, and activities of political parties and interest groups within the American political system. Emphasis will be placed on the performance of America's two major political parties, especially in the area of nominations and elections, and on the organization and lobbying activities of the major American interest groups. Fall semester.

303 Introduction to Public Administration (3 credits). Theory, administrative organization, functions and problems of public governmental units. Prerequisite: Federal Government PO-101. Fall semester.


311 Comparative Foreign Policy (3 credits). A comprehensive study of the political institutions, concepts, values, and methods of international politics relevant to the practice of nation-states; examination of foreign policies and objectives of the world's major powers; analysis of contemporary international problems: consideration of theories of international politics. Prerequisite: Federal Government PO-101 or International Relations PO-231 or consent of instructor and approval of Department Chairman. Fall semester.

320 American Policy Process (3 credits). An examination of the process through which policy is determined, implemented, and adjusted, with emphasis on the role of administrators. Prerequisite: PO-303. Either semester.

324 Comparative Communist Party-State Systems (3 credits). A comparative study of the political systems of the Soviet Union, Eastern Europe, People's Republic of China, and other Communist Party-States. Selected topics and problems relating to the political institutions and political processes will be presented for defining the patterns of political relationships in these states. Attention is be given to questions of political theory and political determinants in the development of the Communist Party-States. Prerequisite: Federal Government PO-101 or consent of instructor and approval of Department Chairman. Fall semester.

326 Regional Administration (3 credits). Survey of the organizational arrangements developing for planning, providing services, and for regulating resources across city and state boundaries. Intergovernmental relations and metropolitan regions will be emphasized. Prerequisites: PO-102, PO-303. Either semester.

330 Issues in Public Personnel Affairs (3 credits). Survey of the public personnel system, including evolution of the merit system, political control of the bureaucracy, compensation plans, employee relationships and unionism. Prerequisite: PO-303. Either semester.

333 Comparative Governments and Politics of Developing Nations (3 credits). A study of the political systems of selected nations in the developing areas of the world, including nation-states in Africa, Asia, and Latin America. The patterns and problems of political development and modernization in the nations will be analyzed. Prerequisite: Federal Government PO-101 or consent of instructor and approval of Department Chairman. Fall semester.

335 United States Foreign Policy (3 credits). Development of diplomacy from the foundation of the Republic to the present with emphasis on the emergence and development of the United States as a world power, and the impact of domestic developments on the formulation of foreign policies. Spring semester.


412 Legislative Behavior (3 credits). An analysis of the behavior of American state and national legislatures. Special consideration will be given to the impact of constituencies, parties, interest groups, interpersonal relations, and other related factors upon legislators, and the role of the legislature in the American political system. Prerequisite: Federal Government PO-101. Spring semester.

421 International Law (3 credits). Law of peace, international intercourse, war and threat of war, pacific settlement, principles and practices of international law and their application to international affairs. Prerequisite: Federal Government PO-101 and International Relations PO-231. Fall semester.
341 American Political Thought (3 credits). The history and development of political thought in the United States from the colonial period to the present. Fall semester.

421 International Organization (3 credits). Historical background; the League; basic problems of international relations; the United Nations. Prerequisite: Federal Government PO 101 and International Relations PO 231. Spring semester.

421 Comparative Legal Systems (3 credits). An examination of the legal systems of the world, with emphasis on the development of legal systems in various parts of the world. Prerequisites: Selected topics in public administration and political science. 60 credits.

422 Political Theory (3 credits). Development of political thought since Machiaveli. Fall semester.

461 Comparative Political Systems (3 credits). An examination of the political systems of the world, including the United States, with emphasis on the development of political thought since Machiaveli. Prerequisite: Political Science 422. Spring semester.

461 Fiscal Processes and Public Budgeting (3 credits). The determination of governmental budget levels. Prerequisite: PO 101. Spring semester.

466 Comparative Public Administration (3 credits). Systematic examination and comparison of the varied models and theories of administrative systems. The course will cover international, transnational, and national studies. Prerequisites: PO 303 and 422. Spring semester.

471 Administrative Law (3 credits). Review of the sources of power and duties of administrative agencies, the rules and regulations made by the agencies through investigation and hearings, as well as judicial decisions and precedents relating to administrative activities. (Students enrolling in this course for graduate-level credit will be assigned special requirements on preparation.) Prerequisite for undergraduate students: PO 303. Either semester. Offered in alternate academic years. Offered 1975-76. Spring semester.

476 Intergovernmental Relations (3 credits). An examination of the systems of government and conflict in the American Federal System, including state-local relationships and metropolitan dispersal and integration. (Students enrolling in this course for graduate-level credit will be assigned special requirements on preparation.) Prerequisite for undergraduate students: PO 101, PO 102, and PO 303. Either semester. Offered in alternate academic years. Not offered in 1975-76. Fall semester.

458 Senior Seminar (Scope and Methods of Political Science) (3 credits). An examination of the discipline of Political Science, its central problems and unifying concerns, and an inquiry into the techniques of scientific political investigation as they relate to improved research methods. This seminar is required of all Political Science majors. Fall semester.

