The Boise State University College of Technology provides a focused response to the technological and engineering-related education and training needs of the region. For Idaho to sustain a strong economy, the educational system must provide the tools and structure necessary for engineering and technical education. The College of Technology is intended to effectively address deficiencies in these areas and to create an environment that attracts new industry and helps existing industry prosper. The College is consistent with the Boise State University mission to provide special emphasis in Applied Technology and, through joint efforts with other institutions, provide needed educational programs.

The programs and services offered through the College of Technology are in direct response to the needs of current and emerging industries in Southwest Idaho. Increasingly, workers at all levels must possess an ever-broader base of scientific and technical knowledge to produce competitively. In addition to education and training programs, the College provides technical assistance to industry, applied research in technology, incubator-type activities and other programs that aid in the region's economic growth and development.

The College of Technology is divided into two Schools—the School of Engineering Technology and the School of Applied Technology. The School of Engineering Technology houses the Bachelor of Applied Science, Construction Management, Manufacturing Engineering Technology, Drafting Technology, Electronics Service Technology, Electronics Technology, and lower division engineering programs. The College has a cooperative arrangement with the University of Idaho, College of Engineering, for delivery of upper-division and graduate engineering courses on the Boise State University campus. The School of Applied Technology provides pre-employment training, industry upgrade and customized training, Adult Basic Education, one-year certificate and a variety of Associate of Applied Science Degree Programs.
School of Engineering Technology

The School of Engineering Technology fulfills its mission within the College of Technology by providing technical and engineering-related needs of the region and state, as well as by providing technical assistance to industry through applied research, technology transfer, and incubator activities for economic development.

Bachelor of Applied Science Degree

The College of Technology offers a Bachelor of Applied Science degree. The Bachelor of Applied Science degree is designed to build upon the Associate of Applied Science degree (A.A.S.) or selected Associate of Science (A.S.) degrees.

Graduates of technical programs that meet the Idaho standards for the A.A.S. degree and are accredited by a regional accrediting body that is recognized by the Council on Postsecondary Accreditation are eligible for admission. The minimum requirements for the A.A.S. degree include:

- Vocational or Technical Education courses .............................................. 42
- Vocational or Technical Support courses ............................................. 10
- General Education courses ............................................................... 12
- TOTAL 64

Exceptions to the above must be reviewed by the Dean, College of Technology for a determination regarding eligibility for admission. Credit for prior learning will be determined in accordance with prevailing institutional policy.

Recommendations for admission to the Bachelor of Applied Science degree must be obtained from the Dean, College of Technology. The interested Student must be formally admitted into the Bachelor of Applied Science degree program by the Dean, College of Technology.

1. Vocational Technical Education Program ......................................... 64
2. General University Requirements .................................................... 64
3. English Composition ....................................................................... 3-6
   NOTE: Number of required credits is determined by student score on ACT exam. See General University Requirements (Core) for details.
4. Area I Requirements .................................................................... 12
   Arts & Humanities
      Three fields must be represented.
5. Area II Requirements .................................................................... 12
   Social Sciences
      Three fields must be represented.
6. Area III Requirements ................................................................ 12
   Natural Sciences and Mathematics
      Two fields must be represented.
      NOTE: Students seeking a B.A.S. with an A.S. degree in Marketing Mid-Management must complete M 103 and M 106 in addition to the requirements listed above.
   NOTE: University Core courses used to meet vocational technical education requirements cannot be used to meet the above listed Area requirements.
7. Upper Division Electives ............................................................... 13
   NOTE: Students seeking the B.A.S. degree must have an additional 9 credits chosen from upper division courses in any of the following disciplines (Social Science and Natural Science-Mathematics must be represented):
   - Anthropology
   - Biology
   - Chemistry
   - Communication
   - Economics
   - Engineering
   - Geography
   - Geology
   - History

Department of Construction Management and Engineering Technologies

Technology Building, Room 240  Telephone (208) 385-3764

Interim Chairperson and Professor: Marvin Cabert; Professors: Affleck, Parks; Associate Professors: Gauerino, Haefer; Assistant Professors: Gains, Kuhr, Mason. Instructors: Lonsdale, Murray, Thatcher.

Degrees Offered

- BS in Construction Management
- BS in Manufacturing Engineering Technology
- Lower Division Engineering for Civil, Mechanical Chemical, Manufacturing and other Engineering disciplines.
- B.S. degrees in Electrical Engineering and Computer Engineering are available on the Boise State campus from the University of Idaho.

Degree Requirements

CONSTRUCTION MANAGEMENT PROGRAM
Bachelor of Science Degree

Accredited by the American Council for Construction Education (ACCE).

The objective of the Construction Management program is to provide education in mathematics, science, communication, engineering, business and construction so that the constructor can intelligently relate to and coordinate the efforts of owners, architects, engineers, craftsmen, contractors and other professionals to provide society with construction services indicative of skill, responsibility and integrity.

FRESHMAN

<table>
<thead>
<tr>
<th>1st SEM</th>
<th>2nd SEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition E 101-102</td>
<td>3</td>
</tr>
<tr>
<td>Area I Elective</td>
<td>3</td>
</tr>
<tr>
<td>&quot;Calculus and Analytical Geometry M 204</td>
<td>5</td>
</tr>
<tr>
<td>Materials &amp; Methods of Architecture AR 290</td>
<td>3</td>
</tr>
<tr>
<td>Engineering Fund and Comp Prog EN 107</td>
<td>3</td>
</tr>
<tr>
<td>Engineering Graphics EN 108</td>
<td>2</td>
</tr>
<tr>
<td>Intro to Management of Construction CO 240</td>
<td>3</td>
</tr>
<tr>
<td>Area II Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

SOPHOMORE

<table>
<thead>
<tr>
<th>1st SEM</th>
<th>2nd SEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Physics PH 101-102</td>
<td>4</td>
</tr>
<tr>
<td>Engineering Measurements EN 216</td>
<td>3</td>
</tr>
<tr>
<td>Intro to Financial Accounting AC 205</td>
<td>3</td>
</tr>
<tr>
<td>The Legal Environment of Business GB 202</td>
<td>3</td>
</tr>
<tr>
<td>Principles of Microeconomics EC 205</td>
<td>3</td>
</tr>
<tr>
<td>Construction Blue Print Commun CO 235</td>
<td>2</td>
</tr>
<tr>
<td>Contracts and Specifications CO 246</td>
<td>3</td>
</tr>
<tr>
<td>Intro to Mechanics EN 205</td>
<td>3</td>
</tr>
<tr>
<td>Intro to Managerial Accounting AC 206</td>
<td>3</td>
</tr>
<tr>
<td>Principles of Macroeconomics EC 206</td>
<td>3</td>
</tr>
</tbody>
</table>

JUNIOR

<table>
<thead>
<tr>
<th>1st SEM</th>
<th>2nd SEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Equipment &amp; Methods CO 320</td>
<td>3</td>
</tr>
<tr>
<td>Mechanical Installations CO 351</td>
<td>3</td>
</tr>
<tr>
<td>Cost Estimating and Bidding CO 370</td>
<td>4</td>
</tr>
<tr>
<td>Statistical Tech Dec Making I PR 207</td>
<td>3</td>
</tr>
<tr>
<td>Principles of Finance FI 303</td>
<td>3</td>
</tr>
<tr>
<td>Mechanic of Materials EN 306</td>
<td>3</td>
</tr>
<tr>
<td>Soil Mechanics and Foundation Const CO 330</td>
<td>3</td>
</tr>
<tr>
<td>Soil Mechanics Lab CO 305</td>
<td>1</td>
</tr>
<tr>
<td>Electrical Installations CO 352</td>
<td>3</td>
</tr>
<tr>
<td>Construct Operations &amp; Improve CO 374</td>
<td>2</td>
</tr>
<tr>
<td>***Labor Relations Course</td>
<td>3</td>
</tr>
<tr>
<td>Technical Writing E 202</td>
<td>3</td>
</tr>
</tbody>
</table>

SENIOR

<table>
<thead>
<tr>
<th>1st SEM</th>
<th>2nd SEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete &amp; Formwork Construction CO 410</td>
<td>3</td>
</tr>
<tr>
<td>Project Scheduling &amp; Control CO 417</td>
<td>3</td>
</tr>
<tr>
<td>Fund of Speech Communication CM 111</td>
<td>3</td>
</tr>
<tr>
<td>**Technical/Management Electives</td>
<td>3</td>
</tr>
<tr>
<td>Area I Electives</td>
<td>3</td>
</tr>
<tr>
<td>Project Management CO 475</td>
<td>3</td>
</tr>
<tr>
<td>Project Controls CO 460</td>
<td>3</td>
</tr>
<tr>
<td>X Organizational Behavior MG 401</td>
<td>3</td>
</tr>
<tr>
<td>General Electives</td>
<td>3</td>
</tr>
</tbody>
</table>

*Math-Competency Exam is required: M 202, M 108 and/or M 111 may be required prior to M 204.
**APPROVED TECHNICAL/MANAGEMENT ELECTIVES: CO 493, 497, EN 206, 301, 320, 382, CO 101, AC 351, FI 201, MG 305, 320, 340, 415, MK 301, PR 345, AS 329, GB 360.
***Chosen from: MG 305, MG 330, MG 340 or MG 415.
1. All Construction Management majors must complete at least 57 credits and have a cumulative grade point average of 2.40 or better before
being admitted to any upper division (number 300 and above) business or construction management classes.
2. All construction management classes take several field trips during the semester (scheduled on Friday afternoons).
3. No more than 32 credits may be taken from the College of Business.

### Recommended Program

**LOWER DIVISION ENGINEERING MAJOR**

All of the following courses will transfer to either the University of Idaho or Idaho State University as well as to most other engineering colleges. BSU offers at least 80 of the 130 or more credits required for an engineering degree in nearly all of the engineering branches. Therefore, it is possible to complete a degree in approximately three semesters after transferring from Boise State University. Bachelor of Science (B.S.) degrees in electrical engineering and computer engineering are available on the Boise State University campus through the University of Idaho. Contact your BSU academic engineering advisor or the University of Idaho Director of Engineering Education for details. The upper division (Junior & Senior) classes offered through the University of Idaho are listed in this section of the Catalog immediately following BSU’s lower division listing.

#### 1st FRESHMAN SEM

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition E 101-102</td>
<td>3</td>
</tr>
<tr>
<td>Algebra &amp; Trig/Calculus M 111-204</td>
<td>5</td>
</tr>
<tr>
<td>Essen of Chemistry C 107-108</td>
<td>-4</td>
</tr>
<tr>
<td>Engr Fund &amp; Comp Prog EN 107</td>
<td>3</td>
</tr>
<tr>
<td>Engr Graphics EN 108</td>
<td>-2</td>
</tr>
<tr>
<td>Industrial Organ &amp; CIM MF 102</td>
<td>3</td>
</tr>
<tr>
<td>Industrial Safety MN 112</td>
<td>-2</td>
</tr>
<tr>
<td>Area I Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

#### 2nd FRESHMAN SEM

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculus &amp; Analytical Geometry M 204-205</td>
<td>5</td>
</tr>
<tr>
<td>College Chemistry C 131-132-133</td>
<td>4</td>
</tr>
<tr>
<td>Engineering Fund &amp; Comp Prog EN 107</td>
<td>3</td>
</tr>
<tr>
<td>Engineering Graphics EN 108</td>
<td>4</td>
</tr>
<tr>
<td>Humanistic Social Elective (See Advisor)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

*Depending on English Placement exam, may have to take E 101.

*Depending on Math Placement exam, may have to take M 111.

**Chemical, Civil and Metallurgical majors add C 134. Computer Engr: substitute Intro to Comp Science II CS 127.

**Computer Engr: substitute Intro to Comp Science II CS 125. Electrical Engineers may substitute CS 125.

**Computer Engineers: substitute "Discrete Math" M 156.

**ADDITIONAL TRANSFERABLE COURSES**

**BRANCH VARIATIONS**

#### Agricultural Engineering

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>*English Composition E 101-102</td>
<td>3</td>
</tr>
<tr>
<td>**Calculus &amp; Analytical Geometry M 204-205</td>
<td>5</td>
</tr>
<tr>
<td>***College Chemistry C 131-132-133</td>
<td>4</td>
</tr>
<tr>
<td>****Engineering Fund &amp; Comp Prog EN 107</td>
<td>3</td>
</tr>
<tr>
<td>*****Engineering Graphics EN 108</td>
<td>2</td>
</tr>
<tr>
<td>Humanistic Social Elective (See Advisor)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

#### SOPHOMORE

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanistic-Social Electives (See Advisor)</td>
<td>3</td>
</tr>
<tr>
<td>Mechanics, Waves &amp; Heat + Lab PH 211-212</td>
<td>3</td>
</tr>
<tr>
<td>Electricity, Magnetism &amp; Optics + Lab PH 213-214</td>
<td>3</td>
</tr>
<tr>
<td>Elect. Engr. Circuits EN 227</td>
<td>3</td>
</tr>
<tr>
<td>Differential Equations M 331</td>
<td>3</td>
</tr>
<tr>
<td>Mechanics/Statics EN 205</td>
<td>3</td>
</tr>
<tr>
<td>Mechanics/Dynamics EN 206</td>
<td>3</td>
</tr>
<tr>
<td>Calculus &amp; Analytic Geometry M 206</td>
<td>2</td>
</tr>
<tr>
<td>Mechanics of Materials EN 306</td>
<td>3</td>
</tr>
<tr>
<td>Fluid Mechanics EN 301</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>83</strong></td>
</tr>
</tbody>
</table>

#### ADDITIONAL AVAILABLE COURSES:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanistic-Social Electives (See Advisor)</td>
<td>3</td>
</tr>
<tr>
<td>Thermodynamics &amp; Heat Transfer EN 320</td>
<td>3</td>
</tr>
<tr>
<td>Engineering Measurements EN 216</td>
<td>3</td>
</tr>
<tr>
<td>Biological Science Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>83</strong></td>
</tr>
</tbody>
</table>

**Chemical Engineering**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>*English Composition E 101-102</td>
<td>3</td>
</tr>
<tr>
<td>**Calculus &amp; Analytical Geometry M 204-205</td>
<td>5</td>
</tr>
<tr>
<td>***College Chemistry C 131-132-133</td>
<td>4</td>
</tr>
<tr>
<td>****Engineering Fund &amp; Comp Prog EN 107</td>
<td>3</td>
</tr>
<tr>
<td>*****Engineering Graphics EN 108</td>
<td>2</td>
</tr>
<tr>
<td>Humanistic Social Elective (See Advisor)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

#### SOPHOMORE

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanistic-Social Electives (See Advisor)</td>
<td>3</td>
</tr>
<tr>
<td>Thermodynamics &amp; Heat Transfer EN 320</td>
<td>3</td>
</tr>
<tr>
<td>Engineering Measurements EN 216</td>
<td>3</td>
</tr>
<tr>
<td>Biological Science Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>83</strong></td>
</tr>
</tbody>
</table>

#### ADDITIONAL AVAILABLE COURSES:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanistic-Social Electives (See Advisor)</td>
<td>3</td>
</tr>
<tr>
<td>Thermodynamics &amp; Heat Transfer EN 320</td>
<td>3</td>
</tr>
<tr>
<td>Engineering Measurements EN 216</td>
<td>3</td>
</tr>
<tr>
<td>Biological Science Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>83</strong></td>
</tr>
</tbody>
</table>
**School of Engineering Technology**

<table>
<thead>
<tr>
<th>Course</th>
<th>FRESHMAN</th>
<th>SOPHOMORE</th>
<th>FRESHMAN</th>
<th>SOPHOMORE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Civil Engineering</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common Year Totals</td>
<td>15</td>
<td>17</td>
<td>15</td>
<td>17</td>
</tr>
<tr>
<td><strong>Sophomore</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calculus &amp; Analytic Geometry M 206</td>
<td>4</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elect. Engr. Circuits EN 227</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanics/Statics EN 205</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering Measurements EN 216</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanics, Waves &amp; Heat PH 211</td>
<td>4</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electricity, Magnetism &amp; Optics PH 213</td>
<td>4</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanics/Dynamics EN 206</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Differential Equations M 331</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanics of Materials EN 306</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fluid Mechanics EN 301</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intro to Civil Engr CE 215 UI@BOI</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Additional Available Courses:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanistic-Social Electives (See Advisor)</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Thermodynamics &amp; Heat Transfer EN 320</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering Economics EN 382</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical Writing E 202</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Geology GO 101</td>
<td>4</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>92</td>
<td>92</td>
<td>92</td>
<td>92</td>
</tr>
</tbody>
</table>

**Computer Engineering**

<table>
<thead>
<tr>
<th>Course</th>
<th>FRESHMAN</th>
<th>SOPHOMORE</th>
<th>FRESHMAN</th>
<th>SOPHOMORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Year Totals</td>
<td>15</td>
<td>17</td>
<td>15</td>
<td>17</td>
</tr>
<tr>
<td><strong>Sophomore</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanistic-Social Electives (See Advisor)</td>
<td>6</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Differential Equations M 331</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Systems &amp; Circuits I EN 221</td>
<td>4</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanics, Waves &amp; Heat Lab PH 211-212</td>
<td>5</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electricity, Magnetism &amp; Optics Lab PH 213-214</td>
<td>5</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intro to Computer Science II CS 127</td>
<td>4</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Systems &amp; Circuits II EN 223</td>
<td>5</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data Structures CS 358</td>
<td>4</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>18</td>
</tr>
</tbody>
</table>

**Electrical Engineering**

<table>
<thead>
<tr>
<th>Course</th>
<th>FRESHMAN</th>
<th>SOPHOMORE</th>
<th>FRESHMAN</th>
<th>SOPHOMORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Year Totals</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td><strong>Sophomore</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanistic-Social Electives (See Advisor)</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Systems &amp; Circuits I EN 221</td>
<td>4</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Differential Equations M 331</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanics/Statics EN 205</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanics, Waves &amp; Heat Lab PH 211-212</td>
<td>5</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electricity, Magnetism &amp; Optics Lab PH 213-214</td>
<td>5</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Systems &amp; Circuits II EN 223</td>
<td>5</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanics/Dynamics EN 206</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calculus &amp; Analytic Geometry M 206</td>
<td>4</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sophomore Seminar EE 292 UI@BOI</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>18</td>
</tr>
</tbody>
</table>

**Geological Engineering**

<table>
<thead>
<tr>
<th>Course</th>
<th>FRESHMAN</th>
<th>SOPHOMORE</th>
<th>FRESHMAN</th>
<th>SOPHOMORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Year Totals</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

**Sophomore**

| Course                                |          |           |          |           |
|                                        |          |           |          |           |
| Physical Geology GO 101                |          | 4         |          |           |
| Elect Eng Circuits EN 227              |          | 3         |          |           |
| Differential Equations M 331           |          | 3         |          |           |
| Mechanics/Statics EN 205               |          | 3         |          |           |
| Mechanics, Waves & Heat Lab PH 211-212 |          | 5         |          |           |
| Electricity, Magnetism & Optics Lab PH 213-214 |      | 5         |          |           |
| Mechanics/Dynamics EN 206              |          | 3         |          |           |
| Calculus & Analytic Geometry M 206     |          | 4         |          |           |
| Mechanics of Materials EN 306          |          | 4         |          |           |
| Fluid Mechanics EN 306                 |          | 4         |          |           |
| **Total**                              | 92       | 92        | 92       | 92        |

**Manufacturing Engineering**

<table>
<thead>
<tr>
<th>Course</th>
<th>FRESHMAN</th>
<th>SOPHOMORE</th>
<th>FRESHMAN</th>
<th>SOPHOMORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Year Totals</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

**Sophomore**

| Course                                |          |           |          |           |
|                                        |          |           |          |           |
| Differential Equations M 331           |          | 3         |          |           |
| Technical Writing E 202                |          | 3         |          |           |
| Mechanics/Statics EN 205               |          | 3         |          |           |
| Systems & Circuits I EN 221            |          | 4         |          |           |
| Mechanics, Waves & Heat Lab PH 211-212 |          | 5         |          |           |
| Electricity, Magnetism & Optics Lab PH 213-214 |      | 5         |          |           |
| Calculus & Analytic Geometry M 206     |          | 4         |          |           |
| Mechanics/Dynamics EN 206              |          | 3         |          |           |
| Fluid Mechanics EN 306                 |          | 3         |          |           |
| Intro Mech Design ME 223 UI@BOI        |          | 2         |          |           |
| **Total**                              | 84       | 84        | 84       | 84        |

**Metallurgical Engineering**

<table>
<thead>
<tr>
<th>Course</th>
<th>FRESHMAN</th>
<th>SOPHOMORE</th>
<th>FRESHMAN</th>
<th>SOPHOMORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Year Totals</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

**Sophomore**

| Course                                |          |           |          |           |
|                                        |          |           |          |           |
| Differential Equations M 331           |          | 3         |          |           |
| Technical Writing E 202                |          | 3         |          |           |
| Mechanics/Statics EN 205               |          | 3         |          |           |
| Systems & Circuits I EN 221            |          | 4         |          |           |
| Mechanics, Waves & Heat Lab PH 211-212 |          | 5         |          |           |
| Electricity, Magnetism & Optics Lab PH 213-214 |      | 5         |          |           |
| Calculus & Analytic Geometry M 206     |          | 4         |          |           |
| Mechanics/Dynamics EN 206              |          | 3         |          |           |
| Mechanics of Materials EN 306          |          | 3         |          |           |
| Intro Mech Design ME 223 UI@BOI        |          | 2         |          |           |
| **Total**                              | 84       | 84        | 84       | 84        |

**Total Upper Division Course Requirements:**

- Civil Engineering: 84
- Computer Engineering: 92
- Electrical Engineering: 92
- Geological Engineering: 92
- Manufacturing Engineering: 84
- Metallurgical Engineering: 84
- Mechanical Engineering: 84

*Remainder upper division course requirements, see "University of Idaho Engineering in Boise Program" in this catalog.*
Elect Eng Circuits EN 227 3
Differential Equations M 331 3
Mechanics/Statics EN 205 3
Mechanics, Waves & Heat & Lab PH 211-212 5
Electricity, Magnetism & Optics & Lab PH 213-214 5
Mechanics/Dynamics EN 206 3
Calculus & Analytic Geometry M 206 4
Mechanics of Materials EN 306 3
Fluid Mechanics EN 301 3

Addition Available Courses:
Humanistic-Social Electives (See Advisor) 9
Technical Writing E 202 3
Physical Chemistry C 321-324 8
Math Elective 3

TOTAL 90

SOPHOMORE
Humanistic-Social Electives (See Advisor) 9
Elect Eng Circuits EN 227 3
Differential Equations M 331 3
Mechanics/Statics EN 205 3
Mechanics, Waves & Heat & Lab PH 211-212 5
Electricity, Magnetism & Optics & Lab PH 213-214 5
Mechanics/Dynamics EN 206 3
Calculus & Analytic Geometry M 206 4
Mechanics of Materials EN 306 3
Fluid Mechanics EN 301 3

TOTAL 84

Gorner Engineering (IDAHO STATE)

FRESHMAN

Common Year Totals 15 17

SOPHOMORE

Engineering Measurements EN 216 3
Systems & Circuits I EN 221 or EN 227 4
Differential Equations M 331 3
Mechanics/Statics EN 205 3
Mechanics, Waves & Heat & Lab PH 211-212 5
Electricity, Magnetism & Optics & Lab PH 213-214 5
Mechanics/Dynamics EN 206 3
Calculus & Analytic Geometry M 206 4
Mechanics of Materials EN 306 3
Fluid Mechanics EN 301 3

TOTAL 87

Course Offerings

See page 23 for definition of course numbering system

CO CONSTRUCTION MANAGEMENT

CO 235 CONSTRUCTION BLUE PRINT COMMUNICATIONS (2-0-2)(F). The transmission and interpretation of blueprint communications covering different types of drawings, including their organization and format. Emphasizing three-dimensional visualization to make practical applications and determine quantities of work. Learn how to interpret quickly and visualize what is being presented by the drawings. Friday field trips required. PREREQ: EN 108.

CO 240 INTRODUCTION TO THE MANAGEMENT OF CONSTRUCTION (3-0-3)(S). Introduction to construction terminology, industry and management. Includes the planning, staffing, directing and controlling functions with emphasis on organizations and the skills of management. A survey of the basic trades, methods, quantity take-off calculations, estimating, and scheduling. Friday field trips required. PREREQ: M 108 or equivalent.

CO 246 CONTRACTS AND SPECIFICATIONS (3-0-3)(S). Contracts, contract documents and specifications for construction including legal as well as technical implications, claims, change orders and contract administration, emphasizing Owner-Engineer/Architect-Contractor functions and related problems. Friday field trips required. PREREQ: CB 202.

Upper Division

CO 320 CONSTRUCTION EQUIPMENT AND METHODS (3-0-3)(F). Characteristics, capabilities, limitations and employment of general building and heavy construction equipment. Friday field trips required. PREREQ: EN 205.

CO 330 SOIL MECHANICS AND FOUNDATION CONSTRUCTION (3-0-3)(S). Fundamentals of soil mechanics as it relates to foundation and earthwork construction problems: interaction of water and soil, compaction, bearing capacity, lateral pressures, drainage and waterproofing, retaining walls, pile foundations, and special foundation construction problems. PREREQ: EN 205 or PER/MNST. COREQ: GO 305.

CO 351 MECHANICAL INSTALLATIONS (3-0-3)(F). The fundamentals of mechanical installations and associated construction problems including heat loss and gain, heating, ventilating and air-conditioning, fluid flow in pipes and ducts as well as water supply, sewage, and fire protection installations. Friday field trips required. PREREQ: PH 102 and EN 205.

CO 352 ELECTRICAL AND ACoustical INSTALLATIONs (3-0-3)(S). The fundamentals of electrical and acoustical installations and associated construction problems including electrical circuits, conduits, conductors, switchgear, other service equipment and electrical transmission. Also included will be lighting and acoustical installations and associated construction problems. Friday field trips required. PREREQ: PH 102 and EN 205.

CO 370 COST ESTIMATING AND BIDDING (3-3-4)(F). Extracting quantity take-offs from drawings, classifying the work in accordance with specifications, compiling and pricing estimates and preparation of bids. PREREQ: CO 215, CO 246 and M 111 or equivalent.

CO 374 CONSTRUCTION OPERATIONS AND IMPROVEMENTS (2-0-2)(S). The use of statistical sampling, time and motion studies, time-lapse photography, crew balance analysis, flow and process charts to improve methods, labor efficiency, equipment and materials usage, safety, and employee motivation. Field trips are required. PREREQ: PR 207.


CO 460 PROJECT COST CONTROLS (3-0-3)(S). Theory of cost accounting and cost control, emphasis on cost determination as a tool of management and project cost control. Includes bidding, budgeting and developing project cost control system for managing, receivable, payroll and subcontractors. PREREQ: AC 206 and CO 370.

CO 475 PROJECT MANAGEMENT (2-0-2)(S). Application of professional construction management techniques such as site investigation, contractor and subcontractor qualifications, conceptual estimating and budgeting, value engineering, quality assurance, business development, risk management and ethics as applied to the management of construction projects. PREREQ: CO 240 and CO 246.

CO 493 INTERNSHIP. Cooperative education/internship in construction management provides practical, on-the-job experience in blueprint reading, material takeoff, estimating, equipment management and project planning.

EN ENGINEERING

Lower Division

EN 100 ENERGY FOR SOCIETY (3-2-4)(F/AREA III). A general interest course having no prerequisite. A basic understanding of energy and how it has been put to use is developed to promote a better understanding of our present technological society with emphasis on energy, environmental, social, and political problems. Alternative as well as conventional energy solutions will be studied.

EN 101 TECHNICAL DRAWING (2-2-2)(F/S). A basic course in technical drawing covering sketching, orthographic projection, sectioning, dimensioning, pictorial drawing and introduction to microcomputer drafting systems.

EN 102 COMPUTER FUNDAMENTALS FOR TECHNOLOGY (3-0-3)(F/S). Introduces course in use and applications of the computer in technology. Topics covered included DOS, word processing, simple programming, spreadsheets and problem solving with PC Solve. Also general orientation to careers in technology. COREQ: M 108 or higher level mathematics.

EN 104 (CS 124) DIGITAL COMPUTER PROGRAMMING (2-2-2)(F/S). An introduction to FORTRAN programming principles and logic including input/output, flow charting, handling arrays and subroutines, all applied to problem solving. PREREQ: M 106 or M 108.

EN 107 ENGINEERING FUNDAMENTALS AND COMPUTER PROGRAMMING (3-0-3)(F/S). Overview of the engineering profession. Introduction to engineering analysis and problem solving using Pascal and Fortran languages plus spreadsheets. PREREQ: M 111 or equivalent.
EN 108 ENGINEERING GRAPHICS (2-2-2)(F,S). Engineering graphical analysis and graphic transmission of information including use of micro computer design and drafting systems. PREREQ: M 108 or equivalent mathematics background.

EN 205 MECHANICS/STATICS (3-0-3). Covers basic statics including equilibrium, analysis of trusses, frames and machines, centroids, static friction and moments of inertia. PREREQ: M 204 or PER/MINST.

EN 206 MECHANICS/DYNAMICS (3-0-3)(S). Kinematics and kinetics of both particles and rigid bodies using the concepts of force, mass acceleration, work and energy plus impulse and momentum for general plane motion. PREREQ: EN 205.

EN 215 BASIC SURVEYING (1-3-2)(F). A basic course in surveying for non-engineering majors. Course covers use of transit, level, plane table and computations related to evaluation, traverse and stadia surveys. PREREQ: M 111 or equivalent.

EN 216 ENGINEERING MEASUREMENTS (2-3-3)(S). Theory and practice; manipulation of instruments for horizontal and vertical distance measurements and angle measurements; types and distribution of errors; route and land surveying; construction surveying introduction to photogrammetry. PREREQ: M 111 or equivalent.

EN 221 SYSTEMS AND CIRCuits I (3-3-4)(F). The fundamental course in electrical engineering which provides an introduction to electrical circuits and basic network analysis. Topics covered are simple resistive, capacitive and inductive circuits, network theorems and circuit analysis methods. There is one three-hour laboratory per week. COREQ: M 331.

EN 223 SYSTEMS AND CIRCuits II (4-3-5)(S). A continuation of EN 221 extending into second order circuits, the use of phasors, AC steady-state analysis and frequency-domain analysis, polyphase circuits, transformers, filters and Fourier analysis. PREREQ: EN 221 and M 205.

EN 227 ELECTRICAL ENGINEERING CIRCUITS (3-0-3)(F). A survey course in circuit analysis for engineering majors other than electrical. Topics covered include DC and AC circuit analysis using the basic network theorems and analysis methods. PREREQ: M 204.

EN 230 DIGITAL CIRCUITS I (3-0-4) (F). An introduction to number systems, Boolean algebra, logic gates, Karnaugh mapping, combinational circuits, registers and arithmetic operations. PREREQ: Math equivalent to M 106, 108, 111; offered every odd numbered year.

Upper Division

EN 301 FLUID MECHANICS (3-0-3)(S). 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. PREREQ: EN 205 and EN 206.

EN 306 MECHANICS OF MATERIALS (3-0-3)(S). Elasticity, strength, and modes of failure of engineering materials, theory of stress and strains for columns, beams and shafts. Three class periods per week. PREREQ: M 205 or PER/MINST and EN 205.

EN 320 THERMODYNAMICS AND HEAT TRANSFER (3-0-3)(F). First and second laws of thermodynamics, thermodynamic processes; thermodynamic properties of fluids; flow processes; heat to work conversion; refrigeration, conduction and radiation. PREREQ: M 206 and PH 211.

EN 382 ENGINEERING ECONOMY (3-0-3)(F). Economic analysis and comparison of engineering alternatives by annual-cost, present-worth, capitalized cost, and rate-of-return methods; income tax considerations. PREREQ: Junior standing.

MF MANUFACTURING ENGINEERING TECHNOLOGY

Lower Division


MF 202 MANUFACTURING MATERIALS & PROCESSES I (2-4-3)(F). A study of the properties of materials used in the manufacturing process including ferrous and non-ferrous metals and the equipment and processes used in the product manufacturing cycle.

MF 204 MANUFACTURING MATERIALS & PROCESSES II (2-4-3)(S). A continuation of Manufacturing Materials & Processes I. The study of the properties of wood, organics, plastics and composites and the equipment and processes used in the manufacturing cycle. PREREQ: MF 202.

MF 210 COMPUTER AIDED DESIGN (CAD) (2-4-3)(F). CAD techniques applied to the mechanical system designs with an emphasis on the manufacturability of the end product. PREREQ: EN 108.

MF 220 COMPUTER AIDED MANUFACTURING (CAM)(2-4-3)(S). A lecture/laboratory course designed to introduce the student to the concept of group technology, computer scheduling, process design and classification systems control, and the relationship between part grouping and part costing. It includes justification for and application of computer assistance in the manufacturing process, machine process control and an introduction to programming of computer controlled machines. PREREQ: MF 204, 210.

Upper Division


MF 310 PRODUCTION PROCESS (2-4-3)(F). The design and application of production processing with consideration to the end product. Emphasis on the choice and sequence of processing to assure productivity and to efficiently obtain an end product at the least cost. PREREQ: MF 220.

MF 312 JIGS & FIXTURES (2-4-3)(S). The design and application of jigs and fixtures for machine tools. PREREQ: MF 204. Offered on demand.


MF 324 INSTRUMENTATION & CONTROL (2-4-3)(S). The application of electronic, mechanical, fluidic, and thermal instrumentation and control mechanisms to monitor and control the manufacturing process. COREQ: MF 320.

MF 346 SHOP FLOOR CONTROL (3-0-3)(S). This course expands on the topics of production control in PR 345 Principles of Production Management, as they apply to the manufacturing technologist. Topics covered will include production systems analysis, resource dispatching, line balancing, flexible manufacturing systems, just-in-Time manufacturing and machine utilization and maintenance. PREREQ: PR 345. Offered on demand.

MF 350 FOOD PROCESSING AND ENVIRONMENT (3-0-3)(F). Materials handling and processing, psychrometrics, heat and mass transfer, pumps and fans, refrigeration, agricultural environments and waste management. PREREQ: PH 102; C 107. Offered on demand.

MF 380 QUALITY SYSTEMS LABORATORY (0-2-1)(S). An investigation of the capability and economic limitations of various methods of measuring quality in manufacturing systems. Students will design and construct quality measuring stations to gather and interpret quality data. COREQ: PR 380.

MF 406 COMPUTER SYSTEMS INTEGRATION (3-0-3)(F). The integration of the various elements in the computer systems required for a CIM factory. A study of the integration problems associated with several system vendors, LAN's, machine controllers and bridging systems. PREREQ: MF 220 or PER/MINST. Offered on demand.

MF 410 ROBOTICS (2-4-3)(F). A lecture/laboratory course concerned with the capabilities of and the justification for industrial robots. Students will develop several robot programs which simulate realistic situations involving processing, assembly and materials handling functions. PREREQ: MF 324.

MF 430 MANUFACTURING COST REDUCTION & CONTROL (3-0-3)(F). An in-depth study of the methodologies used in recording and reporting product cost. The application of manufacturing engineering and production management skills to lower and/or maintain product cost. A study of the interrelationships and product cost impact of JIT, TQC, CAD/CAM and CIM. PREREQ: PR 345, MF 310.

MF 440 MATERIAL HANDLING AND PLANT LAYOUT (3-0-3)(S). The integrated design of typical manufacturing plants and material handling schemes using the principles of CIM to achieve an effective and efficient flow appropriate for both present and future needs. PREREQ: MF 310.


MF 470 PROCESS ENVIRONMENT DESIGN (3-2-3)(S). The design of process environments such as clean rooms, food processing areas, shielded areas and other process/product unique environments. A study of governmental standards—FDA, NASA, MIL STD, etc. COREQ: MF 440. Offered on demand.

MF 480 MANUFACTURING SIMULATION (2-6-4)(S). A capstone course utilizing all the skills attained to design and simulate a manufacturing operation for an assigned new product. Students will work individually and in small teams to complete this senior project. PREREQ: MF 410.

University of Idaho
Engineering in Boise Program

Technology Building, Room 201

As part of its statewide role and mission, the University of Idaho is pleased to be offering engineering education opportunities in the Boise area. We are presently offering complete bachelor of science degrees in Electrical and Computer Engineering in Boise, plus course work leading to bachelor degrees in Chemical, Civil, Mechanical and Manufacturing Engineering.

Degrees Offered

• BS in Computer Engineering
• BS in Electrical Engineering

Program Statement

As part of its statewide role and mission, the University of Idaho is pleased to be offering engineering education opportunities in the Boise area. We are presently offering complete bachelor of science degrees in Electrical and Computer Engineering in Boise, plus course work leading to bachelor degrees in Chemical, Civil, Mechanical and Manufacturing Engineering.

Bachelor of science degrees in Electrical and Computer Engineering can
be completed entirely in Boise. Upper division course work in Mechanical Engineering, Chemical Engineering and Civil Engineering is also offered, so that approximately one year of study is required in Moscow to complete the bachelors degree.

The University of Idaho College of Engineering, with the very generous cooperation of Boise State University, has been teaching classes on the Boise State campus since 1988. The first engineering degrees earned through the Boise Program were awarded in 1990. To cater to the special needs of working students, classes are scheduled in the late afternoon and evening. Courses are taught by University of Idaho engineering faculty, utilizing facilities provided by Boise State University.

Students wishing to pursue an engineering degree in Boise take most of the first two years of course work through the BSU engineering program. After two years, the student transfers to UI and then continues taking UI courses taught on the BSU campus.

Admission to Classes
To take upper division courses taught through the Engineering in Boise Program, students must have completed certain required courses in chemistry, computer science, engineering, mathematics and physics and achieved a grade of 'C' or better in each of these courses. The specific list of courses varies with each major; please contact the UI Engineering in Boise Office for specific course lists.

Fees
Students enrolled in the Engineering in Boise Program pay fees through BSU. The amount of fees is determined by the total number of credits taken, regardless of the combination of credits taken from the two universities. Students who qualify can take UI classes at no additional charge.

Financial Aid
Applications for financial aid are processed by the BSU Office of Financial Aid.

General Education Requirements
Since the degree that will be earned is a UI degree, all UI requirements for graduation must be met. One area of difference between BSU requirements and UI requirements is in the General Education (or Core) Requirements. While many of the courses listed as BSU core requirements will indeed satisfy UI core requirements, some do not. The number of credits required by UI in each core category is also different. Please consult with the UI Boise Engineering office to determine which core courses are appropriate for a UI engineering degree.

Writing Proficiency Test
All students transferring to UI are required to take a Writing Proficiency Test administered by the UI English Department. This test is given in Boise twice a year, once in the fall and once in the spring. Please note that this test is NOT the same as the test given by the BSU English department.

Curricula
The UI Engineering curricula are subject to review and revision by UI faculty. The information listed here is intended only as a guide. Refer specific questions to the UI Engineering Office.

Students pursuing an engineering degree should follow the BSU recommended program for the Freshman and Sophomore years.

Recommended Program

### COMPUTER ENGINEERING CURRICULUM

<table>
<thead>
<tr>
<th>JUNIOR</th>
<th>1ST SEM</th>
<th>2ND SEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Computer Fund &amp; Lab CompE 340-344</td>
<td>UI@BOI 4</td>
<td>-</td>
</tr>
<tr>
<td>Programming Languages CS 354</td>
<td>BU 4</td>
<td>-</td>
</tr>
<tr>
<td>Electronics I &amp; Lab EE 316-317</td>
<td>UI@BOI 4</td>
<td>-</td>
</tr>
<tr>
<td>Lower Level Program CS 223</td>
<td>BU 3</td>
<td>-</td>
</tr>
<tr>
<td>Comp Org CompE 441</td>
<td>UI@BOI</td>
<td>-</td>
</tr>
<tr>
<td>Technical Writing E 202</td>
<td>-</td>
<td>BU 3</td>
</tr>
<tr>
<td>Linear Algebra M 301</td>
<td>-</td>
<td>BU 4</td>
</tr>
<tr>
<td>Technical Elective TE</td>
<td>UI@BOI</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SENIOR</th>
<th>SEMESTER CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design CompE 480</td>
<td>UI@BOI 3</td>
</tr>
<tr>
<td>Statistics M 361</td>
<td>BU 4</td>
</tr>
<tr>
<td>Technical Elective TE</td>
<td>BU/UI 3</td>
</tr>
<tr>
<td>Signals &amp; Systems EE 350</td>
<td>UI@BOI 4</td>
</tr>
<tr>
<td>Operating Systems CS 353</td>
<td>BU 3</td>
</tr>
<tr>
<td>Design CompE 481</td>
<td>UI@BOI 3</td>
</tr>
<tr>
<td>Technical Electives TE</td>
<td>BU/UI 6</td>
</tr>
<tr>
<td>Technical Electives TE</td>
<td>UI@BOI 6</td>
</tr>
</tbody>
</table>

### ELECTRICAL ENGINEERING CURRICULUM

<table>
<thead>
<tr>
<th>JUNIOR</th>
<th>1ST SEM</th>
<th>2ND SEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronics I &amp; Lab EE 316-317</td>
<td>UI@BOI 4</td>
<td>-</td>
</tr>
<tr>
<td>Dig Comp Fund EE 340</td>
<td>UI@BOI 3</td>
<td>-</td>
</tr>
<tr>
<td>Dig Logic Lab EE 344</td>
<td>UI@BOI 1</td>
<td>-</td>
</tr>
<tr>
<td>Signal &amp; Systems EE 350</td>
<td>UI@BOI 4</td>
<td>-</td>
</tr>
<tr>
<td>Technical Writing E 202</td>
<td>BU 3</td>
<td>-</td>
</tr>
<tr>
<td>Electronics II &amp; Lab EE 318-319</td>
<td>UI@BOI 4</td>
<td>-</td>
</tr>
<tr>
<td>Elec Machinry EE 320</td>
<td>UI@BOI 5</td>
<td>-</td>
</tr>
<tr>
<td>Elec Mag Theory EE 330</td>
<td>UI@BOI 4</td>
<td>-</td>
</tr>
<tr>
<td>Elective HS</td>
<td>BU 3</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SENIOR</th>
<th>SEMESTER CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principals of Design EE 480</td>
<td>UI@BOI 3</td>
</tr>
<tr>
<td>Senior Seminar EE 491</td>
<td>UI@BOI 0</td>
</tr>
<tr>
<td>Eng Science Elective ES</td>
<td>BU 3</td>
</tr>
<tr>
<td>Principals of Design EE 481</td>
<td>UI@BOI 3</td>
</tr>
<tr>
<td>Engineering Economics EN 382</td>
<td>BU 3</td>
</tr>
<tr>
<td>Technical Electives TE</td>
<td>UI@BOI 9</td>
</tr>
<tr>
<td>Upper Division HS</td>
<td>BU 3</td>
</tr>
</tbody>
</table>

### CHEMICAL ENGINEERING CURRICULUM

<table>
<thead>
<tr>
<th>JUNIOR</th>
<th>1ST SEM</th>
<th>2ND SEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Chem &amp; Lab C 321</td>
<td>BU 3</td>
<td></td>
</tr>
<tr>
<td>Reactor Kin &amp; Des ChE 323</td>
<td>UI@MOS 3</td>
<td>-</td>
</tr>
<tr>
<td>Fluid Mechanics EN 301</td>
<td>BU 3</td>
<td>-</td>
</tr>
<tr>
<td>Elec Circuits EN 227</td>
<td>BU 3</td>
<td>-</td>
</tr>
<tr>
<td>Communications Elective</td>
<td>BU 2</td>
<td>-</td>
</tr>
<tr>
<td>Unspecified HS</td>
<td>BU 3</td>
<td>-</td>
</tr>
<tr>
<td>Bioscience Elective Chem</td>
<td>UI@MOS</td>
<td>-</td>
</tr>
<tr>
<td>Thermo &amp; Sep Proc ChE 330</td>
<td>UI@MOS</td>
<td>-</td>
</tr>
<tr>
<td>Trans &amp; Rate Proc ChE 430</td>
<td>UI@MOS</td>
<td>-</td>
</tr>
<tr>
<td>Unspecified Engr</td>
<td>UI@MOS</td>
<td>-</td>
</tr>
<tr>
<td>Unspecified Math</td>
<td>UI@MOS</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SENIOR</th>
<th>SEMESTER CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process Analysis ChE 444</td>
<td>UI@MOS 3</td>
</tr>
<tr>
<td>Seminar ChE 491</td>
<td>UI@MOS 0</td>
</tr>
<tr>
<td>Chem Proc Anal &amp; Des ChE 453</td>
<td>UI@MOS 3</td>
</tr>
<tr>
<td>Trans &amp; Rate Proc II ChE 431</td>
<td>UI@MOS 2</td>
</tr>
<tr>
<td>Trans &amp; Rate Proc III ChE 432</td>
<td>UI@MOS 3</td>
</tr>
<tr>
<td>Unspecified ChE</td>
<td>UI@MOS</td>
</tr>
<tr>
<td>Elective</td>
<td>UI@MOS</td>
</tr>
<tr>
<td>Process Control ChE 445</td>
<td>UI@MOS</td>
</tr>
<tr>
<td>Trans &amp; Rate Proc Lab ChE 433</td>
<td>UI@MOS</td>
</tr>
<tr>
<td>Seminar ChE 492</td>
<td>UI@MOS</td>
</tr>
<tr>
<td>Chem Proc Anal &amp; Des ChE 444</td>
<td>UI@MOS</td>
</tr>
<tr>
<td>Technical Unspecified TE</td>
<td>UI@MOS</td>
</tr>
<tr>
<td>(300 or 400 level Science or Engr course)</td>
<td>UI@MOS</td>
</tr>
<tr>
<td>Unspecified HS</td>
<td>UI@MOS</td>
</tr>
</tbody>
</table>

**TOTAL CREDITS 134**

**NOTE:** TE = Technical upper-division electives (at least 3 credits from either EE or CS courses).
## CIVIL ENGINEERING CURRICULUM

<table>
<thead>
<tr>
<th>JUNIOR</th>
<th>1ST SEM</th>
<th>2ND SEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fund of Statistics M 361</td>
<td>BSU</td>
<td>4</td>
</tr>
<tr>
<td>Theory of Structures CE 342</td>
<td>UI@BOI</td>
<td>4</td>
</tr>
<tr>
<td>Engr Econ EN 382</td>
<td>BSU</td>
<td>3</td>
</tr>
<tr>
<td>Fluid Mechanics EN 301</td>
<td>BSU</td>
<td>3</td>
</tr>
<tr>
<td>Elective HS</td>
<td>BSU</td>
<td>3</td>
</tr>
<tr>
<td>Transportation Engr CE 372</td>
<td>UI@MOS</td>
<td>4</td>
</tr>
<tr>
<td>Hydraulics CE 322</td>
<td>UI@MOS</td>
<td>3</td>
</tr>
<tr>
<td>Mech Prop of Materials CE 357</td>
<td>UI@MOS</td>
<td>3</td>
</tr>
<tr>
<td>Rein Concrete Design CE 441</td>
<td>UI@MOS</td>
<td>3</td>
</tr>
<tr>
<td>Design (CE 421 recmd) TE</td>
<td>UI@MOS</td>
<td>3</td>
</tr>
</tbody>
</table>

**SEMMESTER CREDITS** 17 16

## MECHANICAL ENGINEERING CURRICULUM

<table>
<thead>
<tr>
<th>JUNIOR</th>
<th>1st SEM</th>
<th>2nd SEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluid Mechanics EN 301</td>
<td>BSU</td>
<td>3</td>
</tr>
<tr>
<td>Applied Thermodyn ME 322</td>
<td>UI@BOI</td>
<td>4</td>
</tr>
<tr>
<td>Kin &amp; Dyn of Machines ME 342</td>
<td>UI@BOI</td>
<td>3</td>
</tr>
<tr>
<td>Models of Engr Sys I ME 380</td>
<td>UI@BOI</td>
<td>3</td>
</tr>
<tr>
<td>Elective HS</td>
<td>BSU</td>
<td>3</td>
</tr>
<tr>
<td>Heat Transfer ME 345</td>
<td>UI@BOI</td>
<td>3</td>
</tr>
<tr>
<td>Models of Engr Sys II ME 381</td>
<td>UI@BOI</td>
<td>2</td>
</tr>
<tr>
<td>Mechanical Design ME 425</td>
<td>UI@BOI</td>
<td>4</td>
</tr>
<tr>
<td>Elective TE</td>
<td>BSU</td>
<td>6</td>
</tr>
<tr>
<td>Elective HS</td>
<td>BSU</td>
<td>3</td>
</tr>
</tbody>
</table>

**SEMMESTER CREDITS** 17 18

## SENIOR

<table>
<thead>
<tr>
<th>Course Description</th>
<th>BSU/UI@MOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials process ME 253</td>
<td>3</td>
</tr>
<tr>
<td>Exp Meth for Engrs ME 330</td>
<td>UI@MOS</td>
</tr>
<tr>
<td>Seminar ME 491</td>
<td>UI@MOS</td>
</tr>
<tr>
<td>Electronics Sys EE 314 OR</td>
<td></td>
</tr>
<tr>
<td>Elec Machinery EE 324</td>
<td>UI@MOS</td>
</tr>
<tr>
<td>Elective (coherent) TE</td>
<td>UI@MOS</td>
</tr>
<tr>
<td>Upper Division HS</td>
<td></td>
</tr>
<tr>
<td>Eng Materials &amp; Lab ME 261, 262</td>
<td>UI@MOS</td>
</tr>
<tr>
<td>Mech Systems Design ME 426</td>
<td>UI@MOS</td>
</tr>
<tr>
<td>Senior Lab ME 430</td>
<td>UI@MOS</td>
</tr>
<tr>
<td>E.I.T. Exam Prep ENG 411</td>
<td>UI@MOS</td>
</tr>
</tbody>
</table>

**SEMMESTER CREDITS** 18 15

**TOTAL CREDITS** 138

**UI at Boise Course Offerings**

### EE/XE ELECTRICAL ENGINEERING/CompE COMPUTER ENGINEERING

**EE 292/XE 292 SOPHOMORE SEMINAR (0 cr)(S)** Curriculum options, elective courses, prep for graduate study, and current tech topics. Field trip may be required. Graded P/F.