499 Conference Workshop (1 credit). Conferences or workshops covering various topics in public administration may be offered on an irregularly scheduled basis, according to student interest and staff availability. No more than 3 credits provided through conferences or workshops can be applied toward the MPA degree.

540 Selected Topics—The Executive and the Administrative Process (3 credits)

545 Selected Topics—Intergovernmental Relations (3 credits)

586 Selected Topics—Community and Regional Planning (3 credits)

587 Selected Topics—Comparative Public Administration and Planning Systems (3 credits)

601 Public Service Internship (Variable Credit). A public service internship is to be arranged as field experience, for those students with no prior experience in governmental or other organization assignments. Such internships will be established and arranged for placement through the chairman of the Department of Political Science.

693 Thesis (3 credits). Selection of approved topic in public administration or research for major preparation and defense through consultation with major advisor.

695 Reading and Conference (1-2 credits). Directed reading on selected materials in public administration and discussion of these materials, as arranged and approved through major advisor.

696 Independent Study (1-3 credits). Special projects undertaken by the MPA student as advanced tutorial study in specialized areas according to the needs and interests of an individual student. The course embodies research, discussions of the subject matter and procedures with a designated professor and a documented paper covering the subject of the independent study.

699 Conference Workshop (1 credit). Conferences or workshops covering various topics in public administration may be offered on an irregularly scheduled basis, according to student interest and staff availability. No more than 3 credits provided through conferences or workshops can be applied toward the MPA degree.

PY PHILOSOPHY

101 Introduction to Philosophy (3 credits). A general background in the various areas of the discipline is presented after which specific philosophical problems are examined in light of the solutions by various philosophers in Western culture. The areas examined include metaphysics, ethics, and epistemology. Each semester.

121 Introduction to Logic (3 credits). Logic is the science of valid reasoning. To be studied are the logical rules of inference, methods of argumentation, logical problem solving and the nature of logical fallacies. Fall semester.

211 Ethics (3 credits). Problems of both normative ethics and metaethics are examined. Norman ethics concerns the norms and guidelines of moral behavior. Metaethics is principally concerned with the nature of ethical statements. Naturalism, intuitionism, and emotivism are thus examined. Spring semester.

231 Philosophy of Religion (3 credits). The various types of arguments for the existence of God are examined. Various conceptions of the nature of God are explored as well as such problems as the problem of evil and problem of free will. Either semester.

245 Metaphysics (3 credits). As the core of philosophy, this course includes an examination of (a) the problem of free will vs. determinism, (b) the nature of causation, (c) the problem of personal identity, and (d) ontology. Prerequisite: PY 101. Fall semester.

247 Epistemology (3 credits). This course covers the theory of knowledge, including (a) an examination of the relationships and the difference between knowledge and belief, (b) an evaluation of the theories of perception and (c) theories of truth. Prerequisite: PY 101. Spring semester.

249 Ancient Philosophy (3 credits). A study of selected works of Plato and Aristotle. Prerequisite: PY 101. Fall semester.

251 Medieval Philosophy (3 credits). A study of the works of St. Anselm, Duns Scotus, St. Thomas Aquinas, Abelard, and William of Ockham, and other contributors to intellectual thought during the Middle Ages. Prerequisite: PY 101. Spring semester.

260 The Age of Absolutism and Reason (Philosophy) (3 credits). A study of European thought in the seventeenth and eighteenth centuries: the age of absolutism, ideas of the philosophers and the crisis of the old regime leading to revolution. Prerequisite: Introduction to Philosophy, PY 101. Offered either for History credit or for Philosophy credit, but not for both. Either semester. Alternate years. Offered 1975-76.

334 Phenomenology and Existentialism (3 credits). This course explores the most fundamental of human problems: man is subjective by nature, for he is trapped by his own conception of the world, yet the rational mind strives for objectivity. The clash between the two leads man to ask the very basic question, "Who am I?" and "What is my relationship to the external world?" The existential question and the latter is a phenomenological one. Prerequisite: PY 101. Fall semester.

404 Symbolic Logic (3 credits). A study of the translation of natural language statements into symbolic form for the purpose of ridiing them of ambiguity and of making deductions through the rules of propositional calculus. Prerequisite: PY 121. Spring semester.

406 Philosophy of Science (3 credits). This course seeks to examine such philosophical questions as the finiteness of the universe, as well as theories concerning the nature and verification of postulated entities. Prerequisite: PY 101 or PY 121. Fall semester.
DEPARTMENT OF SOCIAL WORK

Chairman and Professor: Mrs. Irene A. Wilcox; Assistant Professors: Beck, Huff, Pankitch, Visiting Professor: VanOrman.

Clinical Associates: Sue Waldman, Health and Welfare; Ulisse C. Pardini, Health and Welfare; Adele Warner, Idaho Office of Aging; Connie Bradley, Health and Welfare; Charles Hansen, Veterans Administration Hospital; Art Dodson; Casey Family Program: Elmer Jacobson, Casey Family Program; Melvin K. Melton, Veterans Administration Hospital; Gail Thompson, Health and Welfare; Cookie Atkins, Idaho Migrant Council; Julie Takevchi, Idaho Migrant Council; Barry Kurz, VA Hospital.