**EE 316/XE 316 ELECTRONICS (3 cr)(F)** Introduction to application of electronic devices in electrical networks; diodes, rectifiers, power supplies, and thermal management; bipolar junction transistor principles, biasing, modeling and low-frequency small-signal application; operational amplifier fundamentals and applications. Prerequisite: M 204. Graded P/F.

**EE 317/XE 317 ELECTRONICS LAB I (1 cr)(F)** Lab to accompany or follow EE 316. Prerequisite required; consult department administrator. PREREQ: EE 316.

**EE 318/XE 318 ELECTRONICS II (3 cr)(S)** Electronic amplifier frequency response (magnitude and phase); RC coupled amplifiers in cascade; large-signal amplifiers; implication of saturation and cut-off; feed-back amplifiers; intro to analog IC implementation. Prerequisite required; consult department administrator. PREREQ: EE 316, 317.

**EE 319/XE 319 ELECTRONICS LAB II (1 cr)(S)** Lab to accompany or follow EE 318. Prerequisite required; consult department administrator. PREREQ: EE 316, 317. COREQ: EE 318.

**EE 320/XE 320 ELECTRICAL MACHINERY (5 cr)(S)** Theory and application of electric machinery and transformers. Four lectures and one 3-hour lab a week. Prerequisite required; consult department administrator. PREREQ: BSU's EN 221, EN 223 and PH 213.

**EE 330/XE 330 MAGNETIC ELECTRODYNAMICS (4 cr)(F)** Vector calculus; electrostatics; electrodynamic waves; electromagnetic waves in isotropic media; Maxwell's equations; boundary value problems. Prerequisite required; consult department administrator. PREREQ: BSU's EN 221, EN 223 and PH 213.

**EE 340/CompE 340/XE 340 DIGITAL COMPUTER FUNDAMENTALS (3 cr)(F)** Number systems, truth tables, logic gates, elementary combinational and sequential logic, concepts of machine language programming, introduction to data structures and subroutines, hands-on use of mini-computer stressed. Prerequisite required; consult department administrator. PREREQ: M 204.


**EE 350/XE 350 SIGNAL AND SYSTEMS ANALYSIS (4 cr)(F)** Continuous and discrete time signal and system analysis; Fourier transforms, z-transforms, filtering, sampling and modulation; intro to state space methods and feedback control. Preregistration required; consult department administrator. PREREQ: BSU's EN 223.

**EE 440/CompE 440/XE 440 DIGITAL SYSTEMS ENGINEERING (3 cr)(S)** Advanced topics in computer logic design such as iterative logic arrays, hazard free design and VLSI logic implementations; study of asynchronous and sequential circuit design, combinational and sequential circuit design with PLA's; register transfer language design of digital system including data path and control structures with TTL, including timing analysis. Prerequisite required; control structures with TTL including timing analysis. Prerequisite required; consult department administrator. PREREQ: EE 340, 344, CompE 340, 344 or XE 340, 344.

**EE 441/CompE 441 COMPUTER ORGANIZATION (3 cr)(S)** Register transfer language design of micro and mini computer systems; micro and mini architectures including interrupt structures and software control; 6-bit and 16-bit microprocessors; computer design including interfacing and software control; microcomputer design including associated interfacing with RAM, ROM, and I/O. Prerequisite required; consult department administrator. PREREQ: EE 340, CompE 340 or XE 340.

**EE 480-481/CompE 480-481/XE 480-481 PRINCIPLE OF DESIGN (3 cr)(F)** Computer-aided technology, economics, marketing, reliability, and patents; projects requiring original design, working model, and report. Two lectures and one 3-hour lab a week. Prerequisite: EE 340; consultation required; consult department administrator. Prerequisite: for EE 480: EE 316, 317, 318, 319, 320, 330, 340, 350, or PERM/INST. PREREQ: for EE 481: EE 480.

**EE 491/XE 491 SENIOR SEMINAR (0 cr)(F)** Technical topics, employment practice and interviewing. One lecture a week; one 3-6 day field trip may be required. Graded P/F.

**Che/XH CHEMICAL ENGINEERING**

**CHE 223/XH 223 MATERIALS AND ENERGY BALANCES (3 cr)(all yrs).** Conservation of mass and energy in chemical processes. Competency in calculations in chemical processing systems. PREREQ: BSU's C 131, 133 and M 205.

**CE/XC CIVIL ENGINEERING**


**CE 312/XC 312 HYDROLOGY (3 cr)(S)** Analysis of precipitation and runoff events; principles of climatology, evaporation, infiltration, and snowmelt. PREREQ: one semester of calculus.

**CE 342/XC 342 THEORY OF STRUCTURES (4 cr)(F)** Stress and strains in statically determined and indeterminate beam, truss, and rigid frame structures; effects of moving loads; matrix displacement method. Three lectures and one 3-hour lab a week. PREREQ: BSU's EN 306.

**ME/CM MECHANICAL ENGINEERING**

**ME 223/M 223 MECHANICAL DESIGN ANALYSIS (2 cr)(S)** Fundamentals of engineering design, graphic representation and computer-aided design (CAD) of engineering systems. Two lectures a week. PREREQ: BSU's EN 107 and EN 108.

**ME 322/M 322 APPLIED THERMODYNAMICS (3 cr)(F)** First and second law: property relations; mixtures; irreversibility and availability; cycles; selected topics in applied thermodynamics; application of computers in a thermodynamic system analysis and control. One lecture a week and one hour of lab a week. PREREQ: BSU's EN 320.

**ME 324/XM 324 DYNAMIC ANALYSIS IN MACHINE DESIGN (3 cr)(F)** Kinematic, static and dynamic principles and application to analysis and synthesis of machines with emphasis on computer-aided design (CAD) technology. Two lectures and one 3-hour lab a week; one 1-day field trip. COREQ: BSU's EN 206 and M 331; ME 223.

**ME 345/XM 345 HEAT TRANSFER (3 cr)(S)** Introduction by conduction of heat in steady and unsteady states, by free and forced convection, and by radiation; combined effects of conduction, convention, and radiation. PREREQ: BSU's EN 320 and M 331.
ME 380/XM 380 MODELING OF ENGINEERING SYSTEMS I (3 cr)(F). Application of math and basic engineering principles in solution of engineering problems and math modeling of engineering systems; solution of problems by analytic and numerical methods; introduction of computer program for dynamic systems analysis and for data analysis. PREREQ: BS/L's M 331.

ME 381/XM 381 MODELING OF ENGINEERING SYSTEMS II (3 cr)(S). Continuation of ME 380, including transfer functions, state variable technique, simulation diagrams, and complex systems modeling. PREREQ: ME 380.

ME 425/XM 425 MECHANICAL DESIGN (4 cr)(S). Stress and strain, material failure, combined stresses, variable and impact loading, machine elements, lubrication theory, bearing design, and computer-aided design (CAD) principle. PREREQ: BS/L's EN 306, ME 223.

Department of Industrial Technology
Technology Building, Room 301 Telephone (208) 385-4049
Chairperson: Thomas O. Murray.

Degrees Offered
• AAS in Broadcast Technology
• AAS in Drafting Technology
• AAS in Electronics Technology
• AAS in Electronics Service Technology
• AAS in Manufacturing Technology
• AAS in Semiconductor Technology

Broadcast Technology—Two Year Program
Associate of Applied Science
Instructors: Paul Kjellander, James Paluzzi

Instructors of Applied Science Degree
Instructors: Danny Benton, Ralph Burkey, Don Watts

This curriculum is organized to provide engineering departments, government agencies, consulting engineers and architectural firms with a technician well versed in the necessary basic skills and knowledge of conventional and computer-aided drafting. The student is required to develop and maintain the same standards and techniques used in firms or agencies that employ drafters and technicians.

Course Offerings
See page 23 for definition of course numbering system

BR 101 INTRODUCTION TO BROADCAST TECHNOLOGY (3-0-3) - F. Study of the technology used to disseminate programming through telecommunications systems, including terrestrial and satellite transmissions systems, CATV, and production technology. Course includes an overview of broadcast technology professionals.

BR 103 BROADCAST TECHNOLOGY REGULATION (3-0-3) - S. Examination of the regulatory function of the Federal Communications Commission as it pertains to broadcast technology, including construction and licensing regulations, emergency broadcast systems, license renewal, public records, and all application procedures. Study of FCC technical parameters for broadcast operations.

BR 111 INTRODUCTION TO AUDIO TECHNOLOGY (3-4-4) - F. Study of basic principles of audio, including equipment and systems used in broadcasting, including microphones, earphone, microphone design, and utilization of broadcast equipment for both studio and field-based broadcast technology.

BR 113 INTRODUCTION TO VIDEO TECHNOLOGY (3-4-4) - F. Study of video systems and equipment used in broadcasting, including studio design and lighting, video switching, video graphics, telecine, videotape and recorders, video editing, and audio for television.

BR 121 BROADCAST OPERATIONS (3-4-4) - S. Theory and practice of master control operations for radio and television, including master control switching, character generators, audio and video maintenance programs for both studio and field-based broadcast systems.

BR 211 ADVANCED AUDIO TECHNOLOGY (3-4-4) - F. Advanced study of studio, field, and multi-track production technology.

BR 215 TELEVISION LIGHTING AND MAKE-UP (3-4-4) - S. Study of physics of light, as it applies to studio and field-based television production. Makeup and set design.

BR 217 ELECTRONIC FIELD PRODUCTION (3-4-4) - S. Study of techniques and utilization of broadcast equipment in the field including audio and video recording systems, remote satellite and microwave technology.

BR 221 BROADCAST FACILITIES MAINTENANCE (3-4-4) - F. Management of preventive maintenance programs for both studio and field-based broadcast systems; procedures for routine repair of basic broadcast equipment. Development of conceptual knowledge of electronic components within broadcast systems.

BR 224 BROADCAST SYSTEMS DESIGN (3-4-4) - S. Theory and practice in designing broadcast studios, master control and production control facilities, transmission systems and networks. Topics include construction management, interconnection and routing systems, and acoustics.

BR 293 BROADCAST TECHNOLOGY INTERNSHIP (6-12-4) - S. Practical experience within a professional broadcast environment.

FIRST SEMESTER
Course Offerings

FRESHMAN
English Composition E 101 3 -
Fund of Speech Communication CM 111 3 -
Intermediate Algebra M 108 4 -
Algebra & Trigonometry M 111 5 -
Computer Fund for Technology EN 102 3 -
Intro to Broadcast Technology BR 101 3 -
Broadcast Technology Regulation BR 103 3 -
Intro to Audio Technology BR 111 4 -
Intro to Video Technology BR 113 4 -
Broadcast Operations BR 121 4 -
TOTAL 17 - 19 -

SOPHOMORE
General Psychology P 101 3 -
Technical Report Writing DT 222 2 -
Technical Physics MN 231 4 -
Fundamentals of Computer Drafting DT 109 2 -
Intermediate Algebra M 108 4 -
English Composition E 101 3 -
TOTAL 16 -

SECOND SEMESTER
Course Offerings

FRESHMAN
Management & Organizational Theory MG 301 3 -
Broadcast Facilities Maintenance BR 221 4 -
Broadcast Systems Design BR 224 4 -
Advanced Audio Theory BR 211 4 -
Electronic Field Production BR 217 4 -
Television Lighting & Make-Up BR 215 4 -
Broadcast Technology Internship BR 293 4 -
TOTAL 17 - 16 -

SOPHOMORE
Civil Drafting Lab and Lecture DT 101 4 -
Fund of Speech Communication CM 111 3 -
Fundamentals of Computer Drafting DT 110 2 -
Intermediate Algebra M 108 4 -
English Composition E 101 3 -
TOTAL 16 -

THIRD SEMESTER
Course Offerings

FRESHMAN
Fund of Speech Communication CM 111 3 -
Fundamentals of Computer Drafting DT 110 2 -
Engineering Measurement EN 216 3 -
Technical Physics MN 231 4 -
Technical Report Writing DT 222 2 -
TOTAL 18 -

SOPHOMORE
Architectural Drafting Lab and Lecture DT 102 4 -
Architectural Drafting Lab and Lecture DT 102 4 -
Architectural Drafting Lab and Lecture DT 102 4 -
Architectural Drafting Lab and Lecture DT 102 4 -
Architectural Drafting Lab and Lecture DT 102 4 -
TOTAL 17 -

FOURTH SEMESTER
Course Offerings

FRESHMAN
Civil Drafting Lab and Lecture DT 201 4 -
Advanced Mathematics DT 231 3 -
Descriptive Geometry DT 221 3 -
Statics DT 241 4 -
Occupational Relations DT 262 3 -
TOTAL 17 -

SOPHOMORE
Structural Drafting Lab and Lecture DT 202 4 -
Structural Drafting Lab and Lecture DT 202 4 -
Structural Drafting Lab and Lecture DT 202 4 -
Structural Drafting Lab and Lecture DT 202 4 -
Structural Drafting Lab and Lecture DT 202 4 -
TOTAL 17 -
Applied Mathematics DT 232 .............................................. 3
Strength of Materials DT 242 ............................................ 4
Technical Illustration DT 264 .............................................. 3
*Elective (from approved list) ............................................. 3
TOTAL ................................................................. 17

All courses require a minimum ‘C’ grade to receive the Associates Degree.

Approved General Electives List
*Electives chosen from following course offerings to fulfill Occupational Area core requirements. These selections are also chosen with the intent of fulfilling the general education requirements for the ASSOCIATE OF APPLIED SCIENCE degree.

Principles Microeconomics EC 205 ........................................ 3
Principles Macroeconomics EC 206 ....................................... 3
Introduction to Business GB 101 ............................................ 3
General Psychology P 101 ................................................... 3
Career Life Planning GE 115 ............................................... 3
Introduction to Sociology SO 101 ........................................... 3

Course Offerings

See page 23 for definition of course numbering system

DT DRAFTING TECHNOLOGY

DT 101 DRAFTING LABORATORY AND LECTURE (2-4-4)(F/S). Mechanical drafting with basic drafting techniques, standards, methods, and basic block and schematic diagrams for electronics and piping with introduction to computer assisted drafting. PREREQ: DT 101.

DT 102 DRAFTING LABORATORY AND LECTURE (2-4-4)(F/S). Architectural drafting includes facility planning, remodeling and details for commercial buildings. PREREQ: DT 101.

DT 109 FUNDAMENTALS OF COMPUTER-AIDED DRAFTING AND DESIGN (2-1-2)(F/S). This course is an introduction to Computer-Aided Drafting and Design Systems. It will prepare students to operate the systems and understand the applications of computer graphics to industry standards.

DT 110 ADVANCED COMPUTER-AIDED DRAFTING AND DESIGN (2-1-2)(F/S). This course provides the student with skills in three-dimensional CAD drafting, developing shape and engineering drawings, developing slides, digitizing and illustrations. Problems will be assigned in conjunction with the lab DT 102. COREQ: Familiarity with basic drafting procedures and standards.

DT 201 CIVIL DRAFTING LABORATORY AND LECTURE (2-4-4)(F). Civil drafting, mapping, highway curves and earthwork using conventional and computer drafting techniques. PREREQ: DT 102, M 108, EN 216.


DT 221 DESCRIPTIVE GEOMETRY AND DEVELOPMENT (3-1-3)(F). Theory and practice of coordinate projection applied to the solution of properties of points, lines, planes and solids with practical drafting applications.

DT 222 TECHNICAL REPORT WRITING (2-0-2)(F). Objective: to enable students to meet on-the-job standards of report preparation in the field of drafting.


DT 241 STATICS (4-0-4)(F). Introductory course in statics with emphasis on analysis of simple structures. PREREQ: M 108.


DT 262 OCCUPATIONAL RELATIONS (3-0-3)(F). Course is designed to enable a student to become skilled in dealing effectively with people and for applying, securing, maintaining and advancing in employment. Emphasis in developing a portfolio.

DT 264 TECHNICAL ILLUSTRATION (3-1-3)(S). An intensive study of axonometric, perspective and rendering as used in industrial illustration. Architectural rendering a civil engineering, including mechanical and electronic methods. (open to non-drafting technology major—space permitting.)

Electronics Service Technology—Two Year Program

A graduate of this program will be prepared for entry level placement with industry and will possess a broad-based general knowledge in electronic concepts, circuits, and equipment repair, maintenance, and interfacing. The graduate will gain experience in the areas of analog and digital electronics with major emphasis in the fields of digital electronics, and telecommunication and electromechanical systems.

To be accepted into this program students must meet Vocational Technical Education Admission Requirements listed on page 159.

FRESHMAN YEAR

1ST SEM 2ND SEM

Electronics Laboratory I ES 106 ........................................ 3
English Composition E 101 .............................................. 3
Electronics Theory ES 122 .............................................. 5
Electronics Mathematics ES 133 ....................................... 5
Computer Literacy for Elec Tech ES 188 ................................ 2
Intro to Digital Electronics ES 123 .................................... 2
Digital Systems I ES 163 ................................................ 2
Linear Systems I ES 172 ................................................ 5
Linear Systems I Lab ES 173 ............................................. 3
Applied Math ES 182 .................................................... 3
Fund of Speech Comm CM 111 ........................................ 3
TOTAL ................................................................. 18 18

Sophomore Year

Electronics Lab ES 206 ............................................... 3
Digital Systems II ES 214 .............................................. 3
General Psychology P 101 .............................................. 3
Linear Systems II ES 237 ............................................... 5
CET Certification ES 274 ............................................... 1
Economics of Elect Service Management ES 264 .............. 3
Telecommunication Systems I ES 232 ................................ 2
Electronics Lab ES 288 ................................................ 3
Digital Systems III ES 275 ............................................... 3
Microprocessors Systems ES 277 ..................................... 4
Electro-Mechanical Systems ES 281 ................................ 4
Telecommunication Systems II ES 285 ................................ 4
TOTAL ................................................................. 18 19

Course Offerings

See page 23 for definition of course numbering system

ES - ELECTRONICS SERVICE TECHNOLOGY


ES 122 ELECTRONIC THEORY (5-0-5)(F). Theory of direct and alternating currents in passive circuits. Circuit analysis of RLC configurations in both ac and dc applications.

ES 123 INTRODUCTION TO DIGITAL ELECTRONICS (2-0-2)(F/S). Introduction to binary number systems, digital coding, basic logic gates and logic families.

ES 133 ELECTRONICS MATHEMATICS (5-0-5)(F/S). The number system, algebra and algebraic equations, exponential and logarithmic equations, vectors and graphing.


ES 188 COMPUTER LITERACY FOR ELECTRONIC TECHNICIANS (2-0-2)(F/S). An introductory computer course dealing in the use of the computer as a writing and computational tool. The student will be introduced to word processing and the BASIC computer programming language. Includes program writing and structuring techniques, software troubleshooting and documentation.

ES 206 ELECTRONICS LAB (0-15-3). Combined electronics lab covering circuits and equipment used in ES 237, ES 214, and ES 281. Lab will stress hands-on exposure...
to circuits and equipment and will provide various trouble-shooting techniques.


**ES 223 TELECOMMUNICATION SYSTEMS I (2-0-2)(F/S).** Introduction to electronic communication systems. Amplitude modulation and detection, percentage of modulation, bandwidth of AM signals, RF power calculations. Radio frequency transmitter and receiver systems.


**ES 264 ECONOMICS OF ELECTRONIC SERVICE MANAGEMENT (3-0-3)(F/S).** Study of electronic shop economics, practices and standards. Includes customer and employee relations, management skills, and invoicing, warranty claims and procedures.

**ES 274 CET CERTIFICATION (1-0-1)(F/S).** Study for and completion of requirements for Certified Electronics Technician examination. Associate Level Exam preparation.


**ES 277 MICROPROCESSOR SYSTEMS (4-0-4)(F/S).** Study of microprocessor functions based on 68000 series microprocessor. Numbers systems, microprocessor basics, computer arithmetic, programming, microcontroller code, central processor unit structure, and interfacing. PREREQ: ES 214.

**ES 281 ELECTRO-MECHANICAL SYSTEMS (3-0-3)(F/S).** Electronic measurement and detection through the use of electronic transducers. Mechanical control through the use of electro-mechanical actuator devices. Photoelectric sensors, thermal sensors, displacement sensors. Solenoids, relays, stepper motors and servo actuators.


### EXTENDED PROGRAMS OFFERINGS

The following Extended Programs offerings are not required in the Electronic Service Technology AAS degree program. These courses are designed for upgrading of individuals employed in the Electronic industry. PREREQ: Minimum of two years employment as an Electronic Service Technician, or PERM/INST.

**ES 293 FIBER OPTICS (2-0-2).** Basic electronics overview including introductory circuit concepts and schematic interpretation. General circuit construction, voltage, current, power and resistance concepts. Components of fiber optic communication systems. Optical fiber properties and types, applications, advantages and limitations. Transformation of voice information to digital form and applications of digital signal multiplexing for use with optical fiber signal transmission and reception. System testing and standardized troubleshooting procedures.

**ES 295 DIGITAL CONCEPTS WITH INTRO MICROPROCESSORS (1-4-2).** A laboratory oriented digital electronics course covering the areas of combinational logic, sequential logic, digital-to-analog and analog-to-digital conversion and introductory microprocessors. Logic trouble-shooting will be emphasized throughout the course.

### Electronics Technology—Two Year Program

**Associate of Applied Science Degree**

**Instructors:** Robert Dodson, Bob Jull, Joe Schreffler, Stan Sluder, James Stack

The Electronics Technology Program prepares students as entry level electronic engineering technicians. These individuals are prepared to work as individuals or team members together with scientists, engineers, and manufacturing or research specialists. The graduate of this program will obtain broad-based experience in areas of digital electronics systems, electronic communications systems, and electronic measurement and control systems.

To be accepted into this program students must meet Vocational Technical Education Admission Requirements listed on page 159.

**FRESHMAN YEAR**

<table>
<thead>
<tr>
<th>Course</th>
<th>1st</th>
<th>2nd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Found of Physical Science PS 100</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>English Composition E 101</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Computer Fund for Technology EN 102</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Sophomore Year**

- **SEMPH** 19
- **Total** 19

### Semiconductor Technology—Two Year Program

**Associate of Applied Science Degree**

To be accepted into this program students must meet Vocational Technical Education Admission Requirements listed on page 159.

The successful completion of ET 131-132 or M-111, or the equivalent is prerequisite for this major.

**FIRST YEAR**

<table>
<thead>
<tr>
<th>Course</th>
<th>1st</th>
<th>2nd</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Physics PH 101-102</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>College Chemistry &amp; Lab C 131-132</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Advanced Electronics Math ET 231-232</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Communication Skills ET 111-112</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

**Second Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>1st</th>
<th>2nd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Systems I and II ET 162, ET 264</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Technical Report Writing ET 113</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Intro to Solid State Physics ET 291</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Solid State Device Physics ET 292</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Integrated Circuit Layout ET 281</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Electronics Theory I and Lab ET 151-101</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Electronics Theory II and Lab ET 152-102</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Solid State Devices I ET 172</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>15</td>
<td>18</td>
</tr>
</tbody>
</table>

**Course Offerings**

See page 23 for Definition of course numbering system

**ET ELECTRONIC TECHNOLOGY**

**ET 101 DC ELECTRONICS LABORATORY (0-10-2)(F/S).** Experiments in direct current electronics. Study of resistance, dc circuit behavior, dc applications of capacitors and inductors, characteristics and use of dc test equipment. PREREQ: ET 151.

ET 151 DC ELECTRONIC THEORY (5-0-3)(F/S). Theory of direct current electricity, its behavior in dc circuits. Resistance, dc power and energy, dc voltage and current laws, dc circuit analysis, dc circuit calculations and interpretation. This course includes 2 hours per week of non-credit study session. COREQ: M 108 or PERM/INST.


ET 162 DIGITAL SYSTEMS I (3-0-3)(F/S). Introductory digital concepts, the binary and hexadecimal number systems, Boolean functions and operations, basic logic gates and combinational logic. PREREQ: ET 152.

ET 163 DIGITAL SYSTEMS I LAB (0-5-1)(F/S). Laboratory exercises in combinational logic to complement ET 162. See ET 162 course description. COREQ: ET 162.


ET 173 SOLID STATE DEVICES LAB (0-5-1)(F). Laboratory exercises dealing with solid state devices including diodes, bipolar and field effect transistors to complement ET 172. See ET 172 course description. COREQ: ET 172.

ET 181 INTRODUCTION TO INTEGRATED CIRCUIT INDUSTRY (2-0-2)(F). Overview of the integrated circuit: its history, applications, and manufacturing. Course will cover technical aspects lightly and will focus on economic and social impact. PREREQ: ET 131-132, or M 111 or equivalent.

ET 182 INTRODUCTION TO INTEGRATED CIRCUIT PROCESSING (2-0-2)(F). Examination of the manufacturing techniques and processes necessary to build an integrated circuit from raw materials to final products. The emphasis is on conceptual aspects of processing; however, mechanisms and modeling will be discussed. PREREQ: ET 131-132 or M 111 or the equivalent.

ET 183 INTEGRATED CIRCUIT PROCESSING I (2-0-2)(S). A descriptive treatment, in some chemical and mathematical detail, of the processes used to manufacture integrated circuits. PREREQ: ET 181, 182.

ET 201 LINEAR SYSTEMS LAB (0-10-2)(F/S). Laboratory exercises dealing with linear amplification and signal processing circuits to complement ET 251. See ET 251 course description. COREQ: ET 251.

ET 202 TELECOMMUNICATIONS SYSTEM LAB (0-4-1)(F/S). Laboratory exercises dealing with radio frequency generation and measurements, communication signal processing circuits, and fiber optic systems to complement ET 252. See ET 252 course description. COREQ: ET 252.

ET 221 TECHNICAL WRITING (3-0-3)(F/S). Writing skills in technical reports, resume preparation, and job applications. Improvement of writing and report preparation style and writing for effectiveness and clarity.


ET 241 INSTRUMENTATION (3-0-3)(F/S). Electronic measurement and control through the use of electronic sensors, transducers, detectors, and actuators. Open and closed loop control systems. Position, force, pressure, temperature, flow, level, light, and radiation sensors. Signal conditioning and processing. PREREQ: ET 152 or PERM/INST.

ET 242 INSTRUMENTATION LAB (0-4-1)(F/S). Laboratory exercises with various sensors and measurement systems to complement ET 241. See ET 241 course description. COREQ: ET 241.

ET 251 LINEAR SYSTEMS (5-0-3)(F/S). Linear circuit signal amplification and processing using discrete and monolithic integrated circuits. Operational amplifier circuits including comparators, oscillators, active filters, and instrumentation amplifiers. PREREQ: ET 172.

ET 252 TELECOMMUNICATIONS SYSTEMS (3-0-3)(F/S). Radio and light-wave communications. Amplitude modulation, frequency modulation, pulse modulation, and video systems. PREREQ: ET 172 or PERM/INST.

ET 264 DIGITAL SYSTEMS II (4-0-4)(F/S). Sequential logic concepts including flip-flops, shift registers, and counters. Memory systems including ROM, SRAM, DRAM, FIFO, EPROM, EEPROM, and video memory devices. PREREQ: ET 162 or PERM/INST.

ET 265 DIGITAL SYSTEMS II LAB (0-5-1)(F/S). Laboratory exercises dealing with combinational and sequential digital devices to complement ET 264. See ET 264 course description. COREQ: ET 264 or PERM/INST.


ET 276 DIGITAL SYSTEMS III LAB (0-4-1)(F/S). Laboratory exercises dealing with data transmission and processing systems to complement ET 275. See ET 275 course description. COREQ: ET 275.

ET 277 MICROPROCESSOR SYSTEMS (3-0-3)(F/S). Study of micro-processor and microcontroller functions and operations. Microprocessor basics, addressing, instruction sets, input/output operations, interfacing, and programming. PREREQ: ET 275 or UNRESTRICTED.

ET 287 MICROPROCESSOR SYSTEMS LAB (0-4-1)(F/S). Laboratory exercises in microprocessor and/or microcontroller operations to complement ET 277. See ET 277 course description. COREQ: ET 277.

ET 281 INTEGRATED CIRCUIT LAYOUT (2-0-2)(S). Lecture and drafting techniques used in the design of integrated circuit photolithographic masks. Focus to be on N-MOS silicon gate memory devices. PREREQ: ET 183.

ET 291 INTRODUCTION TO SOLID STATE PHYSICS (3-0-3)(S). A study of the interaction of wave phenomena (electromagnetic radiation, lattice vibration, and electrons) with the lattice in a solid. Application of the quantum-mechanical and classical methods on the electrical and thermal properties of solids, metals and semiconductors, in particular. Other selected topics from solid state and low temperature physics. PREREQ: PH 102 or PH 220-224.

ET 292 SOLID STATE DEVICE PHYSICS (3-0-3)(S). Introduction to the theory underlying the operation of semiconductor devices. The emphasis is placed on qualitative understanding and simple quantitative models. PREREQ: PH 291, ET 231 or M 204, C 131.

EXTENDED PROGRAMS OFFERINGS

The following offerings are not required in the Electronic Technology AAS degree program. These courses are designed for technical upgrading of individuals working in industry and are to be offered apart from regular degree program offerings on a demand basis.

ET 290 LASER SYSTEMS (3-0-3). Course in LASER mechanics and optics. Coherent light, monochromaticity, and polarization. Diffraction, refraction, and reflection. Types of LASER devices and principles of operation. Safety considerations and BRH ratings. Applications of LASER devices including precision positioning and gaging, interferometric distance measurements, diffraction pattern analysis, LASER welding and communications, and holography. PERM/INST.

ET 295 INTRODUCTORY FIBER OPTIC SYSTEMS (3-0-3). Basic electronics overview including voltage, current, and power. Introductory digital electronics overview including the binary number system, pulse code modulation, sampling, analog-to-digital and digital-to-analog conversions, and data transmission. Optical fiber qualities and use. Electrical-to-optical and optical-to-electrical conversion. Time division multiplexing of signals. Course designed for non-electronic technology majors.


Manufacturing Technology—Two Year Program

Associate of Applied Science Degree

Instructors: Ed Lonsdale, Tom Murray, Larry Thatcher

The Manufacturing Technology Program is designed to prepare entry level technicians to plan, organize and control manufacturing processes. Graduates from this program will be prepared to participate in a modern manufacturing environment with a technical understanding of how each particular function integrates into a complete manufacturing system. In addition, they will be prepared to utilize the current techniques of computer integrated manufacturing.

To be accepted into this program students must meet Vocational Technical Education Admission Requirements listed on page 159.

FRESHMAN

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM 1ST</th>
<th>SEM 2ND</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material &amp; Process Manufacturing MN 100</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Computer Fund for Technology EN 102</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Indus Organ &amp; Intro CIM MN 102</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Intermediate Algebra M 108</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Intro to Machining Processes IM 141</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>English Composition E 101</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Engineering Graphics EN 108</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Industrial Safety MN 112</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>AC/DC Theory M 121</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Adv Machining Processes II MN 180</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Technical Physics MN 231</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Fund Speech Communication CM 111</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>18</td>
<td>17</td>
</tr>
</tbody>
</table>

SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>SEM 1ST</th>
<th>SEM 2ND</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prin of Microeconomics EC 205</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Quality Assurance &amp; Stat Proc Control MN 201</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Robotics &amp; Automated Machine Tool Prog MN 211</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Material Control MN 221</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Jig, Fixture &amp; Tool Design MN 261</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Comp Aided Design/Comp Aided Manuf MN 212</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Manufact Plan &amp; Facil Design/Mod MN 202</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
Course Offerings

See page 23 for definition of course numbering system.

MN - MANUFACTURING TECHNOLOGY

MN 180 MATERIAL AND PROCESS MANUFACTURING (2-0-2)(F/S). A lecture, visual aid presentation overviewing the production and general properties of common engineering materials such as iron, steel, zinc, copper, aluminum and plastics; the fundamentals of material processing such as powder metallurgy, hot and cold forming and shaping; and the basic surface protection processes such as cleaning, painting and plating.


MN 112 INDUSTRIAL SAFETY (2-0-2)(F/S). Federal, state and local safety codes applying to materials, material handling and equipment.

MN 121 AC/DC THEORY (3-2-3)(F/S). Terminology and fundamentals of direct and alternating currents as applied to the manufacturing environment. Practical application and skills in wiring methods and control circuits.

MN 141 INTRODUCTION TO MACHINING PROCESSES I (2-4-3)(F/S). This sequence covers safety, shop practice and production rates. Also included are the set-up and operation of the lathes, milling machines, drill presses, power saws and grinders.

MN 180 ADVANCED MACHINING PROCESSES II (1-8-1)(F/S). This sequence covers the use of special attachments, bench work, layout, heat treating, hardness testing, layout inspection, and computer numerical control mill set-up, operation and programming. PREREQ: MN 141 or equivalent.

MN 201 QUALITY ASSURANCE & STATISTICAL PROCESS CONTROL (4-0-4)(F/S). The statistical requirements necessary to control the processes of a modern manufacturing line will be covered. PREREQ: M 106 or equivalent.

MN 202 MANUFACTURING PLANNING & FACILITY DESIGN/MODIFICATION (2-4-3)(F/S). Techniques of planning methods and procedures of manufacturing, with the goal of becoming more productive and competitive. Planning and procedures include plant layout, conventional and automated materials handling, materials requirement planning, flexible manufacturing, standardization, and inventory and warehousing planning.

MN 211 ROBOTICS & AUTOMATED MACHINE TOOL PROGRAMMING (1-4-2)(F/S). An introduction to lecture/lab robotics in manufacturing, includes definitions and classifications of robots, limitations and justifications of robots, and social implications of robotics as applied to manufacturing.

MN 212 COMPUTER AIDED DRAFTING/COMPUTER AIDED MANUFACTURING (2-4-3)(F/S). Writing computer numerical control (CNC) machine tool programs using computer-assisted techniques to generate machine firmware, set up and operation, development of tooling concepts, preset cutting tools, machine methods, definition of part geometry, writing of tool motion statements, use of the computer to process program inputs, analysis, and debugging of computer outputs to develop a functional program. PREREQ: MN 180 or equivalent.

MN 231 TECHNICAL PHYSICS (3-4-4)(F/S). The study of technical principles in such a manner as to make them readily understood and applicable in different technologies--those that include electrical, mechanical, fluidal, and thermal systems, and combinations thereof. This course blends the useful technical principles with laboratory practice on realistic devices that are commonly utilized by technicians in a process/manufacturing environment. PREREQ: M 108 or equivalent. (May be taken in either the freshman or sophomore year.)


MN 240 MATERIAL CONTROL (3-0-3)(F/S). The integration of the materials function into a CIM environment. A study of inventory control, material requirement planning, master scheduling, capacity planning, material movement, and shop floor control. PREREQ: M 108.

MN 250 MANUFACTURING COST ANALYSIS (3-0-3)(F/S). A study of the methodologies used in recording and reporting product cost. The application of manufacturing engineering technology skills to lower and/or maintain product cost. PREREQ: MN 240.


MN 280 MANUFACTURING PROJECT (2-6-4)(F/S). A capstone course utilizing all the skills attained to design and simulate a manufacturing operation for an assigned product. Students will work individually and in small teams. PREREQ: MN 261.

**Coreq:** MN 202.

### School of Applied Technology

- **Business/Special Programs Division:** Barbara Egland, Division Manager. *Business and Office Education:* Bounds, Butler, Carlson, Madarieta, Metzgar, TenEyck, Williamson;
- **Health/Services Division:** Bonnie J. Sumter, Division Manager. *Child Care and Development:* Noonan; *Culinary Arts:* Hickman, Kulm, Slough; *Dental Assistant:* Beckman, Imbs, Dr. Gunnell; *Horticulture Service Technician:* Moen; *Practical Nursing:* Borman, Laserstrom, McCullough, Noren, Tisdale, Towle; *Respiratory Therapy Technician:* McCrink, Nuerenberg, Read, M.D.; *Surgical Technology:* Gollick.
- **Canyon County Division:** Dennis Griffith, Division Manager. *Business and Office Occupations:* Bounds, Madarieta; *Electrical Lineworker:* McKie; *Professional Truck Driving:* Anchegustei, Castleberry, Hibbard; *Refrigeration, Heating and Air Conditioning:* Messick; *Water/Wastewater Technology:* Dennis.
- **Industrial/Mechanical Division:** Gary Armarbarri, Division Manager. *Agricultural Equipment Technology:* Brownfield, Tillman; *Auto Body Repair:* Parke; *Auto Mechanics:* Gaines, Hall, Mikesell; *Business Systems and Computer Repair:* Cadwell, Janson, Jones; *Heavy Duty Mechanics-Diesel:* Brownfield, Tillman; *Industrial Mechanics/Automation:* Allen; *Machine Shop:* Glassen, Wettman; *Small Engine Repair:* Schroeder; *Welding and Metals Fabrication:* Baldwin.

### Program Coordinators
- **Academic Skills Development:** Susan Hill
- **Adult Learning Center:** Elaine Simmons
- **College of Technology Student Services:** Rhonda Miracle
- **Counselors:** Daigle-Ptacek
- **Center for New Directions:** Myrna McDaniel
- **Outreach Division:** Pepper Stobbe
- **Special Training Programs:** Jane Giles

### Admission Requirements

Students who plan to enter a program in the School of Applied Technology, Boise State University, must complete the following through the College of Technology Student Services office at least one month prior to the start of classes:

1. Arrange a personal interview with a College of Technology Student Services counselor.
2. Submit a Boise State University application and pay the required $15.00 application processing fee.
3. Submit an official high school transcript showing date of graduation, any additional applicable requirements, have been completed. *Admittance into a program is not achieved until steps 1 through 5, and admission requirements should be completed as soon as possible. A limited number of students can be accepted in each program so all admission requirements should be completed as soon as possible. Admittance into a program is not achieved until steps 1 through 5, and any additional applicable requirements, have been completed.*

#### Academic Skills Development

Academic Skills Development provides the College and its students with a valuable resource in two principal areas: raising the academic competencies of registered preparatory students; and tutoring enrolled students in difficult content courses. The unit provides individual assistance, group tutoring, computerized instructional programs and small group classes on both the Boise and Canyon County campuses.
Adult Learning Center
The Adult Learning Center operates an open entry/open exit program with individualized assistance provided by staff and volunteers. The following non-credit instruction and services are provided to adults at the Boise campus location as well as at many outreach sites throughout the ten counties of Southwest Idaho:
- Basic skills instruction in reading, math, English, and writing.
- Instruction and materials for GED and American Government testing preparation.
- GED and American Government testing for the High School Equivalency Certificate.
- Literacy instruction for non-readers.
- English as a Second Language instruction.
- Citizenship preparation classes.

Center for New Direction
The mission of the Center for New Directions is to empower and provide support, career counseling, personal counseling, as well as education, for single parents and displaced homemakers as they progress from unpaid work to paid work and from dependency to personal and financial independence. The goal of the Center is to provide support, career counseling, personal counseling and education for this target population as they transition from independence to independence.

College of Technology Student Services
Vocational guidance and program admittance/enrollment are the primary functional responsibilities of the College of Technology Student Services office. College of Technology Student Services personnel work with BSU Student Affairs offices in the areas of Admissions, Registration, Financial Aid and Student Special Services. Student Services also work closely with school faculty and administration on all activities that involve students.

Outreach Division
The Outreach Division offers a wide spectrum of employment related programs and course offerings within the College's service area. These training, retraining, upgrade and apprenticeship courses are non-credit and held primarily during the evening hours and on weekends. Short courses and seminars are tailored to prepare individuals for job specific professions and to provide currently employed persons a continuing opportunity to improve their skill levels to keep pace with technological advances. The Outreach Division works closely with business and industry to upgrade existing courses and develop customized training programs to meet specific needs.

Special Training Programs
The Special Training Programs unit houses the Job Training Partnership Programs (ITPPS), the Older Workers Employment Opportunity Program (OWEOP), the Job Opportunity Basic Skills Program (JOBS) and the Opportunity Express Bus Program. Services provided consist of counseling and support, workshop presentations, support groups, instruction in a variety of short-term customized training programs, outreach and recruitment, contracts management, grant writing and proposal development, job development and placement, program marketing and office administration. Special Training Programs services are designed to meet the needs of the disadvantaged, at-risk population and individuals who have significant barriers to employment.

Graduation Requirements
All candidates for a Certificate of Completion, Diploma, or Associate of Applied Science Degree must have a minimum of a 'C' grade in the major (technical) course work. A 2.0 grade point average is required in all other required course work.

Curriculum Changes
The curriculum in applied technology programs must reflect the changes and current practices of Business & Industry. Program and course curricula are changed as needs dictate.

Certificate of Completion
The Certificate of Completion is conferred upon students who successfully complete an applied technology program which is less than a two year curriculum.

Diploma
A Diploma is conferred upon students that successfully complete a two year program but opt not to complete the academic requirements for the Associate of Applied Science degree.

Associate of Applied Science
Two year programs in the School of Applied Technology and the School of Engineering Technology lead to an Associate of Applied Science degree. The standard requirements for this degree are as follows:
1. Technical Education Requirements-56 credit hours or equivalent clock hours.
   A. Technical Course work: 42-46 credit hours or equivalent clock hours. (Minimum)
      Program elements which contain instruction directly related to a specific technical area (i.e., skills and knowledge that a person must possess to function as a technician). Course content is determined through a task analysis of the occupation for which training is provided.
   B. Technical Support Course work: 10-14 credit hours or equivalent clock hours.
      Course work which supports and relates to the technical content of the program. Content provides the basic tasks needed for the individual to function at an acceptable level within the technical field.
2. General Education Requirements: 12 credit hours or equivalent clock hours.
   Six credits in the area of Communication Skills; the remaining credits in economics, industrial relations, or human relations.
3. Graduation Requirements
   A. All candidates for the Associate of Applied Science degree must have a minimum of a 'C' grade in the major (technical) course work. A 2.0 grade point average is required in all other required course work.
   B. Students requesting admittance to the Bachelor of Applied Science program must make application through the Dean, College of Technology. The College of Technology requires that all students admitted to the BAS degree program have no grade lower than a 'C' in their major.

Programs Offered
Core Block Courses
Core Block classes are PREREQUISITES for Auto Mechanics (AM), Agricultural Equipment Technology (AE), and Heavy Duty Mechanics-Diesel (DM).

Course Offerings
See page 23 for definition of course numbering system

CB CORE BLOCK
CB 101 INTRODUCTION TO MECHANICS (1-3-1)(F,S). Basic principles of mechanics, including orientation, mechanical careers, certification, personal and shop safety, study skills, basic hand tools, power tools and equipment, using service manuals, fasteners, lines and fittings, taps, dies, heat-coil, measuring and drills, gaskets, seals, and sealants.
CB 105 INTRODUCTION TO ENGINES (1-3-1)(F,S). Theory and principles operation, classifications and identification. The use of shop math and measuring instruments for precision parts measuring.
CB 109 BASIC ELECTRICITY AND ELECTRONICS (1-3-1)(F,S). Principles of electricity and electric circuits. Compare voltage, current and resistance. Principles of magnetism and magnetic fields, battery testing and service, using symbols and wiring diagrams. Perform fundamental electrical tests, and soldering skills.
CB 113 CHASSIS AND EXHAUST SYSTEMS (1-3-1)(F,S). This course covers tire, wheel, hub, shock and wheel bearing fundamentals and service. Exhaust system identification of basic parts and design differences. Perform exhaust system repairs.
CB 117 VEHICLE AND EQUIPMENT MAINTENANCE (1-3-1)(F,S). This course covers lubrication, cooling system, air supply system, and fuel system service procedures and repairs.
CB 121 BASIC WELDING AND METAL WORK (1-3-1)(F,S). This course covers basic oxyacetylene, m.i.g. and t.i.g. welding processes. Oxyacetylene torch cutting techniques, measuring, marking and bending metal properly and welding safety.
CB 125 OCCUPATIONAL RELATIONS (2-0-1)(F,S). This course teaches proper techniques in completing a job application form, job keeping skills, and writing a
Instructor: Charles Parke

Course Offerings

See page 23 for definition of course numbering system

AE AGRICULTURAL EQUIPMENT TECHNOLOGY

AE 150 AIR CONDITIONING SYSTEMS (2-4-2)(F,S). This course covers the basics of air conditioning, refrigerants, and oil, basic system—how it works, service equipment, inspecting and diagnosing the system, testing and adjusting the system, and preparing system for service. PREREQ: Core Block or PERM/INST.