REQUIREMENTS FOR SOCIAL WORK MAJOR
Bachelor of Arts Program

<table>
<thead>
<tr>
<th>COURSES</th>
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<td>General University and Major Requirements</td>
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<td>A. Lower Division Courses</td>
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<tr>
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<tr>
<td>Literature</td>
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<td>Humanities</td>
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<td>History</td>
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<tr>
<td>Lab Science or Math</td>
<td>12</td>
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<tr>
<td>Speech</td>
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<td>Economics</td>
<td>3</td>
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<tr>
<td>Intro-Sociology</td>
<td>3</td>
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<tr>
<td>Social Problems</td>
<td>3</td>
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<tr>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>State and Local Government</td>
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<tr>
<td>Intro-Social Work</td>
<td>3</td>
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<tr>
<td>Elementary Social Work Processes</td>
<td>3</td>
</tr>
<tr>
<td>General Electives</td>
<td>14</td>
</tr>
</tbody>
</table>

| B. Upper Division Courses | 54 |
| SW Social Work | 3 |
| Social Welfare | 3 |
| Normal Social Functioning | 3 |
| SW Methods - Casework | 3 |
| SW Methods - Groupwork | 3 |
| SW Methods - Community Organization | 3 |
| Statistics | 3 |
| Psychology Electives | 9 |
| Field Work | 10 |
| General Electives | 15 |
| Senior Seminar | 2 |

SCHOOL OF ARTS & SCIENCES
Social Work

480, 481 Field Work (5 credits). Sixteen hours per week. The student works as a practicing social worker under the supervision of a professionally trained and experienced social worker. The student functions as an integrated staff member except in those areas where educational benefits conflict with agency needs. All juniors must apply for admission into the field work program prior to the beginning of their second semester. Before the final decision is made as to where the student will spend his time in field placement, he is interviewed by a team of faculty members who will attempt to pinpoint important gaps or needs. Prerequisites: SW-385 and permission of instructor. Each semester.

498 Senior Seminar (2 credits). Discussion of topics of particular interest to Social Work students who are planning to enter practice. Prerequisite: senior standing in Social Work. Enrollment of one semester required. Each semester.

DEPARTMENT OF SOCIETAL AND URBAN STUDIES

Chairman and Professor: Dr. Patricia M. Dorman, Associate Professors: Christensen, Harvey, Pavesic, Schneider, Assistant Professors: Baker, Corbin, Cox, Hopfenbeck, Marsh, Taylor. Visiting Professor: Ames.

The Department believes that the condition of urban life in modern society requires a broad, interdisciplinary approach to provide competency and knowledge in the areas of societal and urban studies. In addition, the curriculum offers current perspectives for resolving many of the existing problems which face man. It provides an opportunity for each student to gain both the scientific and practical knowledge in three disciplines: sociology, anthropology and criminal justice administration.

Capitalizing on a variety of fields, the Department offers students an opportunity for entry into the rapidly growing occupational areas of personal services in urban society. The Department also offers a social undergraduate curriculum preparatory to graduate study in each baccalaureate program.

CRIMINAL JUSTICE ADMINISTRATION

General University and core requirements to meet either Bachelor of Arts or Bachelor of Science program as given on page 17-18 except:

A. Criminal Justice majors are required to take 64
   1. Defensive Tactics * | 1
   2. Fundamental Concepts of Math | 4
   3. Fundamentals of Speech-Communication
   4. Contemporary Economic Problems
   5. Federal Government
   6. State and Local Government
   7. Principles of Accounting
   8. Business English * | 3

B. Major Requirements

<table>
<thead>
<tr>
<th>COURSES</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Division</td>
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<tr>
<td>Law Enforcement in Modern Society</td>
<td>3</td>
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<tr>
<td>Patrol Administration</td>
<td>3</td>
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<tr>
<td>Jail Administration</td>
<td>3</td>
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<tr>
<td>Law of Criminal Evidence</td>
<td>3</td>
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<tr>
<td>Criminal Investigation</td>
<td>3</td>
</tr>
<tr>
<td>Vice and Organized Crime</td>
<td>3</td>
</tr>
<tr>
<td>Upper Division</td>
<td>24</td>
</tr>
<tr>
<td>Administration of Justice</td>
<td>3</td>
</tr>
<tr>
<td>Police Organization and Management</td>
<td>3</td>
</tr>
<tr>
<td>Criminal Law</td>
<td>3</td>
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<tr>
<td>Contemporary Law Enforcement Problems</td>
<td>3</td>
</tr>
<tr>
<td>Comparative Law Enforcement Administration, or Introduction to Criminalistics</td>
<td>3</td>
</tr>
<tr>
<td>Abnormal Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Juvenile Delinquency</td>
<td>3</td>
</tr>
<tr>
<td>Criminology</td>
<td>3</td>
</tr>
</tbody>
</table>

C. Electives

| Electives | 16-18 |
| Upper Division Criminal Justice Electives | 6 |
| Upper Division Electives | 10-12 |

* The following courses are strongly recommended: Judo, Self Defense
** Required of students who do not meet competency standards
## ASSOCIATE OF SCIENCE

### CREDITS

#### A. Criminal Justice majors are required to take: 38-41
- Defensive Tactics* 1
- Fundamental Concepts of Math 4
- Lab Science 4
- English Composition 3 or 6
- Literature 3
- History 3
- Fundamentals of Speech-Communication 3
- Contemporary Economic Problems 3
- Federal Government 3
- State and Local Government 3
- Principles of Accounting 3
- Business English** 3

#### B. Major Requirements 18
- Law Enforcement in Modern Society 3
- Patrol Administration 3
- Jail Administration 3
- Law of Criminal Evidence 3
- Vice and Organized Crime 3
- Criminal Investigation 3

#### C. Electives to bring total credits to 64
- *The following courses are strongly recommended: Judo, Self Defense
- **Required of students who do not meet competency standards.