AE 160 HAY AND FORAGE (1-3-1)(F,S). This course covers types, sizes, operation of balers and stack wagons, preliminary setting and adjustments, and troubleshooting of field problems. PREREQ: Core Block or PERM/INST.

AE 165 ELECTRICAL SYSTEMS, TROUBLE SHOOTING (2-4-2)(F,S). This course covers the theory and repair procedures on various types of electrical systems, and troubleshooting of the electrical system. PREREQ: Core Block or PERM/INST.

AE 170 ADVANCED HYDRAULICS (2-4-2)(F,S). This course covers the diagnosis and repair procedures associated with open and closed-center hydraulic systems, and tracing hydraulic flows through circuits. PREREQ: Core Block or PERM/INST.

AE 175 HYDRAULIC ASSIST TRANSMISSIONS AND HYDROSTATIC DrIVES (2-4-2)(F,S). This course covers the theory and repair procedures for overhaul of hydraulic assist transmissions and hydrostatic drive systems. PREREQ: Core Block or PERM/INST.

Auto Body - Eleven Month Program

The Auto Body Program curriculum is designed to provide the student with the necessary skills for employment in the Auto Body Industry. This training provides students with the necessary skills and knowledge for employment in the Auto Trade and closely related crafts. Training includes Auto Body theory, welding (plastics, braze, mild steel, wirefeed), painting (lacquer, acrylic enamel, urethanes, blending, matching), metal working (repair, replace, shrinking), frame alignment and repair, repair of new cars (Unicycle Repair, Unicycle Bench Systems). A Certificate of Completion is issued upon satisfactorily completion of all skills in the eleven month program.

SUBJECTS

Fall  Spring  Summer
Auto Body Lab AB 101-102-103  6  6  7
Auto Body Theory AB 151-152  2  3 -
Auto Body Theory AB 161-162  2  3 -
Auto Body Theory AB 171 - - 
Occupational Relationships AB 180 - 1 -
Auto Body Theory AB 181 - - 
Intro Microcomputers AB 182 - - 1
Auto Body Theory AB 191 - - 
TOTAL 16 14 7

Course Offerings

See page 23 for definition of course numbering system

AB AUTO BODY

AB 101 AUTO BODY LABORATORY (0-25-6)(F). This course is designed to expose the students to the basic Auto Body Skills, orientation of shop and equipment, welding of thin gauge sheet metal, wirefeed, oxy-aceylene, basic metal roughing, and finishing skills, metal grinding, applications of plastic bondo repairs, basic painting, sanding skills, painting techniques (lacquers, enamels, etc.), repair of fender, and mastering of skills. PREREQ: AB 102 or PERM/INST.

AB 102 AUTO BODY LABORATORY (0-25-6)(S). This course is designed to let the students experience skills in advanced collision damage (panel replacement, bumper repair, and unitized collision repair), or experience in advanced painting skills (basecoat, blending, epoxy primers, paint complete, painted and tape stripes), lacquer, enamels and urethane painting. PREREQ: AB 101 or PERM/INST.

AB 103 AUTO BODY LABORATORY (0-30-7)(SU). This summer session is designed for the student to continue practicing on basic skills, and advanced students to further their skills in preparing for the work force (early out, on-the-job training). Lecture/Lab. PREREQ: AB 102 or PERM/INST.

AB 151 AUTO BODY THEORY (2-0-2)(F). This section of the course is designed to cover orientation, tools, safety, shop procedures, industry needs and standards. PREREQ: PERM/INST.

AB 152 AUTO BODY THEORY (2-0-3)(F). This course prepares the student with advanced polishing of paints, paint skills in basecoat/blend/coat, painting techniques (basecoat, blending, epoxy primers, paint complete, painted and tape stripes), lacquer, enamels and urethane painting. PREREQ: AB 151 or PERM/INST.

AB 161 AUTO BODY THEORY (2-0-2)(F). This course covers mild steel, brazing, wirefeed welding on car sheet metals, basic oxy-aceylene, MIG welding, plasma air arc cutting, equipment, tools and safety. PREREQ: PERM/INST.

AB 162 AUTO BODY THEORY (3-0-3)(F). This course is designed to give the student advanced theory skills in minor collision damage, major bench repair techniques, panel replacement, and rubber panel repair. PREREQ: PERM/INST.

AB 171 AUTO BODY THEORY (2-0-2)(F). This course is designed to give basic theory in metal finishing and minor body damage using plastic body fillers, roughing metal and grinding sheet metals, sandpapers, sanding techniques of plastic fillers, and air tools. PREREQ: PERM/INST.

AB 180 OCCUPATIONAL RELATIONS (1-0-1)(S). This course is designed to enable a student to become skilled in dealing effectively with people and for applying, getting, maintaining and advancing in employment.

AB 181 AUTO BODY THEORY (2-0-2)(F). This course covers car and light truck body alignments, glass removal, door, hood and trunk alignments, estimating paint damage, estimating collision damage. PREREQ: PERM/INST.

AB 182 INTRO TO MICROCOMPUTERS (1-0-1)(F). This course introduces the student to microcomputers related to the Mechanical Technology field. Students are introduced to Disk Operating Systems (D.O.S.) and word processing to prepare their resumes and reports.

Course Offerings

AB 191 AUTO BODY THEORY (2-0-2)(F). This section of the course is designed to give basic theory in car polishing, paint surface cleaning, interior and exterior detailing, and shop management. PREREQ: PERM/INST.
Automated Industrial Technician Program

Associate of Applied Science

This double-major option combines the Industrial Mechanics/Automation and Welding/Metal Fabrication curriculums. The required general education course work for the AAS Degree are CM 131 Fundamentals of Speech Communication (3 credits) and 6 credits from EC 205, 206, GB 101, P 101, GE 151, or SO 101.

SUBJECTS

<table>
<thead>
<tr>
<th>SEM 1</th>
<th>SEM 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance Welding Technology IM 101</td>
<td>3</td>
</tr>
<tr>
<td>Maintenance Machine Fundamentals IM 102</td>
<td>3</td>
</tr>
<tr>
<td>Electro-Mechanical Systems IM 114</td>
<td>3</td>
</tr>
<tr>
<td>Electro-Mechanical Systems IM 115</td>
<td>3</td>
</tr>
<tr>
<td>Basic Fluid Power Operations-Hydraulics IM 124</td>
<td>3</td>
</tr>
<tr>
<td>Basic Fluid Power Operations-Pneumatics IM 125</td>
<td>3</td>
</tr>
<tr>
<td>Industrial Mechanical Laboratory IM 134</td>
<td>5</td>
</tr>
<tr>
<td>Industrial Mechanical Laboratory IM 135</td>
<td>5</td>
</tr>
<tr>
<td>Industrial Technology Communications IM 162</td>
<td>2</td>
</tr>
<tr>
<td>Occupational Relationships IM 262</td>
<td>2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>16</td>
</tr>
</tbody>
</table>

See Industrial Mechanics/Automation for detailed course descriptions.

Auto Mechanics—Eleven Month Program

Certificate of Completion

Instructors: Lee Hall, Charles Mikesell

The program is designed to provide students with classroom and laboratory experiences that will prepare them for employment in new-car dealerships or independent garages. The proper use of diagnostic equipment, shop machine tools and shop safety are emphasized.

Students will be offered entry into the Auto Mechanics program five times a school year during the fall, spring and summer semesters, depending on available seating.

*Prerequisite to entering the Automotive program is the Core Block Mechanics Program or the equivalent.

A minimum grade of ‘C’ is required in all course work to graduate with a Certificate of Completion.

SUBJECTS

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welding Laboratory W 106-107</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Welding Laboratory W 108</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Blueprint Read &amp; Layout W 125-126</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Welding Communication W 111</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Welding Theory W 155-156</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Intro Microcomputers W 157</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Occupational Relationships W 262</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

See Welding & Metal Fabrication for detailed course description.

Summer Session

Selected course work from Fall or Spring Offerings with PERM/INST.

Course Offerings

See page 23 for definition of course numbering system

AM AUTO MECHANICS

AM 200 TWO AND FOUR WHEEL ALIGNMENT (2-4-2)(F,SU). This course introduces the student to the theory and practice of two and four wheel alignment, including the function, servicing, diagnosis and troubleshooting of proper removal, adjustment, installation and testing procedures. PREREQ: Core Block or PERM/INST.

AM 205 AUTOMATIC TRANSMISSION/TRANSAXLE (4-8-4)(S,SU). This course teaches the fundamentals of automatic transmissions and transaxle design features including the function, servicing, diagnosis, troubleshooting and proper repair. PREREQ: Core Block or PERM/INST.

AM 210 ENGINE PERFORMANCE (2-12-5)(F,SU). The student will be introduced to the design and repair of conventional and electronic ignition systems, fuel delivery systems, carburetor, fuel injection, computer controlled ignition and fuel systems. The use of scopes and testing equipment will be emphasized. PREREQ: Core Block or PERM/INST.

AM 215 SUSPENSION AND STEERING CONTROLS (2-4-2)(F,SU). Theory and operation of suspension and steering systems, including linkage, rack and pinion and power steering, leaf and coil springs, struts and control arms. PREREQ: Core Block or PERM/INST.

AM 220 AUTOMOTIVE BRAKE SYSTEMS (2-16-3)(F,SU). Theory and practice of Automotive Brake Systems inspection, maintenance and repair will be covered, including shoe and pad replacement, drum and rotor machining and rebuilding of wheel, caliper and master cylinder and power brake units. PREREQ: Core Block or PERM/INST.

AM 225 EMISSION SYSTEMS (1-3-1)(F,SU). This course prepares the student in the principles and laws of various automotive emissions systems to include the function, service and repair of complex emission system components, diagnostic techniques, and compliance with emission standards. PREREQ: Core Block or PERM/INST.

AM 230 ADVANCED ENGINE PERFORMANCE (2-4-2)(F,SU). The student will be taught the use of advanced diagnostic equipment to troubleshoot and repair automobile performance, with emphasis placed on electrically related problems. PREREQ: Core Block or PERM/INST.

AM 240 AUTOMOTIVE ELECTRICAL SYSTEMS (4-12-5)(F,SU). This course covers identification and use of basic automotive electronic test equipment, basic automotive electronic theory, testing, troubleshooting and rebuilding of starter motors, charging systems, and electronic ignition systems. The theory and testing of computer command control systems will also be covered. PREREQ: Core Block or PERM/INST.

AM 245 ENGINE REPAIR (4-9-4)(S,SU). This course introduces students to transmission and differential design, proper disassembly techniques, parts evaluation and proper assembly. PREREQ: Core Block or PERM/INST.

AM 250 MANUAL TRANSMISSION AND DIFFERENTIAL REPAIR (4-9-4)(S,SU). This course introduces students to transmission and differential design, proper disassembly techniques, parts evaluation and proper assembly. PREREQ: Core Block or PERM/INST.

AM 255 AUTOMOTIVE HEATING AND AIR CONDITIONING (2-6-2)(S,SU). This course introduces students to the principles and design of the heating and air conditioning system used in today’s automobiles, and teaches the student troubleshooting and repair techniques. PREREQ: Core Block or PERM/INST.

Business & Office Education—Nine Month or Two Year Program

Certificate of Completion

Instructors: Karen Bounds, Jeanine Brinkerhoff, Doris Butler, Janet Carlton, Barbara Egland, Susan Madarieta, Wanda Metzgar, Theresa TenEyck, Marge Williamson

The Business and Office Education Program is designed to meet the needs of students as they prepare to enter the business world in both private industry and government. Upon enrollment in the program, the student will have an opportunity to pursue a one-year Certificate of Completion in Business and Office Education, or a two-year Associate of Applied Science degree in Business and Office Education in one of the following: Bookkeeping, Legal Secretary, Word Processing.

The one-year (Nine Month) Certificate of Completion is available both on campus and at the Canyon County facility. The AAS degree is available only on the Boise State University campus.

Approved internship in an office and/or competency testing may be substituted for course work with special permission of the program head and division manager. This course work will be monitored and evaluated on a weekly basis by appropriate faculty in consultation with the agency
or business with whom the arrangement is contracted.

The Business and Office Education Program is competency based which specifies the student performance objectives and the necessary competencies required for employment at entry level.

Prior to entering the program, all students with the exception of beginning keyboarding students will take a typing placement test. A minimum grade of 'C' is required in all Business and Office course work to graduate with a Certificate of Completion or Associate of Applied Science degree.

### CORE FRESHMAN CLASSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Math OF 105</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Business English OF 109</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Keyboarding OF 126</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Keyboarding Skill Development OF 128</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Intro to Microcomputers OF 161</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Intro to Information Processing OF 162</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Basic Office Procedures OF 107</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>General Correspondence Typing OF 131</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Forms &amp; Manuscript Typing OF 132</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Proofreading &amp; Spelling OF 119</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Business Writing OF 159</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Machine Transcription OF 158</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Record Keeping OF 155</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Job Seeking Skills/Career Planning OF 153</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>17</td>
<td>17</td>
</tr>
</tbody>
</table>

### Associate of Applied Science Degree

#### Business and Office Education (Bookkeeping)

This area of specialization is designed for the student to obtain a basic knowledge of the business world and to develop the necessary skills to perform competently the duties required of an entry-level bookkeeper.

Upon successful completion of this area of specialization, the learner will not only possess the necessary skills and knowledge to enter the bookkeeping field, but will also have developed basic skills in computerized bookkeeping, word processing, data base management, spreadsheets, proofreading and spelling, and Business English.

### SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bookkeeping I OF 108</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Spreadsheet I OF 201</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Intro Data Base Management OF 202</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Applied Business Communications OF 252</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Legal Environment of Business GB 202</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Production Typing OF 141</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>*Electives</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Bookkeeping II OF 152</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Computerized Bookkeeping I OF 225</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Computerized Bookkeeping II OF 226</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Fundamentals of Supervision OF 256</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Spreadsheet II OF 254</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>**Electives</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>*Technical Support Courses</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>17</td>
<td>18</td>
</tr>
</tbody>
</table>

### Associate of Applied Science Degree

#### Business and Office Education (Legal Secretary)

This area of specialization is designed to train specialists to perform a wide variety of administrative and clerical duties in the legal field.

Upon successful completion of this area of specialization, the learner will not only possess competencies in specialized legal courses such as legal terminology and transcription, and legal office technology, but will have also developed basic skills in proofreading and spelling, English usage, word processing, machine transcription, record keeping, spreadsheets, data base management, and information processing.

Through a business and office internship, these specialists will have a capstone training experience allowing them the opportunity to apply the competencies previously learned to a realistic legal office setting.

### SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied Business Communications OF 252</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Production Typing OF 141</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Legal Office Technology I OF 212</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>17</td>
<td>18</td>
</tr>
</tbody>
</table>

### Approved Technical Support Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine Transcription II OF 169</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Bus &amp; Off Educ Internship OF 293</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Word Processing Production OF 277</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Advanced Word Processing Production OF 278</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Model Office Simulation OF 257</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Records Management Procedures OF 251</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>18</td>
<td>18</td>
</tr>
</tbody>
</table>

### Approved General Education Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fund of Speech Communication CM 111</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Listening CM 131</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Interpersonal Communications CM 221</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Assertiveness Training GE 161</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>General Psychology P 101</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Intro to Business GB 101</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

### Course Offerings

See page 23 for definition of course numbering system

### OF OFFICE OCCUPATIONS

**OF 105 BUSINESS MATH (3-2-3)/(F/S)** Fundamental operations of arithmetic in business usage. Applications of business math as used in accounting, management, consumer education, and retailing are stressed.

**OF 107 BASIC OFFICE PROCEDURES (2-4-2)/(F/S)** This course provides training in filing, telephone techniques, mailing procedures, making appointments, arranging conferences, preparing itineraries, receiving and routing caller, practice in typing the various office forms. PREREQ: Demonstrated proficiency in typing. Eight-week course.

**OF 108 BOOKKEEPING I (3-2-3)/(F/S)** Designed to prepare students for the new environment in the modern office. Teaches the use of the general and specialized journals, general and subsidiary ledgers, how to prepare and analyze financial statements, and an introduction to computerized bookkeeping. PREREQ: OF 105 and OF 155.

**OF 109 BUSINESS ENGLISH (4-1-4)/(F/S)** Emphasis on development of skills in
grammar, sentence structure, word usage, punctuation, and vocabulary. Coverage of capitalization and number usage rules as well as abbreviations.


OF 126 KEYBOARDING (2-4-2)(F/S). Beginning class introducing the alphabetic and numeric keyboard and basic typing skills. Eight-week course.

OF 128 KEYBOARDING SKILL DEVELOPMENT (2-4-2)(F/S). A diagnostic approach to improve speed and accuracy on microcomputers. This course will include an introduction to basic word processing/formating skills. Eight-week course.

OF 131 GENERAL CORRESPONDENCE TYPING (2-4-2)(F/S). Experience in typing a variety of business letter styles with special features, memorandum, and administrative communications using automated office systems. Proofreading skills are stressed. PREREQ: Of 128 and a keyboarding speed of at least 35 wpm. Eight-week course.

OF 132 FORMS AND MANUSCRIPT TYPING (2-4-2)(F/S). Experience in typing a variety of business forms, columnar text, and manuscripts. Proofreading skills are stressed. PREREQ: Of 131 and keyboarding speed of at least 35 wpm. Eight-week course.

OF 141 PRODUCTION TYPING (2-4-2)(F/S). Development of production competence using automated office systems to prepare general office documents. Emphasis on high-quality work and development of ability to make decisions without direct supervision. PREREQ: Of 132 and keyboarding speed of at least 45 wpm. Eight-week course.

OF 142 TECHNICAL TYPING (2-4-2)(F/S). Development of technical competence using automated office systems to prepare technical, medical, legal and governmental documents. Emphasis on high-quality work and development of ability to make decisions without direct supervision. PREREQ: Of 132 and keyboarding speed of at least 45 wpm. Eight-week course.

OF 152 BOOKKEEPING II (3-2-3)(F/S). Designed to provide a practical knowledge of cost analysis for bookkeeping systems and procedures. Primary concepts include job order and process cost allocation, planning, control responsibility for the accounting and reporting process. PREREQ: Of 108.

OF 153 JOB SEEKING SKILLS/CAREER PLANNING (2-4-2)(F/S). Will help students analyze their job needs and skills and prepare them to present those needs and skills to a prospective employer in a professional manner. Emphasizes: self-analysis, researching employers, resume and cover letter, effective interview techniques, and career planning. Eight-week course.

OF 155 RECORD KEEPING (3-2-3)(F/S). Students proceed from very simple clerical tasks to the introduction of elementary double-entry bookkeeping concepts. Develops skills and knowledge that students can use in simple clerical office jobs in which record keeping is involved. PREREQ: Of 105.


OF 159 BUSINESS WRITING (3-2-3)(F/S). Emphasis on building a foundation in effective writing principles by planning, organizing, and writing memos and various types of business letters such as credit, collection, sales, claims adjustments. Psychology, format, content, and style of business letters will be covered. Grade of C or better required to continue. PREREQ: Of 109.

OF 161 INTRO TO MICROCOMPUTERS (2-4-2)(F/S). An introduction to the fundamentals of microcomputers and specialized microcomputer business applications such as spreadsheets and graphics. Eight-week course.

OF 162 INTRO TO INFORMATION PROCESSING (2-4-2)(F/S). An introduction to the fundamentals of word processing and database management business applications. Eight-week course.

OF 169 MACHINE TRANSCRIPTION II (2-4-2)(F/S). Emphasis on typing advanced and technical dictation from recorded media using automated office systems. PREREQ: Of 109, Of 119, Of 156, or PERN/INST, and a typing speed of 35 wpm. Eight-week course.

OF 201 SPREADSHEET I (2-4-2)(F/S). Presents concepts of spreadsheets software; understanding the worksheet elements; the command menu; entering numbers, formulas and labels, specifying ranges; entering simple formulas; editing, and printing. PREREQ: Of 155 and Of 161. An eight-week course.

OF 202 INTRO TO DATA BASE MANAGEMENT (2-4-2)(F/S). Emphasis will be on creating files, data entry, edit data, how to search for data; create, run and print reports. PREREQ: Of 162. Eight-week course.

OF 205 ADVANCED SHORTHAND (4-4-1)(F/S). Emphasis is on continued speed building in taking dictation and transcribing. Course includes review of business vocabulary, punctuation, and grammar. PREREQ: Of 151 or advanced placement through proficiency exam.

OF 212 LEGAL OFFICE TECHNOLOGY I (3-2-3)(F/S). Students will become acquainted with basic office procedures in a legal office. Emphasis on the formatting and transcription of legal correspondence and documents using automated office systems.

OF 213 LEGAL OFFICE TECHNOLOGY II (3-2-3)(F/S). This course is designed to cover advanced legal office procedures and problems. Emphasis on legal terminology and preparation of specialized legal documents. PREREQ: Of 212.

OF 221 LEGAL TERMINOLOGY AND TRANSCRIPTION (3-2-3)(F/S). This course will be a basic introduction to legal vocabulary, the preparation of legal documents, and transcription of dictated legal material. PREREQ: Of 158 and Of 159.

OF 224 LEGAL DOCUMENTATION (3-2-3)(F/S). This course is designed as a capstone training experience applying previously learned skills. Emphasis on records management, use of legal references, and problem solving techniques in a law office. PREREQ: Of 212 and Of 221.

OF 225 COMPUTERIZED BOOKKEEPING I (2-4-2)(F/S). An introduction to the principles utilizing computers to set up and to maintain a set of books that are common in many small business operations. An integrated system of accounting software will be used to demonstrate the entire bookkeeping cycle. PREREQ: Of 108. Eight-week course.

OF 226 COMPUTERIZED BOOKKEEPING II (2-4-2)(F/S). Computerized practical applications using integrated software for the bookkeeping cycle will be implemented. A practice set will be used to cover the bookkeeping cycle as well as a practice set for payroll bookkeeping. PREREQ: Of 225. Eight-week course.

OF 251 RECORDS MANAGEMENT PROCEDURES (2-4-2)(F/S). A study of the principles and procedures of records management, including retention, processing maintenance, transfer. Eight-week course.

OF 252 APPLIED BUSINESS COMMUNICATIONS (3-2-3)(F/S). Course is designed to improve student's ability to communicate effectively through written and verbal media as well as to develop a systematic and creative approach to solving communication problems through studying and applying principles of effective writing. Emphasis on report writing and research. Concentrates on gathering and writing the information. PREREQ: Of 159.

OF 254 SPREADSHEET II (2-4-2)(F/S). Designed to give students the knowledge and skills necessary to create spreadsheets performing advanced functions. Emphasis will be on creating typical business documents such as: budgets, payroll. PREREQ: Of 201. Eight-week course.

OF 256 FUNDAMENTALS OF SUPERVISION (2-4-2)(F/S). Introduction to fundamental principles of first-line supervision, emphasizing the following: role-responsibilities of the supervisor; problem-solving and time management; and assertiveness and conflict management. Eight-week course.

OF 257 MODEL OFFICE SIMULATION (3-2-3)(F/S). Students are "employed" in a classroom simulated office environment. This course will be a capstone training experience allowing students to apply previously learned skills and develop advanced skill in word processing, data base management, and desktop publishing. PREREQ: Of 201, Of 202, Of 277.

OF 277 WORD PROCESSING PRODUCTION (2-4-2)(F/S). This course will focus on word processing production applications with an emphasis on fonts, columns, reports with table of contents and indexes, merge, and outlining. PREREQ: Of 141. Eight-week course.

OF 278 ADVANCED WORD PROCESSING PRODUCTION (2-4-2)(F/S). This course will focus on advanced word processing production applications with an emphasis on macros, styles, line draw, graphics, and sort/select. PREREQ: Of 277. Eight-week course.

OF 293 BUSINESS AND OFFICE INTERNSHIP (0-12-3)(F/S). A practical application of technical knowledge and skills in supervised community business and office settings. Individuals completing arrangements involving student, instructor, and employer to gain practical work experience. Monitored and evaluated weekly by appropriate faculty in consultation with the agency or business with whom the arrangement is contracted. PREREQ: Permission of Program Head and Division Manager.

Business Systems and Computer Repair—Two Year Program

Associate of Applied Science Degree

Instructors: Dan Cadwell, Paul Jansson, Don Jones

The program in Business Systems and Computer Repair has been developed to give the student the basic knowledge to perform as an entry level technician. The student will be qualified to make electronic and mechanical adjustments as they relate to computers, computer peripheral, xerography and other electro-mechanical devices.

FRESHMAN

First Eight Week Block

- Business Systems Mechanical Principles BC 155
- Xerography and Photocopyer Theory BC 156
- Communications Skills BC 111
- Basic Electronic Theory BC 157
- Basic Electronic Lab BC 158
- Customer Relations BC 113
- Electronics Lab BC 103
- Semiconductor Electronics Theory BC 159
- Electronics Lab BC 104
- Digital Electronics Theory BC 171

Second Eight Week Block

- Business Systems Mechanical Principles BC 155
- Xerography and Photocopyer Theory BC 156
- Communications Skills BC 111
- Basic Electronic Theory BC 157
- Basic Electronic Lab BC 158
- Customer Relations BC 113
- Electronics Lab BC 103
- Semiconductor Electronics Theory BC 159
- Electronics Lab BC 104
- Digital Electronics Theory BC 171
**SOPHOMORE YEAR**

Fifth Eight Week Block

**General Education Elective in Communication** ........................................ 3
Intro Computer Technology BC 255 .......................................................... 5
Computer Tech Lab I BC 256 ................................................................. 2

Sixth Eight Week Block

Computer Repair BC 257 ........................................................................ 5
Computer Tech Lab II BC 258 ................................................................. 2

Seventh Eight Week Block

*General Education Elective in Econ or Ind/Hum Relations ..................... 3
Computer Peripheral Repair BC 260 .......................................................... 2
Business Equipment Repair I BC 261 ....................................................... 3
Business Tech Lab III BC 262 ................................................................. 2

Eighth Eight Week Block

Business Equipment Repair III BC 263 ..................................................... 3
Business Equipment Lab IV BC 264 .......................................................... 2
Business Systems Sales Techniques BC 265 .............................................. 1

*Chosen from: CM 111, 221, E 101, 102, 202 or MH 209.

---

**Course Offerings**

See page 23 for definition of course numbering system

**BC BUSINESS SYSTEMS AND COMPUTER REPAIR**

**BC 257 ELECTRONICS LAB (10-16-2)(F/S).** Experiments and troubleshooting exercises in semiconductor electronic circuits and systems.

**BC 258 ELECTRONICS LAB (10-16-2)(F/S).** Experiments and troubleshooting exercises in digital electronic circuits and systems.

**BC 111 COMMUNICATION SKILLS (6-0-3)(F/S).** Develops abilities which enable students to use language effectively as a tool for the Office System Technician; i.e., effective writing and verbal communication for sales, technical repair, job applications and resumes.

**BC 113 CUSTOMER RELATIONS (6-0-3)(F/S).** Directed toward developing skills necessary to effectively deal with customers in the business equipment repair field.

**BC 155 BUSINESS SYSTEM MECHANICAL PRINCIPLES (8-10-5)(F/S).** This is a hands on theory/laboratory course in which the student is taught troubleshooting methods on mechanical systems. The student is introduced to the tools, test equipment and mechanical devices used in conjunction with electronic devices.

**BC 156 XEROGRAPHY AND PHOTOCOPIER THEORY (4-8-3)(F/S).** Prepares students for entry level employment in the photocopier repair field. Students will develop skills through theory and lab classes directed at troubleshooting and preventive maintenance techniques.

**BC 157 BASIC ELECTRONIC THEORY (8-0-4)(F/S).** Students gain experience through theory and hands on experiments which assist students understanding of DC circuits, Ohm’s law, magnetism and properties of electronic components.

**BC 158 BASIC ELECTRONIC LAB I (8-20-2)(F/S).** Students gain experience through hands on experiments which assist students understanding of DC Circuits, OHMS law, magnetism and properties of electronic components.

**BC 159 SEMICONDUCTOR ELECTRONICS THEORY (8-0-4)(F/S).** Study of semiconductor electronic devices and circuits with emphasis on analyzing the relationship of components in circuits and troubleshooting malfunctioning circuits. PREREQ: BC 157.

**BC 171 DIGITAL ELECTRONICS THEORY (12-0-6)(F/S).** Study of digital electronic circuits and microprocessor systems with emphasis on circuit analysis and troubleshooting. PREREQ: BC 159.

**BC 255 INTRODUCTION TO COMPUTER TECHNOLOGY (10-0-5)(F).** Directed toward developing skills toward computer repair. Training in the areas of computer operating systems and software with emphasis on ability to analyze problems in systems and software.

**BC 256 COMPUTER TECHNOLOGY LAB I (0-20-2)(F).** A hands on lab where the principals taught in BC 255 can be studied and analyzed as they apply to a computer.

**BC 257 COMPUTER REPAIR (10-0-5)(F).** Prepares students for entry level employment into the computer repair field. Concepts in logic, circuitry, troubleshooting and component replacement procedures are taught.

**BC 258 COMPUTER TECHNOLOGY LAB II (0-20-2)(F).** A hands on lab where the principals taught in BC 257 can be studied and analyzed as they apply to a computer and the computer peripheral.

**BC 260 COMPUTER PERIPHERAL REPAIR (10-0-2)(S).** This course deals with the maintenance, repair and troubleshooting of computer peripheral. Concepts in the different types of printers, modems, disk drives and etc. with methods of repair and maintenance. This is a four week block.

**BC 261 BUSINESS EQUIPMENT REPAIR I (12-2-3)(S).** This course deals with the maintenance, repair and troubleshooting of electronic word processors. This is a four week block.
The purpose of the Culinary Arts Program is to provide basic training and education for cooks, apprentice chefs, and managers.

The curriculum offers students an opportunity to:
- Learn and effectively practice basic and advanced technical skills in food preparation and service.
- Understand the principles of food identification, nutrition and food, and beverage composition.
- Acquire basic supervisory skills to better utilize human and physical resources in food service operations.
- Gain experience in the proper use and maintenance of professional food service equipment.
- Become familiar with the layout and work flow of professional kitchens and bakeshops. Gain appreciation for the history, evolution and international diversity of the culinary arts.
- Develop a personal sense of professionalism necessary for working successfully in the food service industry.

The core of the Culinary Arts Program at Boise State University is the hands-on teaching of cooking and baking skills as well as the theoretical knowledge that must underlie competency in both fields.

The objective is to not only teach students to work in the kitchen, but how it functions. Related to our mission of professional training are the courses that complete a food service education: table service, wines, bar management, menu, facilities planning, cost controls, supervisory development, storeroom and stewarding.

Upon enrollment in the program, the student will have the opportunity to pursue a one-year Certificate of Completion, or a two-year Associate of Applied Science degree in Culinary Arts.

A minimum grade of 'C' is required in all course work to receive a Certificate of Completion or an Associate of Applied Science degree.

**Course Offerings**

See page 23 for definition of course numbering system

**CA CULINARY ARTS**

**CA 102 CULINARY SKILLS DEVELOPMENT (3-2-3)(F/S).** During this introduction to the fundamental concepts, skills and techniques of basic cookery, special emphasis is given to the study of ingredients, cooking theories and procedures. Basic cooking methods are stressed and practiced including: sauting, broiling, roasting, poaching, simmering, braising, pan frying, deep fat frying, stewing and fricasseeing.

**CA 103 SANITATION, SAFETY & HEALTH (2-0-2)(F/S).** Theory and practice of food and environmental sanitation in a food production area are stressed, with attention
to food-related diseases and their origins. The sanitation course has been reviewed for compliance and approved by the Federal Food and Drug Administration. Students conduct a sanitary inspection of one of the Culinary Arts Programs facilities in their production areas.

CA 104 INTRODUCTORY BAKING (2-1-2)(F/S). This course gives instruction in the fundamentals of baking science, terminology, equipment, technology, ingredients, weights and measures, formula conversion, and storage.

CA 105 COST CONTROL (1-0-1)(F/S). An introduction to the food service cost control method, procedures and math.

CA 109 CULINARY FRENCH (1-0-0)(F/S). Explanations of basic culinary French terminology and menu phrases.

CA 112 INTRODUCTORY HOT FOODS (3-2-3)(F/S). Basic menu items such as soups, sauces, stocks, vegetables, and entrees are prepared. Fundamental concepts and techniques of food preparation are first demonstrated by the instructors and then practiced by the students.

CA 113 PANTRY, BASIC GARDE MANGER (3-2-3)(F/S). A survey course in the fundamentals of pantry, basic garde manger, and breakfast cookery. Students are instructed in the proper techniques and procedures for preparing a variety of lunch and dinner salads and salad dressings, hot and cold sandwiches, garnishes, canapés, marinades, tea and fancy sandwiches, and hot and cold appetizers.

CA 114 COMMUNICATION SKILLS (3-0-3)(F/S). Study of terms, attributes, and the mechanics of language for logical thinking, speaking, and writing. Training includes an introduction to reference using both verbal and symbolic techniques. Industrial applications include organization and delivery of technical reports in written and oral forms, business correspondence, and resume preparation.

CA 115 DINING ROOM PROCEDURES (2-0-2)(F/S). This basic course in dining room and supervision covers equipment, personnel responsibility, organization, customer relations, sanitation, table arrangements and setups. Service techniques for American table service are practiced. Basic guidance service is explained.

CA 116 MEAT IDENTIFICATION AND FABRICATION (1-0-1)(F/S). Instructors demonstrate the cutting of meat and poultry into fabricated units and explains grading, quality and yield.

CA 118 CHARCUTERIE (SAUSAGE MAKING) (1-0-1)(F/S). This course teaches and gives understanding through lecture, demonstration and hands-on in all phases of sausage making. For total utilization of meat by-products, students prepare forcemeats, pates, galantines and ballottines.

CA 119 SUPERVISORY DEVELOPMENT (2-0-2)(F/S). Basic principles of effective supervision, including human relations, motivation, communications, proper training principles, interviewing, staffing and discipline are covered. Stewarding functions and responsibilities of personnel scheduling, cleaning scheduling and purchasing.

CA 122 FISH COOKERY (1-0-1)(F/S). Affords students the opportunity to actually identify, store, rotate, issue and learn the disciplines that must be practiced to keep quality purchased fish, crustaceans and mollusks fresh. Students butcher fish, lobster, crabs, and practice the basic fundamentals of fish cookery. They also prepare stocks, soups and foundation sauces, and learn to highlight a variety of seasoned specialties.

CA 123 COMMUNICATION SKILLS II (3-0-3)(F/S). Study of terms, attributes, and the mechanics of language for logical thinking, speaking, and writing. Training includes an introduction to reference using both verbal and symbolic techniques. Industrial applications include organization and delivery of technical reports in written and oral forms, business correspondence.

CA 124 KITCHEN LABORATORY PREPARATION (0-24-6)(F/S). This laboratory will be used in the preparation of Table Top A La Carte cooking menu as students follow the history and terms relative to classical foods and menus are discussed. Students plan, prepare, and serve a graduation dinner.

CA 125 CLASSICAL CUISINE (1-0-1)(F/S). Advanced and sophisticated classical culinary preparation, following the principles and techniques of Auguste Escoffier. Emphasis is on French cuisine. Students prepare a complete menu with special consideration of cooking techniques, timing and presentation. History and terms relative to classical foods and menus are discussed. Students plan, prepare, and serve a graduation dinner.

CA 204 KITCHEN LABORATORY PREPARATION (8-24-6)(F/S). This laboratory will be used for all Theory classes in fourth semester.

CA 226 ADVANCED CULINARY SKILLS (1-4-2)(F/S). Emphasis is given to fine-tuning basic competencies learned in previous courses. These competencies are used in the preparation of Table Top A La Carte cooking menu as student follow the traditional European brigade system and work all the stations in the kitchen on a weekly rotation. Production of the highest quality product through proper techniques, presentation and service is stressed. PREREQ: CA 102.

CA 227 ADVANCED/CLASSICAL BAKING (1-4-2)(F/S). Techniques are practiced in the production puff pastry desserts, sponge cakes, specialty breads and pastries. Buffet centerpieces are made from pastillage, marzipan, and chocolate. A variety of kitchen desserts are implemented. PREREQ: CA 104.

CA 228 ADVANCED FOOD AND BEVERAGE COST CONTROLS (1-4-2)(F/S). Course work emphasizes an understanding of the complexities of controlling the primary resources of hospitality operations-food, beverage, labor and sales income. Control systems development are reviewed. PREREQ: CA 105.

CA 229 FOOD AND BEVERAGE OPERATIONAL PLANNING (2-0-2)(F/S). Basic principles and concepts of menu planning, menu formats and layout are studied in detail with regard to the eating habits and tastes of social groups. Legal requirements affecting of operations. Pricing and control of menu items, designing a salable menu, and menus as management and merchandising tools are defined. The various types of establishments, such as full service, quick-service, and take-out are discussed.

CA 230 CAKE DECORATING (1-0-1)(F/S). The basic theory in professional cake decoration. Frosting and decorating wedding, anniversary, birthday, bar mitzvah, and other celebration cakes are demonstrated. Decorative borders, flowers, figure piping and tube and wire techniques are demonstrated. Students will become familiar with the extensive array of decorating tools.
Course Offerings

See page 23 for definition of course numbering system

DA DENTAL ASSISTING


DA 102 DENTAL LABORATORY (2-12-5)(S). Provides practical laboratory experience to clinical competency in chairside skills and expanded dental assisting functions.

DA 104 DENTAL RADIOLOGY (3-5-4)(F). Provides dental assisting students the opportunity to become skilled in dental x-ray procedures with a heavy emphasis on safety.

DA 106 DENTAL ASSISTING CLINICAL EXPERIENCE (0-16-4)(S). Supervised chairside assisting experience in private dental offices and clinics.

DA 108 DENTAL OFFICE MANAGEMENT (2-0-2). Covers the fundamentals of business practices related to dentistry.

DA 109 PUBLIC HEALTH AND DENTAL HYGIENE (2-0-2). The class work deals with preventive dentistry and patient education.

DA 111 COMMUNICATION SKILLS (3-0-3)(F). Enables the students to use English and Dental terminology effectively as a tool for logical thinking, problem solving, technical writing and speaking required in the field of dental assisting.

DA 151-152 DENTAL THEORY (6-0-6)(F/S). Lectures cover the basic dental sciences and dental specialties.

DA 180 INTRODUCTION TO COMPUTER APPLICATION TO OCCUPATIONAL RELATIONS (1-0-1)(S). A study of job seeking skills, communications and hands on use of computer technology to complete a personal data portfolio.

DA 181 PROFESSIONAL AND LEGAL CONCEPTS (1-0-1)(S). To enable a student to become skilled in dealing effectively with people and practice the ethics and legal responsibilities of dental practice.

Electrical Lineworker — Nine Month Program

Certificate of Completion
Instructor: Gerald McKie

The Electrical Lineworker Program provides the student with the best and most complete basic preparation possible in overhead and underground construction and maintenance procedures. Centering around a basic program of performance based objectives, instructional materials and field experiences, the program provides the student with the necessary skills and knowledge needed as a firm foundation in this rapidly advancing field.

In the laboratory experience with equipment such as transformers, oil circuit breakers, switches, materials and pole line hardware, hot line tools, test equipment, line truck, trencher/backhoe, and related equipment components, provides the student with "hands-on" experience permitting further and more concentrated advancement in these skilled areas.

The program is designed to produce a highly skilled, well-informed entry level Lineworker who is familiar with use of all tools, materials, and equipment of the trade. The areas of first aid, personal safety, and occupational safety are stressed as integral parts of each area of the craft.

SUBJECTS

<table>
<thead>
<tr>
<th></th>
<th>1st SEM</th>
<th>2nd SEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical Lineworker Lab EL 101-102</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Electrical Lineworker Basics EL 151-152</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Design/Construction EL 161-162</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Occupational Relationships EL 262</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>15</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

Course Offerings

See page 23 for definition of course numbering system

EL ELECTRICAL LINEPERWORKER

EL 101-102 ELECTRICAL LINeworker LABORATORY (0-20-5)(F/S). The field operation provides actual "job type" experience for the student. Course content includes live climbing experiences using ropes and rigging, pole setting and removal with suitable guys and anchors including installation of transformers, construction and maintenance of underground distribution networks, troubleshooting all systems including hot stick care and use, plus preventative maintenance on associate systems or equipment.

EL 151-152 ELECTRICAL LINeworker BASICS (5-0-5)(F/S). This course provides the student with the basics of electrical theory, power generation, materials identification and application, overcurrent and protective devices, related equipment application, and personal occupational safety.

EL 161-162 ELECTRICAL LINeworker SYSTEMS DESIGN/CONSTRUCTION (5-0-5)(F/S). This course emphasizes electrical power systems, power systems design and construction techniques, transformer theory, design of transformers and their construction and transmission networks.

EL 262 OCCUPATIONAL RELATIONS (2-0-2)(S). Course is designed to enable a student to become skilled in dealing effectively with people and for applying, getting, maintaining and advancing in employment. One semester course.

Fire Service Technology

Associate of Applied Science

The Fire Service Technology program is designed to up-grade the fire fighting skills and knowledge of volunteer and paid fire fighters. In some instances a volunteer fire fighter may use this degree as a means to enter the fire service as a paid professional. The program covers all phases of fire fighting. The intent is to provide fire fighters with the skills needed to save lives and protect property in a safe and efficient manner. Special fees apply to this program.

SUBJECTS

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation FR 101</td>
<td>2</td>
</tr>
<tr>
<td>Safety FR 102</td>
<td>1</td>
</tr>
<tr>
<td>First Aid FR 103</td>
<td>2</td>
</tr>
<tr>
<td>Fundamentals of Fire Service FR 104</td>
<td>4</td>
</tr>
<tr>
<td>Water Supply FR 105</td>
<td>2</td>
</tr>
<tr>
<td>Fire Stream, Hydraulics FR 106</td>
<td>2</td>
</tr>
<tr>
<td>Ropes, Knots, and Rescue FR 107</td>
<td>1</td>
</tr>
<tr>
<td>Forcible Entry FR 108</td>
<td>1</td>
</tr>
<tr>
<td>Breathing Apparatus FR 109</td>
<td>3</td>
</tr>
<tr>
<td>Hose Techniques FR 110</td>
<td>2</td>
</tr>
<tr>
<td>Ladders Techniques FR 111</td>
<td>2</td>
</tr>
<tr>
<td>Building Construction FR 112</td>
<td>1</td>
</tr>
<tr>
<td>Ventilation FR 113</td>
<td>1</td>
</tr>
<tr>
<td>Salvage and Overhaul FR 114</td>
<td>1</td>
</tr>
<tr>
<td>Skills Maintenance FR 115</td>
<td>2</td>
</tr>
<tr>
<td>Ground Cover FR 116</td>
<td>1</td>
</tr>
<tr>
<td>Fire Apparatus FR 117</td>
<td>1</td>
</tr>
<tr>
<td>Applied Communication FR 121</td>
<td>3</td>
</tr>
<tr>
<td>Applied Communication FR 122</td>
<td>3</td>
</tr>
<tr>
<td>Human Relations FR 131</td>
<td>3</td>
</tr>
<tr>
<td>Industrial Relations FR 132</td>
<td>3</td>
</tr>
<tr>
<td>Industrial Fire Protection FR 208</td>
<td>3</td>
</tr>
<tr>
<td>Aircraft Fire Protection FR 209</td>
<td>1</td>
</tr>
<tr>
<td>Cooperative Vocational Education (on-the-job training) FR</td>
<td>10</td>
</tr>
<tr>
<td>*Approved Electives</td>
<td>9</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>73</strong></td>
</tr>
</tbody>
</table>

*Students must complete 270 instructional hours of approved course work (in addition to those prescribed in the certification program) which may include any National Fire Academy resident or field programs described in the current Fire Service Training Program Catalog and/or any combination of state or federally sponsored fire classes, courses or schools except those already used for credit toward completion of previous courses in the certification program. Students may use courses that they have attended prior to or any time during enrollment in the certification program. Copies of all course certificates must be on file at the fire department.

Course Offerings

See page 23 for definition of course numbering system

FR FIRE SERVICE TECHNOLOGY

FR 101 ORIENTATION FIRE SERVICE TRAINING (2-0-2). The purpose, objectives, and scope of Idaho's Certification program is covered in this course: organization charts; primary functions of the state and national fire service organizations; local department; public relations programs; and the cleaning, maintenance, costs and degree of protection of the fire fighters protective clothing and other equipment is a part of the instruction received in this course. In addition, issues involving the fire service on a national level are covered. PREREQ: PERM/INST.

FR 102 SAFETY (1-0-1). This course covers important aspects of safety on the fire ground and around the station. It is designed to provide the student with a working...
knowledge of the following: accident control concepts, safety programs, safe use of facilities, personal protective equipment, safety in training, en route hazard, the emergency scene, special hazards, and inspection safety. PREREQ: PERM/INST.

FR 103 FIRST AID (1-4-2). The fire fighter student in this course will receive instruction leading to certification in General First Aid and CPR. Instruction will also be given in the "Heimlich" maneuver, triage, identifying and treating burns, controlling bleeding, applying dressing and bandages, and identifying and treating poisoning. PREREQ: PERM/INST.

FR 104 FUNDAMENTALS OF FIRE SERVICE SCIENCE (3-4-4). This course is designed to provide the student with a basic knowledge of applied mathematics technically related to the field of fire science and fire protection science. The course is divided into the following: principles of fire protection chemistry; characteristics of matter; mechanics of liquids; mechanics of gases; motion and force, work and machinery; combustion and heat; electricity; and atomic energy and radiation. PREREQ: PERM/INST.

FR 105 WATER SUPPLY (1-4-2). In this course, the student will learn to identify properties of water, sources of water supply, parts of a water distribution system, types of hydrants, different types of pressure, and types of water main valves. Instruction will also be given in inspecting a fire hydrant, properly operating and testing fire hydrants, testing and determining water pressures and determining the proper size of hose and nozzles to be used. PREREQ: PERM/INST.

FR 106 FIRE STREAM, HYDRAULICS (1-4-2). This course will cover different types of fire streams, the characteristics of good fire streams and the proper fire streams to be used for different types of fires. It will also provide instruction in the operations of common foam-making devices, and the use of different foams. Identification of nozzles and tips along with nozzle classification will be included in the course. PREREQ: PERM/INST.

FR 107 ROPES, KNOTS, AND RESCUE (0-4-1). This course is designed to instruct the student in the use of ropes in a wide variety of applications, in the use of backboards and stretchers, victim lifts, carries and drags, and in methods for searching for victims in buildings. PREREQ: PERM/INST.

FR 108 FORCIBLE ENTRY (0-4-1). This course provides the necessary knowledge and practical skills applications needed to permit the student to perform the following forcible entry operations: forcing doors, opening locked windows, opening walls and ceilings, opening roofs, and opening floors. PREREQ: PERM/INST.