## REQUIREMENTS FOR SOCIAL SCIENCE MAJOR

### Bachelor of Arts Program

1. **Liberal Arts Option**
   1. General College and Basic Core requirements.
   2. Social Science requirements:

   #### CREDITS
   - Lower Division Courses 21
     - Anthropology 3
     - Economics 3
     - History 3
     - Political Science 3
     - Sociology 3
     - Social Science Electives 9

   #### Upper Division Courses
   - Select from the following combinations twelve credits in one field and six credits in two other fields:

     #### CREDITS 24
     - Anthropology
     - Economics
     - History
     - Political Science
     - Sociology
     - Psychology

2. **Education Option**
   - required courses are the same as for the Sociology major above, including at least 15 upper division hours.
   - Education courses to meet Idaho State Department of Education Certification requirements for teachers in Secondary Education 20
   - State requirements for teacher certification, including U.S. History 6 hours
   - American Government 3 hours
   - Electives to complete a total of 128 credit hours, including 40 upper division credit hours 0-21

3. **15 Hour Emphasis for Social Science Secondary Education**
   - To include So-101 Introduction to Sociology and at least 6 upper division hours.

4. **15 hour Anthropology emphasis in Social Science - Secondary Education options**
   - Required courses 9 credit hours
     - AN-202 Cultural Anthropology 3
     - AN-201 Physical Anthropology 3
     - AN-311 Peoples and Cultures of the World 3
   - Upper Division Anthropology Electives 6 credit hours

## REQUIREMENTS FOR SOCIOLOGY MAJOR

1. General University and core requirements to meet either Bachelor of Arts or Bachelor of Science Program* as given on page 16-18.
2. At least 78 credit hours in fields other than sociology, including at least 15 hours in a single field or in a related group of subjects as defined by the individual student in consultation with his advisor.
3. At least 29 credit hours in Sociology including:

   #### CREDITS
   - Introduction to Sociology 3
   - Elementary Social Statistics 3
   - Social Research 3
   - History of Sociology 3
   - Current Sociological Perspectives 3
   - Sociology Seminar 2

### Sociology — Social Science Secondary Education Option

Each academic department in the social sciences (History, Political Science, Societal and Urban Studies, and Economics) provides a major emphasis with the Social Science Secondary Education Option. Students must have a minimum of 30 credits in the department's subject matter plus two additional fields of study or teaching minors of 15 credits each chosen from the other social science fields.

#### CREDIT HOURS

1. General College and Basic Core requirements 18-39
2. 2 approved teaching minors, 15 hours each 30
   (minors to be selected from the following field
   Political Science, Anthropology, History, Geography, or Economics)
3. Sociology courses 30
   (required courses are the same as for the Sociology major above, including at least 15 upper division hours)
4. Education courses to meet Idaho State Department of Education Certification requirements for teachers in Secondary Education 20
5. State requirements for teacher certification, including U.S. History 6 hours
   American Government 3 hours 9
6. Electives to complete a total of 128 credit hours, including 40 upper division credit hours 0-21

### Multi-Ethnic Studies — Social Science

*The Multi-Ethnic Studies Program, which is open to all students, is an inter-disciplinary area of emphasis which will help students provide themselves with an understanding of traditions, cultures, languages, problems, and perspectives.
The program is supervised by an interdisciplinary group of faculty and students. Prospective majors may contact Dr. John Jensen, Department of Teacher Education; Dr. P. K. Ourada, Department of History; or A. R. Corbin, Department of Societal and Urban Studies,* to develop program of study.

**COURSES**

**AN ANTHROPOLOGY**

**Lower Division**

201 Physical Anthropology (3 credits). An introduction to the fossil evidence for human evolution, population genetics, human variation, and the study of living primates with emphasis on behavior. Either semester.

202 Cultural Anthropology (3 credits). The meaning of culture; its significance for human beings, similar and diverse forms and degrees of elaboration of culture in relation to technology economic systems, social organization, values and beliefs. Either semester.

203 Introduction to Archaeology (3 credits). An introduction to the historic background and basic techniques of archaeological excavation. The methods and theory used to reconstruct prehistoric cultures, their environmental settings, their activities and their histories. Either semester.

**Upper Division**

303 Old World Prehistory (3 credits). An in-depth study of the evolution of man and the development of culture. The course traces man's development from the first known evidence of cultural behavior (ca two and a half million years ago); the development of man 'The Middle East, Africa, and Asia, the Ice Age, the spread of man throughout the Old World, the domestication of plants and animals, and the rise of civilization. Prerequisite: AN 202, upper division status, or consent of instructor. Either semester.

307 Indians of North America (3 credits). A general survey with emphasis on the description and analysis of native cultures and the role of environment and historical factors in North America. Prerequisite: AN 202, upper division status, or consent of instructor. Either semester.

311 Peoples and Cultures of the World (3 credits). The cultural patterns of representative aboriginal peoples. Technology, subsistence, social organization, and super nativism considered with a view toward environmental adjustment, historical developments present and future interrelations. Prerequisite: AN 202, upper division status, or consent of instructor. Either semester.

315 Indian Peoples of Idaho (3 credits). A study of the prehistoric and recent cultures of the native peoples of Idaho. Topics will include the interpretation of ancient Idaho cultures, the distinctiveness of the recent tribal groupings and the relationship between past and present Idaho societies to those of the Great Basin, Interior Plateau and Northern Plains. Prerequisites: AN 202, upper division status, or consent of instructor. Either semester.

412 Archaeology of North America (3 credits). A survey of prehistoric cultures of North America north of Mexico. The course includes a history of ideas about native American origins and antiquities along with demonstrating regional societal complexity on the continent. Special emphasis is given to the study of early man and the cultures of the Eastern Woodlands, the American Southwest and the Intermountain West. Prerequisite: AN 203, upper division status, or consent of instructor. Either semester.

421 Theory and Method in Archaeology (3 credits). A survey of the philosophical and theoretical foundations of archaeology. Includes the development of methodologies and theoretical advances as applied to archaeological research. Prerequisite: AN 203, upper division status, or consent of instructor. Spring semester.

**CR CRIMINAL JUSTICE ADMINISTRATION**

**Lower Division**

201 Law Enforcement in Modern Society (3 credits). A study of philosophy, history, objectives and the functions of law enforcement as an institution, institutional relationship to society; general overview of the administration of justice. Each semester.

212 Jail Administration (3 credits). Historical development of local detention facilities present and future trends of operation and administration. Operation of programs for the sentenced misdemeanant, first offenders, female and juvenile offenders. Special problems relative to inmate social interaction and supervision of prisoners. Prerequisite: CR 201. Fall semester.

216 Patrol Administration (3 credits). The Patrol function as the fundamental police operation multi-level decision and policy making processes, determination of functional areas of patrol responsibility. Prerequisite: CR 201. Fall semester.

225 Vice and Organized Crime (3 credits). The history, cause, nature, and control of vice and organized crime are studied. Prerequisite: CR 201. Spring semester.

231 Criminal Investigation (3 credits). Designed to acquaint the student with investigation as it involves the application of the investigative process in criminology, discovery and preservation of evidence, investigative report organization and content of investigative reports, and evidentiary proof of the elements of crime. Prerequisite: CR 201. Spring semester.

279 Law of Criminal Evidence (3 credits). Presentation of the laws and rules of evidence, burden of proof, exclusionary rule, presumption, opinion evidence, and leading court cases involving the presentation and acceptability of evidence. Witness examination procedures and related legal problems are presented. Prerequisite: CR 201. Fall semester.
Theatre Arts

250 Population (3 credits). The theory of population from Malthus to the present (1) Social factors that influence population size, such as birth control and inadequate housing; (2) composition of the population, past and present trends of populations. Prerequisite: Introduction to Sociology SO-101. Either semester.

305 Racial and Cultural Minorities (3 credits). An analysis of inter-ethnic contacts. The development of racial attitudes; theories relating to casual factors of prejudice and discrimination. Prerequisite: Introduction to Sociology SO-101 or General Psychology PSY-101 and upper division status. Either semester.

310 Elementary Social Statistics (3 credits). The application of measurements to social research data. Basic statistical measures, techniques for their application, meaning, and use in research. Recommended for majors, to be taken in the Junior year and followed by SO-311. Prerequisite: SO-101, High School Algebra, upper division status. Fall semester.

311 Social Research (3 credits). An introduction to the empirical basis of modern sociological methods of research, design and the statistical analysis of social data. Prerequisite: Introduction to Sociology SO-101, Elementary Social Statistics SO-310 and upper division status. Spring semester.


325 Sociology of Aging (3 credits). Analysis aging as a social process, emphasizing the changing role as a sociological process, the demands made on by society because of the way it defines and deals with age, and the problems created for society and for the aged as a result of values, attitudes and beliefs. Prerequisite: SO-101 and upper division status. Either semester.

331 Deviant Behavior and Social Control (3 credits). Analysis of the forms and causes of social deviance how social systems control behavior through the socializing process, the sanction system and the allocation of prestige and power. Prerequisite: Introduction to Sociology SO-101 and upper division status. This course may be used as either Sociology or Criminology credit. Either semester.

351 Social Institutions (3 credits). Study of the basic institutions. An analysis of values, forms, and behavior organized around the important goals of society. Prerequisite: SO-101, and upper division status.

361 Industrial Sociology (3 credits). Study of the social organization of work in industrial society with attention to internal human relations and to the external relations in the community and society. Prerequisite: SO-101 and upper division status. Either semester.