FR 109 BREATHING APPARATUS (1-3-3). This course is designed to instruct the fire fighter student in the operational functions of self-contained protective breathing apparatus, and the methods of maintaining it and putting it on. Proper methods for charging air cylinders and the limitations and the degree of protection of self-contained breathing equipment is also covered in this course. Many exercises in this course emphasize the practical use of the equipment in a variety of simulated fire ground situations. PREREQ: PERM/INST.

FR 110 HOSE TECHNIQUES (0-8-2). All types, sizes, and uses of hoses are covered in this course including the use of nozzles—their attachment to hoses and the advancing of charged and dry lines. Inspection, maintenance, cleaning, rolling, and carrying of hose are other topics of instruction within the course. PREREQ: PERM/INST.

FR 111 LADDER TECHNIQUES (0-4-1). All types of ladders used in the fire service, their parts and their uses will be covered in this course. Ladder raises, ladder carries, materials used in ladder construction, ladder inspection, care maintenance, and testing are also topics of instruction in this course. PREREQ: PERM/INST.

FR 112 BUILDING CONSTRUCTION (1-4-2). This course is designed to provide the student with a thorough background in building construction principles as they relate to fire fighting. It is divided as general construction, mill construction, concrete and steel construction. Concepts of "fire proof" and fire resistance are also covered. PREREQ: PERM/INST.

FR 113 VENTILATION (0-4-1). This course is designed to instruct the student in the use of hand and power tools as they apply to ventilation and forcible entry, and will instruct the student in breaking and opening windows, forcing windows, breaking walls, proper ventilation methods, and prevention of backdraft and safety precautions to be taken during ventilation. PREREQ: PERM/INST.

FR 114 SALVAGE AND OVERHAUL (0-4-1). This course will demonstrate the construction and use of a water chute and a water catchall, explain different methods of disposing water and removing debris from the scene of a fire, discuss the proper use of tools, cover the principles of wet and dry chemical extinguishing systems. Water flow alarms, alarm testing, and maintenance of extinguishers are also topics of instruction within this course. PREREQ: PERM/INST.

FR 115 SKILLS MAINTENANCE (0-8-2). This course is designed to assist students in maintaining proficiency in practical skills that were learned during course work in the certification levels. A selected number of practical skills are reviewed during this activity. PREREQ: PERM/INST.

FR 116 GROUND COVER (1-0-1). This course is designed to provide the student with knowledge of the following as they relate to ground cover fire fighting, apparatus--water supply, fire behavior and fire behavior, ground cover fire fighting, tools, ground cover fire fighting, and coordination of ground forces. PREREQ: PERM/INST.

FR 117 FIRE APPARATUS (0-4-1). This course is designed to provide the student with knowledge of the following as they relate to fire apparatus practices: types of fire apparatus, the driver and the apparatus, driving exercises, positioning and operating apparatus, operating fire department pumps, operating aerial ladder apparatus, operating elevating platform apparatus, maintenance schedules, and testing apparatus. PREREQ: PERM/INST.

FR 121 APPLIED COMMUNICATIONS (3-0-3). This course is taught in conjunction with the orientation and fire cause determination courses. The student demonstrates the ability to organize ideas, interpret facts, assimilate thoughts and ideas and effectively communicate this knowledge in proper written form by responding in depth to essay questions regarding such topics as: Successful Fire Service Leadership; Focusing on Fire Education and Professional Development in the Fire Service. PREREQ: PERM/INST.

FR 122 TECHNICAL WRITING/COMMUNICATIONS (3-0-3). This course is taught in conjunction with Fire Risk Analysis, fire ground management and hazardous materials. The student learns proper writing techniques for preparing pre-fire plans and reports for a wide variety of structures and occupancies as part of fire risk analysis. PREREQ: PERM/INST.

FR 131 HUMAN RELATIONS/SUPERVISION (3-0-3). In this course the student learns about human relations as they apply to: strike team interactions; Incident Command System Camp organization and unit of operation relationships; management and organization of fireground units, functions and structure; and principles of command. PREREQ: PERM/INST.

FR 132 INDUSTRIAL RELATIONS (3-0-3). In this course the student learns the importance and effective techniques of public relations and education in the field of fire prevention. Discussed in-depth are: fire prevention public relations programs; applications of the principles and techniques of public relations to fire fighting activities; working with the media; public relations in a fire service setting. PREREQ: PERM/INST.

FR 201 FIRE CAUSE DETERMINATION (1-0-1). This course is designed to prepare the student with the knowledge and skills needed in order to correctly determine fire causes, including: the fire department's responsibility, the fire company's role, fire setters, preserving and documenting evidence for the investigator and courtroom testimony. PREREQ: PERM/INST.

FR 202 FIRE GROUND MANAGEMENT (1-0-1). The assuming of command of a fire operation in a fire situation is the main subject of this course, dealing with the specific performances of sizing up, positioning of vehicle equipment and personnel, determining the type of attack, selecting the proper type and size of hose and nozzles to be used, and the supervision of personnel in accomplishing forcible entry, rescue and other fire suppression activities. PREREQ: PERM/INST.

FR 203 PORTABLE FIRE AND INSTALLED DETECTION AND EXTINGUISHING SYSTEMS/AGENTS (1-4-2). This course will cover the principles of wet and dry chemical extinguishing systems, control valves on sprinkler systems, purposes of the three classes of standpipe systems, and the purpose and operation of accelerators and extinguishers on drypipe systems. It will also contain instruction in the operation and extinguishment principle for carbon dioxide, halogenated agent, dry and wet chemical and foam extinguishing systems. Water flow alarms, alarm test valves, infrared flame, detection devices, smoke detectors, and the servicing, recharging, testing, and use of extinguishers and extinguishing devices are also topics of instruction within this course. PREREQ: PERM/INST.

FR 204 HAZARDOUS MATERIALS INCIDENT ANALYSIS (2-0-2). This course is designed to give the fire fighter student information on target hazards, configuration, local disaster plans and the process of locating and notifying agencies on the disaster preparedness directory. The fire department's participation in the following disasters will also be covered: train derailment, building collapse, hazardous chemical/material exposure, major highway accident, aircraft accident, earthquake, flood and riots. PREREQ: PERM/INST.

FR 205 FIRE RISK ANALYSIS (2-0-2). This course is designed to provide the student with the necessary skills to determine, in a systematic risk analysis of a community and examination of a problem solving method of determining, the major fire hazards of the city as a total fire emergency, and provides methods to identify and estimate a community's risk level and level of protection. PREREQ: PERM/INST.

FR 206 FIRE SERVICE AND THE LAW (2-0-2). This course will cover the application of statutory, common and constitutional law of the fire fighter, organization of the local jurisdiction, responsibilities and powers of the fire fighters, the process of statutory, common and constitutional law of the fire fighter, organization of the local jurisdiction, responsibilities and powers of the fire fighters, and managing fire brigade training problems, fire brigade training, fire protection system, and inspection and testing fire protection systems. PREREQ: PERM/INST.

FR 207 HIGH RISE (1-0-1). This course is designed to provide the student with knowledge of the following as they relate to high rise fire fighting: improve problems in high rise buildings; heat, smoke and fire gases; life hazards; exposure problems; water supplies; access problems; logistics problems; coordination problems; salvage efficiency; power outages; and electrical power; smoke proof stairways and special problems. PREREQ: PERM/INST.

FR 208 INDUSTRIAL FIRE PROTECTION (1-0-1). This course is designed to provide the student with knowledge of the following as they relate to industrial fire protection: the need for plant fire protection, emergency planning, cooperation and coordination of plant activities, fire prevention, fire brigades, managing fire brigade training problems, fire brigade training, fire protection system, and inspection and testing fire protection systems. PREREQ: PERM/INST.

FR 209 AIRCRAFT FIRE PROTECTION (1-0-1). This course will cover fire service equipment applicable to aircraft fires, methods of water application, chemical application, detection methods; fire behavior and fire behavior, ground cover fire fighting, and coordination of ground forces. PREREQ: PERM/INST.

FR 210 COOPERATIVE VOCATIONAL EDUCATION (on-the-job training) (0-40-10). A maximum of 10 credits will be awarded for supervised on-the-job training, upon completion of all course work. The on-the-job training consists of the practical application of the principles and practices taught in the prescribed courses. The credits will be granted upon written recommendation of the instructor of record and the local Fire Chief. PREREQ: PERM/INST.
Heavy Duty Mechanics—Diesel—
Eleven Month Program

Certificate of Completion
Instructors: Ted Brownfield, Chuck Tillman

This program is designed to prepare students for entry-level employment in the heavy mechanics field. Instruction will include the basics in design and fundamentals of operation of gasoline and diesel engines, heavy duty trucks, equipment and component parts. Instruction will be on mock-ups and actual working units.

Student will be offered entry into the Heavy Duty Mechanics—Diesel program four times per school year in the fall, and two in the spring semester, depending on available seating.

NOTE: The PREREQUISITE for entering the Heavy Duty Mechanics—Diesel program is the Core Block Mechanics program or the equivalent.

This program is incorporated with the Agricultural Equipment Technology program which allows enhancement of skills. A minimum grade of 'C' is required in all course work to graduate with a Certificate of Completion.

SUBJECTS

Core Block Mechanics CB .......................... 8

First Eight Week Block

Engine Component Systems DM 157 .......................... 5
Engine Brakes DM 169 .......................... 2
Engine Fuel Systems DM 158 .......................... 2

TOTAL 8

Second Eight Week Block

Clutches & Transmissions DM 160 .......................... 2
Power Take-off & Drive Lines DM 161 .......................... 2
Diff, Power Dividers, Final Drive & Planet Sys DM 162 .......................... 2
Hydraulic Assist Trans & Hydrostatic Drives AE 175 .......................... 2

TOTAL 8

Third Eight Week Block

Batt, Swit, Relays & Solen, Start & Chgr Syst DM 164 .......................... 5
Basic Hydraulics DM 165 .......................... 1
Electrical Systems, Trouble Shooting AE 165 .......................... 2

TOTAL 8

Fourth Eight Week Block

Air Conditioning Systems AE 150 .......................... 2
Air Brake Systems DM 166 .......................... 2
Hydraulic Brakes DM 167 .......................... 2
Steering & Suspension Systems DM 168 .......................... 2

TOTAL 8

Summer Session

Selected course work from Fall or Spring offerings with PERM/INST.

Course Offerings

See page 23 for definition of course numbering system

DM Heavy Duty Mechanics—Diesel

DM 157 ENGINE COMPONENT SYSTEMS (4-12-5)(F,SU). Theory and principles of operation. Engine assembly disassembly and repair and assembly procedures. Intake and exhaust systems, lubrication systems, cooling systems, repairing cylinder heads, theory and principles of turbo chargers, and super chargers, timing of various types of engines and injection systems. PREREQ: Core Block or PERM/INST.

DM 158 ENGINE FUEL SYSTEMS (2-4-2)(F,SU). Theory and principles of the major types of diesel fuel injection systems. Injection nozzle testing procedures, gasoline fuel systems, carburetors, fuel filters, fuel lines, and fuel transfer systems. PREREQ: Core Block or PERM/INST.

DM 160 CLUTCHES AND TRANSMISSIONS (2-4-2)(F,SU). Covers complete disassembly and assembly of heavy duty single and double disk clutches and theory and operation of heavy duty manual transmission with complete disassembly and assembly procedures to factory specifications. PREREQ: Core Block or PERM/INST.

DM 161 POWER TAKE-OFF AND DRIVE LINES (2-4-2)(F,SU). Will cover power take-off and drive line disassembly and assembly to factory specifications. PREREQ: Core Block or PERM/INST.

DM 162 DIFFERENTIAL, POWER DIVIDERS, FINAL DRIVE AND PLANETARY SYSTEMS (2-4-2)(F,SU). Includes complete disassembly and assembly of differentials, power dividers, theory of final drive systems, and planetary systems in heavy duty equipment. PREREQ: Core Block or PERM/INST.

DM 164 BATTERIES, SWITCHES, RELAYS AND SOLENOIDS, STARTING & CHARGING SYSTEMS (4-12-5)(F,SU). Introduction to batteries, switches, relays, and solenoids, starter and charging systems used in electrical circuits of heavy duty equipment. PREREQ: Core Block or PERM/INST.

DM 165 BASIC HYDRAULICS (2-1-1)(S,SU). Introduction to basic hydraulic theory and practices of hydraulic systems, lines, fittings, accumulators, oil coolers, circuits, valves, pumps, and motors. PREREQ: Core Block or PERM/INST.

DM 166 AIR BRAKE SYSTEM (2-4-2)(S,SU). Air compressors, air brakes, parking brakes, air cans, spring brake cans, slack adjustors, brake shoes, air tanks and air piping. PREREQ: Core Block or PERM/INST.

DM 167 HYDRAULIC BRAKES (2-4-2)(S,SU). System components and functions of brake systems including brake shoes, drums, wheel bearings, wheel spindles, seals, brake adjustments. PREREQ: Core Block or PERM/INST.

DM 168 STEERING AND SUSPENSION SYSTEMS (2-4-2)(S,SU). Suspension system including torsion bars, springs, air suspensions, wheels, tires, frames. PREREQ: Core Block or PERM/INST.

DM 169 ENGINE BRAKES (1-4-1)(F,SU). Jacobs and Cummins compression brake components and operation, retarders, construction and operation. PREREQ: Core Block or PERM/INST.

Horticulture Service Technician—
Two Year Program

(Landscape Construction and Maintenance)

Associate of Applied Science Degree
Instructors: Gary Moen

The objective of the Horticulture Program is to prepare students for employment in the Landscape, Nursery, Floral, Greenhouse, and Fruit and Vegetable industries. This includes the production, sales and service areas of these major fields. The program stresses the design of landscapes, their interpretation and construction including costs, production of nursery plants, plant propagation, and landscape planting. Graduates of the Horticulture program qualify for positions in Nursery and Floral establishments as well as in Parks, Grounds, Maintenance, and Highway departments. They may also enter the fields associated with plant propagation, nursery sales, greenhouse work and sales in the related fertilizer and insecticide fields.

1st 2nd

FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course Offerings</th>
<th>1st</th>
<th>2nd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horticulture Laboratory HO 101-102</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Communication Skills HO 111-112</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Related Basic Mathematics HO 131-132</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Related Basic Science HO 141-142</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Horticulture Theory HO 151-152</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>TOTAL</td>
<td>19</td>
<td>19</td>
</tr>
</tbody>
</table>

SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course Offerings</th>
<th>1st</th>
<th>2nd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horticulture Laboratory HO 201-202</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Related Science HO 241-242</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Horticulture Theory HO 251-252</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Occupational Relationships HO 262</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Individual Project HO 271</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Elements of Marketing MM 201</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Salesmanship MM 101</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>18</td>
<td>19</td>
</tr>
</tbody>
</table>

Course Offerings

See page 23 for definition of course numbering system

HO HORTICULTURE

HO 101 HORTICULTURE LABORATORY (0-15-4). Applying the related theory and content to the solution of practical problems in horticulture. Specific areas of application include: income production; the use of insecticides; pesticides, etc., and precautions necessary during apply.

HO 102 HORTICULTURE LABORATORY (0-15-4). Applying the related theory and content to the solution of practical problems in horticulture. Specific areas of application include: income production; the use of insecticides; pesticides, etc., and precautions necessary during apply.

HO 111-112 COMMUNICATION SKILLS (3-0-3)(F,S). Objective: to enable students to use language effectively as a tool for logical thinking, problem solving, technical writing and speaking required in their major field of training.

HO 131-132 RELATED BASIC MATHEMATICS (3-0-3). First semester—developing comprehension of the basic principles of mathematics. Specific areas include addition, subtraction, multiplication, division, fractions, denominators, square root, mensuration. Second semester: developing comprehension of the principles of related bookkeeping and accounting. Specific areas to be covered include: income and expense accounts, general journal and ledger, sales and purchases, inventories, payroll, etc.
The Industrial Mechanics/Automation Program is designed to prepare technicians with entry level skills relevant to increasingly complex automated industrial environments. Emphasis is on design, operation, maintenance, diagnosis and troubleshooting of modern systems as found in the workplace today. Preventive maintenance techniques and job safety are stressed.

**SUBJECTS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 101-102</td>
<td>Basic Science</td>
<td>6</td>
</tr>
<tr>
<td>MH 101-102</td>
<td>Machine Fundamentals</td>
<td>6</td>
</tr>
<tr>
<td>EA 101-102</td>
<td>Electro-Mechanical Systems</td>
<td>6</td>
</tr>
<tr>
<td>FH 101-102</td>
<td>Fluid Power Operations-Hydraulics</td>
<td>6</td>
</tr>
<tr>
<td>TM 101-102</td>
<td>Industrial Mechanics Laboratory</td>
<td>6</td>
</tr>
<tr>
<td>CM 111-112</td>
<td>Certificate of Completion</td>
<td>3</td>
</tr>
</tbody>
</table>

**Course Offerings**

See page 23 for definition of course numbering system.

**IM INDUSTRIAL MECHANICS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 101-102</td>
<td>Basic Science</td>
<td>6</td>
</tr>
<tr>
<td>MH 101-102</td>
<td>Machine Fundamentals</td>
<td>6</td>
</tr>
<tr>
<td>EA 101-102</td>
<td>Electro-Mechanical Systems</td>
<td>6</td>
</tr>
<tr>
<td>FH 101-102</td>
<td>Fluid Power Operations-Hydraulics</td>
<td>6</td>
</tr>
<tr>
<td>TM 101-102</td>
<td>Industrial Mechanics Laboratory</td>
<td>6</td>
</tr>
<tr>
<td>CM 111-112</td>
<td>Certificate of Completion</td>
<td>3</td>
</tr>
</tbody>
</table>

The Certificate of Completion that is available for each respective program is retained. The AAS Degree program is an option beyond the Certificate of Completion level.

**Industrial Environmental Technician Program**

**Associate of Applied Science**

This double major option combines the Industrial Mechanics/Automation and Refrigeration, Heating and Air Conditioning curriculums. The required general education course work for the AAS degree are 6 credits in Communications (CM 111, 221) and 4 credits of Psychology (P 101 and P 125). Successful candidates will control the environment in a variety of industrial settings ranging from light manufacturing to business to heavy industrial settings.

Detailed course descriptions for Industrial Mechanics/Automation and Refrigeration, Heating and Air Conditioning can be found in the present Boise State University catalog.

The Certificate of Completion that is available for each respective program is retained. The AAS Degree program is an option beyond the Certificate of Completion level.

**SUBJECTS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 101-102</td>
<td>Basic Science</td>
<td>6</td>
</tr>
<tr>
<td>MH 101-102</td>
<td>Machine Fundamentals</td>
<td>6</td>
</tr>
<tr>
<td>EA 101-102</td>
<td>Electro-Mechanical Systems</td>
<td>6</td>
</tr>
<tr>
<td>FH 101-102</td>
<td>Fluid Power Operations-Hydraulics</td>
<td>6</td>
</tr>
<tr>
<td>TM 101-102</td>
<td>Industrial Mechanics Laboratory</td>
<td>6</td>
</tr>
<tr>
<td>CM 111-112</td>
<td>Certificate of Completion</td>
<td>3</td>
</tr>
</tbody>
</table>

**Industrial Mechanics/Automation—Nine Month Program**

**Certificate of Completion**

Instructor: Bob Allen

The Industrial Mechanics/Automation Program is designed to prepare technicians with entry level skills relevant to increasingly complex automated industrial environments. Emphasis is on design, operation, maintenance, diagnosis and troubleshooting of modern systems as found in the workplace today. Preventive maintenance techniques and job safety are stressed.

**SUBJECTS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 101-102</td>
<td>Basic Science</td>
<td>6</td>
</tr>
<tr>
<td>MH 101-102</td>
<td>Machine Fundamentals</td>
<td>6</td>
</tr>
<tr>
<td>EA 101-102</td>
<td>Electro-Mechanical Systems</td>
<td>6</td>
</tr>
<tr>
<td>FH 101-102</td>
<td>Fluid Power Operations-Hydraulics</td>
<td>6</td>
</tr>
<tr>
<td>TM 101-102</td>
<td>Industrial Mechanics Laboratory</td>
<td>6</td>
</tr>
<tr>
<td>CM 111-112</td>
<td>Certificate of Completion</td>
<td>3</td>
</tr>
</tbody>
</table>

**Course Offerings**

See page 23 for definition of course numbering system.

**IM INDUSTRIAL MECHANICS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 101-102</td>
<td>Basic Science</td>
<td>6</td>
</tr>
<tr>
<td>MH 101-102</td>
<td>Machine Fundamentals</td>
<td>6</td>
</tr>
<tr>
<td>EA 101-102</td>
<td>Electro-Mechanical Systems</td>
<td>6</td>
</tr>
<tr>
<td>FH 101-102</td>
<td>Fluid Power Operations-Hydraulics</td>
<td>6</td>
</tr>
<tr>
<td>TM 101-102</td>
<td>Industrial Mechanics Laboratory</td>
<td>6</td>
</tr>
<tr>
<td>CM 111-112</td>
<td>Certificate of Completion</td>
<td>3</td>
</tr>
</tbody>
</table>

This double major option combines the Industrial Mechanics/Automation and Refrigeration, Heating and Air Conditioning curriculums. The required general education course work for the AAS degree are 6 credits in Communications (CM 111, 221) and 4 credits of Psychology (P 101 and P 125). Successful candidates will control the environment in a variety of industrial settings ranging from light manufacturing to business to heavy industrial settings.

Detailed course descriptions for Industrial Mechanics/Automation and Refrigeration, Heating and Air Conditioning can be found in the present Boise State University catalog.

The Certificate of Completion that is available for each respective program is retained. The AAS Degree program is an option beyond the Certificate of Completion level.

**SUBJECTS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 101-102</td>
<td>Basic Science</td>
<td>6</td>
</tr>
<tr>
<td>MH 101-102</td>
<td>Machine Fundamentals</td>
<td>6</td>
</tr>
<tr>
<td>EA 101-102</td>
<td>Electro-Mechanical Systems</td>
<td>6</td>
</tr>
<tr>
<td>FH 101-102</td>
<td>Fluid Power Operations-Hydraulics</td>
<td>6</td>
</tr>
<tr>
<td>TM 101-102</td>
<td>Industrial Mechanics Laboratory</td>
<td>6</td>
</tr>
<tr>
<td>CM 111-112</td>
<td>Certificate of Completion</td>
<td>3</td>
</tr>
</tbody>
</table>

The Certificate of Completion that is available for each respective program is retained. The AAS Degree program is an option beyond the Certificate of Completion level.

**Industrial Mechanics/Automation—Nine Month Program**

**Certificate of Completion**

Instructor: Bob Allen

The Industrial Mechanics/Automation Program is designed to prepare technicians with entry level skills relevant to increasingly complex automated industrial environments. Emphasis is on design, operation, maintenance, diagnosis and troubleshooting of modern systems as found in the workplace today. Preventive maintenance techniques and job safety are stressed.

**SUBJECTS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 101-102</td>
<td>Basic Science</td>
<td>6</td>
</tr>
<tr>
<td>MH 101-102</td>
<td>Machine Fundamentals</td>
<td>6</td>
</tr>
<tr>
<td>EA 101-102</td>
<td>Electro-Mechanical Systems</td>
<td>6</td>
</tr>
<tr>
<td>FH 101-102</td>
<td>Fluid Power Operations-Hydraulics</td>
<td>6</td>
</tr>
<tr>
<td>TM 101-102</td>
<td>Industrial Mechanics Laboratory</td>
<td>6</td>
</tr>
<tr>
<td>CM 111-112</td>
<td>Certificate of Completion</td>
<td>3</td>
</tr>
</tbody>
</table>

**Course Offerings**

See page 23 for definition of course numbering system.