401 History of Sociology (3 credits). Presociological perspectives on society from ancient times to the present. Relationships of social thought and social structure. Theories of selected sociologists. Prerequisite: SO-101 and upper division status. Fall semester.

402 Current Sociological Perspectives (3 credits). Major theoretical issues in contemporary sociology: works of leading contemporary sociologists. Prerequisite: SO-101 and upper division status. Spring semester.

403 Social Change (3 credits). This course will study the factors which give rise to and influence the acceptance or rejection of innovations, and their effects on social institutions. Prerequisites: SO-101 and upper division status. Either semester.

404 Sociology of Religion (3 credits). A study of religion as a social phenomenon. Prerequisite: SO-101 and upper division status. Either semester. (Not offered in 1975-76.)

411 Juvenile Delinquency (3 credits). A study of causation, treatment, and control of juvenile delinquency. Prerequisite: SO-101 and upper division status. This course may be used as a Sociology or Criminology credit. Either semester.

417 Criminology (3 credits). Sociology as applied to the study of "crime" as defined by the law of society; the possible causes of criminal behavior and the way society attempts to control criminal behavior. Prerequisite: SO-101 and upper division status. Either semester.

421 Social Stratification (3 credits). Examination of the theoretical and methodological approaches to the study of the wealth, prestige and power distribution of local and national stratification systems, implications for the functioning of communities with emphasis on the problems of poverty. Prerequisites: SO-101 and upper division status. Spring semester. Either semester.


426 The Urban Community (3 credits). An examination of the changing growth, demographic, stratification and institutional structure of urban communities, the causes of urbanization and its consequences for individual and group interaction. Prerequisite: SO-101, and upper division status. Either semester.

431 Social Psychology (3 credits). Social factors affecting individual behavior; formation and change of attitudes; social and cultural effects on individual cognitions; effects of leadership on members of groups and organizations. This course may be taken for either Psychology or Sociology credit, but not for both. Prerequisites: P-10 or SO-101 upper division status. Either semester.

487 Organizational Theory and Bureaucratic Structure (3 credits). A socio political analysis of the theories and concepts of complex social organizations, their application to public administration and the interrelationship between political science and sociological organizational theory. (This course is offered on an interdepartmental basis with the Department of Political Science and is also designated as PQ 487 for students undertaking a major program in Political Science.) Prerequisite: Upper division standing and consent of the instructor. Either semester.

498 Sociology Seminar (2 credits). Intensive study of selected problems in sociology. Prerequisite: Senior standing in Sociology major. Spring semester.

DEPARTMENT OF THEATRE ARTS

Theatre Arts

Graduate

501 The Sociology of Education (3 credits). A sociological analysis of the American school system. Its problems and the social forces that shape the schools in contemporary society. Prerequisite: Graduate Status and SO-101. Summer.

510 Conflict and Change in Socio-Cultural Systems (3 credits). The theory and evidence of socio-cultural change, as viewed from anthropological and sociological perspectives, demonstrating the evolutionary and revolutionary trends, with focus on the interaction between technological, institutional and value systems as they affect human development and the provision of social services. Either semester.

511 The Sociology of Age Group Stratification (3 credits). Examination of the sociological effect of age as a major dimension of social organization and stratification in American society and Western civilization. The course will consider the effects of changing patterns of longevity, resultant changes in age distribution of the population as these factors affect social, economic, and political systems. Either semester.

512 Social Demography (3 credits). Techniques and methods for analyzing population growth, trends and movement as reflected in actuarial data; birth/death rates, mobility, fertility and fecundity as these affect the societal patterns, especially the planning for human service programs. Either semester. Not offered 1975-76.

580 Selected Topics—Human Services Administration (3 credits). (To be offered according to staff availability.)

589 Reading and Conference (1-2 credits). Directed reading on selected materials in human services administration and discussion of these materials, as arranged and approved through major advisor.

*The graduate level courses to support this program will be regularly offered in the fall and spring semesters when funded by the legislature.

REQUIREMENTS FOR THEATRE ARTS MAJOR

Bachelor of Arts Program

General college requirements as listed under college requirements, Bachelor of Arts degree except:

A. Theatre Arts majors are required to take two hours of Physical Education courses as recommended by their advisor, (i.e., fencing, dance, gymnastics, etc.)

B. Area I ............................. 12
C. Area II ............................. 12
D. The department recommends that Theatre Arts majors take one year of foreign language, and LS 101.

MAJOR SUBJECT REQUIREMENTS

THEATRE:

Introduction to Theatre ............................. 3
Technical Theatre ...................................... 6
Acting (lower division) .............................. 3
Stage Voice .......................................... 3
World Drama .......................................... 6
Directing ............................................. 3
Theatre History ....................................... 6
Contemporary Drama .................................. 3

(Credit Division — 21)

SECONDARY EDUCATION:

Departmental requirements for the Secondary Education Option are the same as regular theatre major plus.

TA-402 Directing
E-345 or E-346 Shakespeare is substituted for Contemporary Drama TA-445
The student must also satisfy the requirements for teacher certification.

**THEATRE ARTS MAJOR**

Bachelor of Arts Program

(Suggested Sequence: departmental requirements are indicated by asterisks)

### THEATRE EMPHASIS:

#### FRESHMAN YEAR:

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<td>English Composition</td>
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<tr>
<td>Physical Education*</td>
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<tr>
<td>Laboratory Science</td>
<td>4</td>
<td>4</td>
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<tr>
<td>General Psychology*</td>
<td></td>
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<td>Introduction to Theatre*</td>
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<td>Technical Theatre*</td>
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<td>3</td>
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<tr>
<td>Art or Music</td>
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<td>Introduction to use of Books &amp; Libraries</td>
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#### SOPHOMORE YEAR:

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<tr>
<td>Dramatic Literature*</td>
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<td>Western Civilization*</td>
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<td>Acting*</td>
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<td>Social Science Elective</td>
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<td>Oral Interpretation</td>
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<td>Electives</td>
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#### JUNIOR YEAR:

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<th>Course</th>
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<tbody>
<tr>
<td>Foreign Language</td>
<td>4</td>
<td>4</td>
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<tr>
<td>Stage Voice*</td>
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<tr>
<td>World Drama</td>
<td>3</td>
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<tr>
<td>Electives (Upper Division)</td>
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#### SENIOR YEAR:

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<th>2ND SEM.</th>
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<tbody>
<tr>
<td>Directing*</td>
<td>3</td>
<td></td>
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<tr>
<td>Theatre History*</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Electives (Upper Division)</td>
<td>6</td>
<td>9</td>
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<tr>
<td>Contemporary Drama*</td>
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<tr>
<td>Theatre Theory &amp; Criticism</td>
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#### SECONDARY EDUCATION EMPHASIS:

#### FRESHMAN YEAR:

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<tr>
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<tr>
<td>Physical Education*</td>
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<td>Laboratory Science</td>
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<tr>
<td>General Psychology*</td>
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<td>Introduction to Theatre*</td>
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<td>Technical Theatre*</td>
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<td>Electives</td>
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#### SOPHOMORE YEAR:

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<td>Dramatic Literature*</td>
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<td>Western Civilization*</td>
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<td>Laboratory Science</td>
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<td>Social Science Elective</td>
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<td>Oral Interpretation</td>
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<td>Acting*</td>
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<td>Electives</td>
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### MASTER'S DEGREE IN SECONDARY EDUCATION

**Theatre Arts Emphasis**

**Admissions and Program**

A. Entrance Requirement

The candidate must have an undergraduate major in Theatre from an accredited institution or successfully pass a diagnostic examination written and administered by a member of the Theatre Arts Department.

**Course Offerings**

A. Required Courses

1. TA-511 Theatre Research and Bibliography - 3 credits
2. TA-524 Twentieth Century Theatre - 3 credits
3. Thesis or Project. The department recommends a thesis (TA-593) or project (TA-591). However, the option of additional hours is available upon approval of the department chairman.
4. Three hours of a 400 or 500 level Dramatic Literature course as offered in either the English or Theatre Arts Department.

B. Elective Courses

Additional courses as planned by the student and his graduate committee.

**Additional Information**

A. Culminating Activity. Thesis or Project part of this work may be creative. That is, a student may be permitted to demonstrate his competence in the area of his greatest interest. A candidate most interested in directing may be allowed credit for directing a full length production. Such an activity would culminate in a written presentation and analysis by the candidate to his graduate committee.

B. For each candidate, an informal oral examination is planned at the end of the program. It is not a pass/fail examination but rather a period in which student and faculty examine each other with the improvement of the entire program as a goal.

*The graduate level courses to support this program will be offered regularly in the fall and spring semesters when funded by the legislature.*

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COURSES

TA THEATRE ARTS

Lower Division

107 Introduction to Theatre (3 credits). A survey course designed to stimulate an appreciation of drama and related arts, through the study of the history of theatre, dramatic literature, and techniques. Each semester.

117-118 Technical Theatre (3 credits). Provides the student with a practical knowledge and skill in the techniques of the technical aspects of theatre; the mechanical characteristics of the stage and the elements used in productions; development of drafting skills, problems solving in staging, and the rudiments of lighting and design. Three hours of lecture plus four hours of lab per week required. Fall, Spring semesters.

182 Stage Make-up (2 credits). Investigation of and production analysis of stage make-up, the relationship of actor to play and audience; an integration of make-up and other technical aspects that influence this particular art. Practical application is stressed. Fall semester.

215-216 Acting (3 credits). Emphasis on the problems in the techniques of the actor, appraisal and analysis of stage techniques, acting theories and practices, and recent internationally representative roles. One hour lecture, two hours lab per week required. Fall, Spring semesters.

220 Cinema: History and Aesthetics (3 credits). An examination of the beginnings and development of motion pictures with attention given to the qualities peculiar to cinema when viewed as a unique art form. Selected motion pictures projected and discussed in class. Each semester.

230 Television: History and Aesthetics (3 credits). An examination of television as an entertainment medium from critical and historical points of view. Course includes a study of dramatic presentations, the development of specialized programming, and the social and cultural influences on program content. Spring semester.

232, 432 Repertory Theatre (3 credits). The study and practice of theatre repertory with emphasis on rehearsal and production. Some arranged hours outside of the regularly scheduled class time. Maximum credit 232 and/or TA 432 6 credits. Each semester.

Upper Division

311-312 Advanced Acting (3 credits). Intensive study in the problems of the actor in Classical Drama; Shakespearean Drama; Restoration Comedy and the modern realistic play. Skills and techniques are applied to the production of actual scenes of the categorized type. Prerequisite: TA 215-216 or consent of instructor. Fall, Spring semesters. Alternate years.

331 Major Production Participation (1 credit). Significant participation in a major college production in some phase of technical theatre or acting or management. One hour of credit allowed per semester. Maximum 4 credit hours. Each semester.

333 Stage Voice (3 credits). Techniques and practice in the use of the voice in the theatre with emphasis on diction, projection, and vocal flexibility, as applied in work with actual scenes. Either semester.

334 Advanced Oral Interpretation (3 credits). Analysis and oral presentation of advanced literary works in prose, poetry and drama. Course includes dramatic interpretation, program recital, reader's theatre and continued practice in vocal development. Prerequisite: CM 241 or consent of instructor after audition. Offered spring semester.

341 World Drama 500 BC-1570 (3 credits). Study of outstanding selections of dramatic literature. The plays are studied from a theatrical point of view, i.e., they are approached as scripts intended for production as well as examples of literary form. Alternate Fall semesters.

342 World Drama 1670-1870 (3 credits). Same as TA 341 except that the period covered is from 1570 A.D. through 1870. Alternate Spring semester.

343 World Drama 1870 to 1960 (3 credits). Same as TA 341 except that the period covered is from 1870 to 1960. Alternate Spring semester.

391 Elements of Scenic Design (3 credits). Major skills of beginning design. Included will be art techniques for theatre, research in major periods of scenic design, examination of major designers' works, and practical experience in designing for all major types of stages. Prerequisite: TA 117-118. Fall semester.

392 Costume Design (3 credits). Major skills of beginning costume design. Included will be art techniques for theatre, research in major periods of costume design; examination of major costume designers; works, and practical experience in designing for all manner of productions. Prerequisite: TA 117-118. Alternate Spring semester.

393 Stage Lighting Design (3 hours credit). A study of the theories, principles and practices of stage lighting including both aesthetic and practical aspects. Course includes the direction of scenes and one-act plays; the presentation of special problems of directing as they are related to the art of theatre. Prerequisite: Upper Division standing. Either semester.

401-402 Directing (3 credits). Basic theory and techniques of stage direction; the direction of scenes and one-act plays. Prerequisite: Upper Division standing. Alternate Spring semesters.

421-422 Theatre History (3 credits). Investigation of the periods of major importance in the development of theatre. The first semester will include the period from 800 B.C. through approximately 1550 A.D.; the second semester from the Elizabethan period through the end of the 19th century. Fall, Spring semesters.

445 Contemporary Drama (3 credits). A study of world drama since 1960 with an emphasis on current research materials and techniques. Alternate Spring semesters.

451 Theatre Theory and Criticism (3 credits). Aesthetic theory as it pertains to the art of the theatre; script and production analysis based upon theoretical principles, and their practical application. Prerequisite: Senior standing. Alternate Fall semesters.

481 Puppetry (3 credits). An introduction to the art and craft of puppetry. Emphasis in the class will be on the actual construction of puppets and the creation of puppet plays.

497g-548g Children's Theatre (3 credits). Preparation for successful work in the production of plays for primary school audiences. Theory and techniques of children's theatre production; selection of a selected script. Fall, Spring semesters in alternate years.

491 Senior Projects (3 credits). A culminating work for the theatre major. The student will complete a research plan, and execute a theatrical endeavor relative to his emphasis in theatre. This endeavor will be accompanied by a formally written, fully documented thesis describing his production and the concept involved. Spring semester.

Graduate

511 Theatre Research and Bibliography (3 credits). Instruction and practice in techniques of research with special reference to problems peculiar to theatre as an academic discipline. Special attention to evaluation, organization, and presentation of materials. Instruction in bibliographic information, analysis and use. Prerequisite: Graduate Status.

520 Graduate Theatre Practicum (1-3 credits). Supervised activity in performing, designing, and/or directing. May be repeated up to three credits. Prerequisite: Graduate Status.

524 Twentieth Century Theatre (3 credits). A study of the major producing theatres of the Western world; their organization, principles, architecture and style. Prerequisite: Graduate Status; a class in Introduction to Theatre or equivalent. General knowledge of theatre practice in the United States.

531 Educational Theatre: Curriculum and Production (3 credits). A study of problems, procedures and theories concerning theatre course work and theatre production work in public schools. Prerequisite: Graduate Status.

541 Seminar in Dramatic Literature (3 credits). A varying study in dramatic literature including such subjects as dramatic form and genre, individual playwrights, and historic periods. May be repeated for credit as subject matter changes. Prerequisite: Graduate Status. A class in Introduction to Theatre or equivalent. Upper Division undergraduate course in dramatic literature.

591 Project (3 credits).

593 Thesis (3 credits). Repeatable once, total not to exceed 6 credits.