**IM INDUSTRIAL MECHANICS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 101-102</td>
<td>Basic Science</td>
<td>6</td>
</tr>
<tr>
<td>MH 101-102</td>
<td>Machine Fundamentals</td>
<td>6</td>
</tr>
<tr>
<td>EA 101-102</td>
<td>Electro-Mechanical Systems</td>
<td>6</td>
</tr>
<tr>
<td>FH 101-102</td>
<td>Fluid Power Operations-Hydraulics</td>
<td>6</td>
</tr>
<tr>
<td>TM 101-102</td>
<td>Industrial Mechanics Laboratory</td>
<td>6</td>
</tr>
<tr>
<td>CM 111-112</td>
<td>Certificate of Completion</td>
<td>3</td>
</tr>
</tbody>
</table>

This double major option combines the Industrial Mechanics/Automation and Refrigeration, Heating and Air Conditioning curriculums. The required general education course work for the AAS degree are 6 credits in Communications (CM 111, 221) and 4 credits of Psychology (P 101 and P 125). Successful candidates will control the environment in a variety of industrial settings ranging from light manufacturing to business to heavy industrial settings.

Detailed course descriptions for Industrial Mechanics/Automation and Refrigeration, Heating and Air Conditioning can be found in the present Boise State University catalog.

The Certificate of Completion that is available for each respective program is retained. The AAS Degree program is an option beyond the Certificate ofCompletion level.

**SUBJECTS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 101-102</td>
<td>Basic Science</td>
<td>6</td>
</tr>
<tr>
<td>MH 101-102</td>
<td>Machine Fundamentals</td>
<td>6</td>
</tr>
<tr>
<td>EA 101-102</td>
<td>Electro-Mechanical Systems</td>
<td>6</td>
</tr>
<tr>
<td>FH 101-102</td>
<td>Fluid Power Operations-Hydraulics</td>
<td>6</td>
</tr>
<tr>
<td>TM 101-102</td>
<td>Industrial Mechanics Laboratory</td>
<td>6</td>
</tr>
<tr>
<td>CM 111-112</td>
<td>Certificate of Completion</td>
<td>3</td>
</tr>
</tbody>
</table>

The Certificate of Completion that is available for each respective program is retained. The AAS Degree program is an option beyond the Certificate of Completion level.

**Industrial Mechanics/Automation—Nine Month Program**

**Certificate of Completion**

Instructor: Bob Allen

The Industrial Mechanics/Automation Program is designed to prepare technicians with entry level skills relevant to increasingly complex automated industrial environments. Emphasis is on design, operation, maintenance, diagnosis and troubleshooting of modern systems as found in the workplace today. Preventive maintenance techniques and job safety are stressed.

**SUBJECTS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 101-102</td>
<td>Basic Science</td>
<td>6</td>
</tr>
<tr>
<td>MH 101-102</td>
<td>Machine Fundamentals</td>
<td>6</td>
</tr>
<tr>
<td>EA 101-102</td>
<td>Electro-Mechanical Systems</td>
<td>6</td>
</tr>
<tr>
<td>FH 101-102</td>
<td>Fluid Power Operations-Hydraulics</td>
<td>6</td>
</tr>
<tr>
<td>TM 101-102</td>
<td>Industrial Mechanics Laboratory</td>
<td>6</td>
</tr>
<tr>
<td>CM 111-112</td>
<td>Certificate of Completion</td>
<td>3</td>
</tr>
</tbody>
</table>

**Course Offerings**

See page 23 for definition of course numbering system.

**IM INDUSTRIAL MECHANICS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 101-102</td>
<td>Basic Science</td>
<td>6</td>
</tr>
<tr>
<td>MH 101-102</td>
<td>Machine Fundamentals</td>
<td>6</td>
</tr>
<tr>
<td>EA 101-102</td>
<td>Electro-Mechanical Systems</td>
<td>6</td>
</tr>
<tr>
<td>FH 101-102</td>
<td>Fluid Power Operations-Hydraulics</td>
<td>6</td>
</tr>
<tr>
<td>TM 101-102</td>
<td>Industrial Mechanics Laboratory</td>
<td>6</td>
</tr>
<tr>
<td>CM 111-112</td>
<td>Certificate of Completion</td>
<td>3</td>
</tr>
</tbody>
</table>

This double major option combines the Industrial Mechanics/Automation and Refrigeration, Heating and Air Conditioning curriculums. The required general education course work for the AAS degree are 6 credits in Communications (CM 111, 221) and 4 credits of Psychology (P 101 and P 125). Successful candidates will control the environment in a variety of industrial settings ranging from light manufacturing to business to heavy industrial settings.

Detailed course descriptions for Industrial Mechanics/Automation and Refrigeration, Heating and Air Conditioning can be found in the present Boise State University catalog.

The Certificate of Completion that is available for each respective program is retained. The AAS Degree program is an option beyond the Certificate of Completion level.

**SUBJECTS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH 101-102</td>
<td>Basic Science</td>
<td>6</td>
</tr>
<tr>
<td>MH 101-102</td>
<td>Machine Fundamentals</td>
<td>6</td>
</tr>
<tr>
<td>EA 101-102</td>
<td>Electro-Mechanical Systems</td>
<td>6</td>
</tr>
<tr>
<td>FH 101-102</td>
<td>Fluid Power Operations-Hydraulics</td>
<td>6</td>
</tr>
<tr>
<td>TM 101-102</td>
<td>Industrial Mechanics Laboratory</td>
<td>6</td>
</tr>
<tr>
<td>CM 111-112</td>
<td>Certificate of Completion</td>
<td>3</td>
</tr>
</tbody>
</table>

The Certificate of Completion that is available for each respective program is retained. The AAS Degree program is an option beyond the Certificate of Completion level.
Boise State University offers a specialized Machine Shop program for students desiring to become machine shop operators. Students receive instruction in the set-up and use of all basic machines including engine lathes, milling machines, grinders, surface grinders, computer numerical control machines and bench work connected with them. Students will also learn about the many different materials and processes used by industry. They will receive classroom instruction and practical experience in the use of various precision measurement and test equipment being used by metals manufacturing industries.

Students who choose not to take CM-111 and two approved electives will receive a Diploma in Machine Shop.

**Course Offerings**

**MS MACHINE SHOP**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS 103</td>
<td>MACHINE SHOP LABORATORY (2-18-6)</td>
<td>(F)</td>
</tr>
<tr>
<td>MS 104</td>
<td>MACHINE SHOP LABORATORY (2-18-6)</td>
<td>(F)</td>
</tr>
</tbody>
</table>

**SOPHOMORE YEAR**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS 111</td>
<td>COMMUNICATION SKILLS (3-0-3)</td>
<td>(F)</td>
</tr>
<tr>
<td>MS 112</td>
<td>RELATED BLUEPRINT READING &amp; LAYOUT FOR THE MACHINIST</td>
<td>(1-0-1)</td>
</tr>
<tr>
<td>MS 203</td>
<td>ADVANCED MACHINE SHOP LABORATORY (2-18-6)</td>
<td>(F)</td>
</tr>
</tbody>
</table>

**FRESHMAN YEAR**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS 103</td>
<td>MACHINE SHOP LABORATORY (2-18-6)</td>
<td>(F)</td>
</tr>
<tr>
<td>MS 104</td>
<td>MACHINE SHOP LABORATORY (2-18-6)</td>
<td>(F)</td>
</tr>
<tr>
<td>MS 111</td>
<td>COMMUNICATION SKILLS (3-0-3)</td>
<td>(F)</td>
</tr>
<tr>
<td>MS 112</td>
<td>RELATED BLUEPRINT READING &amp; LAYOUT FOR THE MACHINIST</td>
<td>(1-0-1)</td>
</tr>
<tr>
<td>MS 203</td>
<td>ADVANCED MACHINE SHOP LABORATORY (2-18-6)</td>
<td>(F)</td>
</tr>
</tbody>
</table>

**Mid-Management Two Year Program**

The Mid-Management program is a two-year program leading to the Associate of Applied Science degree. Students develop skills in sales, management, communication, and computer science, as well as other general academic areas. Instruction is given in basic business orientation, selling and management techniques, economics, foundations of management in retail, merchandising, buying, and selling. Supervised internships in cooperation with local businesses is part of the program. Students work for cooperating firms as part-time paid employees during their college training and are able to earn part of their income needed to cover their educational expenses while building a background of valuable experience in the distributive occupations. Many trainee positions as assistant managers, store buyers, department heads, and junior executives are available for students with two years of university training.
NOTE: Students are required to take 6 credits of the Mid-Management Internship. Three additional internship credits may count toward departmental elective requirements.

Course Offerings

See page 23 for definition of course numbering system

MM MID-MANAGEMENT

MM 101 SALESMAINTSHIP (3-0-3)(F/S). A basic course in personal selling techniques as applied in working situations in the modern retail store, wholesaler, and manufacturer establishments, analysis of customer behavior and motivation; methods of creating customer attention, interest, desire and action. Special emphasis is given to ethical sales techniques.

MM 104 LEADERSHIP AND DEVELOPMENT (2-0-2)(F/S). This course will further the professional development of students in business. Students will be evaluated on leadership skill development, parliamentary procedure, interpersonal communication, business related skill enhancement through state and national leadership conferences, and business-oriented community and campus projects. This course may be repeated only for credit.

MM 201 ELEMENTS OF MARKETING (3-0-3)(F). The study of activities by which goods and services flow from producer to ultimate consumer. Includes methods, policies, and evaluation of the various marketing institutions according to the function performed.

MM 203 PRINCIPLES OF PROMOTION (3-0-3)(F/S). Objectives and policies of sales promotion, study of the media, and regulation of advertising. Coordination of display, selling and other merchandising factors. Study of copy, illustrations, layout and display.

MM 204 RETAIL MERCHANDISING (3-0-3)(F). Merchandise planning and control, expenses and cost reduction, purchasing for resale, pricing of goods, retail control systems. Mid-management majors only.

MM 209 REPORT WRITING (3-0-3)(F/S). Prepares the student to write reports and other types of business communication. Emphasis is on the planning, organization, analysis, and writing of reports and related business communication. Research methods and the use of verbal and visual materials will also be included. Mid-Management majors only.

MM 212 DISPLAY AND PROMOTION (3-0-3)(F/S). This course will cover practical applications of the various forms of promotion used by business today. Students will be required to organize and construct promotional plans applying strategies and theories learned in MM 203. PREREQ: MM 203.

MM 250 INTRODUCTION TO MICROCOMPUTER APPLICATIONS IN RETAILING (3-0-3)(S). Applications in the retail field including basic operation, spreadsheets, and database applications.

MM 257 ELEMENTS OF MANAGEMENT (3-0-3)(F/S). Principles of management related to the functions of planning, organizing, staffing, directing, and controlling. Focus on practical applications of job design and analysis, employee training and development, motivation, leadership, art of negotiation, improving team performance, and productivity, and creative problem solving as they relate to retail, service, and wholesale fields. PREREQ: OF 256. Mid-Management majors only.

MM 293 MID-MANAGEMENT INTERNSHIP (1-8-3)(F/S). For students enrolled in the mid-management program. Student are required to take 6 credits of internship but may earn a maximum of 9 credits (3 credits elective). This provides actual experience in retail, wholesale, or service fields as a paid employee. Student is evaluated by both the employer and the program coordinator. Students will also learn the basic attitudes, knowledges, and job seeking techniques needed to get and keep a job and adjust to situations encountered on the job.

Course Offerings

See page 23 for definition of course numbering system

PN PRACTICAL NURSING

PN 101 PROFESSIONAL CONCEPTS (1-0-1)(F/S). Topics of study for Practical Nursing Professional Concepts will include role of the Practical Nurse, legal and ethical aspects, and historical development of the field.

PN 102 ANATOMY AND PHYSIOLOGY FOR PRACTICAL NURSING (4-0-4). A study of the normal structure and function of the body cells, tissues, organs and systems, including the interrelationship of body systems.

PN 104 MEDICAL-SURGICAL NURSING CLINICAL (0-28-7). Clinical experience for PN 103.

PN 105 NUTRITION AND DIET THERAPY (2-0-2). An introduction to nutrition and identification of body nutritional needs in health and illness, including the study of diet therapy.

PN 106 EMERGENCY NURSING CONCEPTS (2-0-2). A study of assessment and immediate and temporary treatment of persons involved in accidents or other emergency situations.

PN 107 PHARMACOLOGY FOR PRACTICAL NURSING (3-0-3). A study of drug classification, modes of administration and principles of mathematics essential to drug administration.

PN 108 PHARMACOLOGY CLINICAL (0-4-1). Clinical experience for PN 107.

PN 109 GERIATRIC NURSING (1-0-1). A study of the health needs and problems particular to the elderly patient.

PN 110 GERIATRIC CLINICAL (0-4-1). Clinical experience for PN 109. PREREQ: PN 109.

PN 112 MATERNAL AND INFANT CLINICAL (0-4-1). Clinical experience for PN 124. PREREQ: PN 124.

PN 113 PEDIATRIC CLINICAL (0-8-2). Clinical experience for PN 125. PREREQ: PN 125.

PN 114 FUNDAMENTALS OF NURSING (3-4-5). The student will develop skills in activities and procedures basic to patient care and includes medical terminology.

Failure to meet requirements in either theory or clinical areas may result in termination from the program.

Admission Requirements: High school graduate or pass the General Educational Development Test. Satisfactory scores on the pre-entrance test, which is given by Boise State University. A complete medical examination is required. The applicant will be interviewed by a committee. Thirty-five students will be selected for the Boise program, which begins in January; twenty students will be selected for the Nampa/Caldwell program which begins in September.

The courses will be offered at various times during the eleven months depending upon the admission date and the availability of clinical experiences. This curriculum meets the requirements for hours and content for the Idaho State Board of Nursing.

A student must complete the following requirements to graduate from the program.

Professional Concepts PN 101 .............................................. 1
Anatomy and Physiology for Practical Nursing PN 102 .................. 7
Medical-Surgical Nursing Clinical PN 104 ................................. 4
Nutrition and Diet Therapy PN 105 ......................................... 2
Emergency Nursing Concepts PN 106 ...................................... 2
Pharmacology for Practical Nursing PN 107 ............................... 3
Pharmacology Clinical PN 108 ................................................ 1
Geriatric Nursing PN 110 ..................................................... 1
Geriatric Clinical PN 110 ..................................................... 1
Maternal and Infant Clinical PN 112 ........................................ 1
Pediatric Clinical PN 113 ..................................................... 2
Fundamentals of Nursing PN 114 ............................................. 5
Clinical Foundations PN 115 .................................................. 3
Community Health and Microbiology PN 120 ......................... 120
Medical-Surgical Nursing I PN 121 ........................................... 8
Medical-Surgical Nursing II PN 122 ......................................... 7
Growth and Development PN 123 .......................................... 1
Maternal and Infant Health PN 124 ....................................... 124
Pediatric Nursing PN 125 ..................................................... 2
Mental Health and Mental Illness PN 126 ................................. 1
Intro Comp Appl Occup Relat PN 180 ...................................... 1
TOTAL ................................. 58

Course Offerings

See page 23 for definition of course numbering system

PN PRACTICAL NURSING

PN 101 PROFESSIONAL CONCEPTS (1-0-1)(F/S). Topics of study for Practical Nursing Professional Concepts will include role of the Practical Nurse, legal and ethical aspects, and historical development of the field.

PN 102 ANATOMY AND PHYSIOLOGY FOR PRACTICAL NURSING (4-0-4). A study of the normal structure and function of the body cells, tissues, organs and systems, including the interrelationship of body systems.

PN 104 MEDICAL-SURGICAL NURSING CLINICAL (0-28-7). Clinical experience for PN 103.

PN 105 NUTRITION AND DIET THERAPY (2-0-2). An introduction to nutrition and identification of body nutritional needs in health and illness, including the study of diet therapy.

PN 106 EMERGENCY NURSING CONCEPTS (2-0-2). A study of assessment and immediate and temporary treatment of persons involved in accidents or other emergency situations.

PN 107 PHARMACOLOGY FOR PRACTICAL NURSING (3-0-3). A study of drug classification, modes of administration and principles of mathematics essential to drug administration.

PN 108 PHARMACOLOGY CLINICAL (0-4-1). Clinical experience for PN 107.

PN 109 GERIATRIC NURSING (1-0-1). A study of the health needs and problems particular to the elderly patient.

PN 110 GERIATRIC CLINICAL (0-4-1). Clinical experience for PN 109. PREREQ: PN 109.

PN 112 MATERNAL AND INFANT CLINICAL (0-4-1). Clinical experience for PN 124. PREREQ: PN 124.

PN 113 PEDIATRIC CLINICAL (0-8-2). Clinical experience for PN 125. PREREQ: PN 125.

PN 114 FUNDAMENTALS OF NURSING (3-4-5). The student will develop skills in activities and procedures basic to patient care and includes medical terminology.
School of Applied Technology

PN 115 CLINICAL FOUNDATIONS (0-12-3). Clinical experience for PN 114. PREREQ: PN 114.

PN 118 PRACTICAL NURSING SPECIAL THEORY (V-V-1 to 10). Designed to provide the opportunity for study of a specific unit of theory. The topic offered will be selected on the basis of an evaluation of needs of the individual. PREREQ: PERM/DEPT.

PN 119 PRACTICAL NURSING SPECIAL CLINICAL (V-V-1 to 10). Designed to provide the opportunity for specific clinical experience. The clinical offered will be selected on the basis of an evaluation of needs of the individual. PREREQ: PERM/DEPT.

PN 120 COMMUNITY HEALTH AND MICROBIOLOGY (1-0-1). A study of the health needs of the individual, the family, the community and microbiology.

PN 121 MEDICAL AND SURGICAL NURSING I (8-0-8). A study of diseases and disorders of the body systems including planning, implementation and evaluation of nursing care.

PN 122 MEDICAL AND SURGICAL NURSING II (7-0-7). Continuation of the study of body systems and nursing care. PREREQ: PN 121.

PN 123 GROWTH AND DEVELOPMENT (1-0-1). A study of normal growth and development.

PN 124 MATERNAL AND INFANT HEALTH (2-0-2). A study of the obstetric patient and the neonate both in health and illness.

PN 125 PEDIATRIC NURSING (2-0-2). A study of health, diseases and disorders of children.

PN 126 MENTAL HEALTH AND MENTAL ILLNESS (2-0-2). A study designed to enable the student to become skilled in dealing with people including mental health and the signs and symptoms of mental illness.

PN 180 INTRO COMPUTER APPLICATION TO OCCUPATIONAL RELATIONS (1-0-1)/(F/S). A study of job seeking skills, written communication and hands on use of computer technology to complete personal data packet.

Professional Truck Driving Program—Ten Week Program

Certificate of Completion
Instructor: Bob Castelberry

The Professional Truck Driving Program curriculum is designed to provide the students with the necessary skills and background for employment as an over-the-road entry level driver. This program is 10 weeks in length, 40 hours per week. Initially controlled driving will take place in non-trafic areas and advance to open road, progressing from an empty to a loaded truck and trailer. The student will learn skills and procedures for handling freight, loading and unloading, dock loading, trailer combinations and their uses. Ample time will be given to familiarize the student with the problems of negotiating large rigs in traffic and over the highway. DOT and Interstate rules and requirements including the new Federal Commercial Driver’s License law will be covered. Log keeping and accident procedures are stressed throughout the course. A Certificate of Completion is issued upon satisfactory completion of the program. All students must meet the Department of Transportation’s physical standards and have a Department of Motor Vehicles driver’s record check.

SUBJECTS
Basic Operation TD 100 ............ 3
Sale Operating Procedures TD 105 ............ 3
Advanced Operating Practice TD 110 ............ 2
Vehicle Maintenance TD 115 ............ 4
Transportation Systems Management TD 120 ............ 3
TOTAL ............ 15

Course Offerings

See page 23 for definition of course numbering system

TD 100 BASIC OPERATION (3-0-3). This course includes orientation to the program. Introduces students to control systems, vehicle inspection, basic vehicle operation, shifting, backing, coupling and uncoupling, proficiency development, and introduction to required permits, log books and regulations.

TD 105 SAFE OPERATING PROCEDURES (2-4-3). This course includes classroom and lab instruction on principles of visual search, communications, speed management, space management, night operation, extreme driving conditions and proficiency development covering safe operating procedures.

TD 110 ADVANCED OPERATING PRACTICE (1-4-2). This course includes lab and classroom instruction on hazard perception, emergency maneuvers, skid control and recovery.

TD 115 VEHICLE MAINTENANCE (3-4-4). This course includes classroom and lab instruction on the function and operation of all key vehicle systems, preventive maintenance and vehicle servicing including checking engine fluids, changing fuses, checking tire inflation, changing tires, draining air tanks, adjusting brakes, and performing emergency repairs. Diagnosing and reporting of vehicle malfunctions will also be covered.

TD 120 TRANSPORTATION SYSTEMS MANAGEMENT (2-4-3). This course includes the lab and basic principles of handling freight, weight distribution, securing cargo, cargo documentation, service requirements including permissible hours of duty, log keeping, accident procedures, personal health and safety, trip planning, public and employee relations.

Refrigeration, Heating and Air Conditioning—Nine Month Program

Certificate of Completion
Instructor: Alan Messick

The Refrigeration, Heating and Air Conditioning Program offers laboratory experience, theory classes and related subjects, designed to prepare students for entry level employment.

Emphasis will be on the servicing of commercial and residential equipment and will cover all phases of skills and knowledge necessary to repair the equipment with a strong emphasis on safety.

SUBJECTS

<table>
<thead>
<tr>
<th>SUBJECTS</th>
<th>1st SEM</th>
<th>2nd SEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Conditioning Lab RH 121-122</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Air Conditioning Theory RH 141-142</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Occupational Relationships RH 262</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>TOTAL</td>
<td>17</td>
<td>15</td>
</tr>
</tbody>
</table>

Course Offerings

See page 23 for definition of course numbering system

RH 121-122 AIR CONDITIONING, REFRIGERATION AND HEATING LABORATORY (0-20-5)/(F/S). These courses provide the laboratory application of principles covered in the theory class. Skills will be developed and practice will be provided which will be needed by the service person. Different phases of air conditioning, refrigeration and heating will be covered.

RH 141-142 AIR CONDITIONING, REFRIGERATION AND HEATING THEORY (10-0-10)/(F/S). This sequence of courses provides a basic understanding of the equipment and tools used on commercial and residential refrigeration, heating and air conditioning equipment including heat pumps. Emphasis is on causes of break downs and the making of necessary repairs. Test equipment is used in the inspection of components such as relays, thermostats, motors, refrigerant lines, compressors, evaporators, condensers, oil and gas heating equipment, metering devices and electrical circuitry.

RH 262 OCCUPATIONAL RELATIONS (2-0-2)/(F). Course is designed to enable a student to become skilled in dealing effectively with people and for applying, securing, maintaining and advancing in employment. It also helps students deal with stress and become more efficient in time management.

Residential Carpenter
Nine Month Program

Certificate of Completion
Instructor: Bill Hood

This program is designed to cover all the major emphases of carpentry. The graduate of this course will have the skills to perform entry level jobs and operations in the house construction industry. The instruction consists of both classroom instruction and on the job training.

SUBJECTS

<table>
<thead>
<tr>
<th>SUBJECTS</th>
<th>1st SEM</th>
<th>2nd SEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Blueprint Reading &amp; Math RC 102</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Estimating &amp; Scheduling RC 103</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Site Layout &amp; Excavation RC 104</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Concrete RC 105</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Framing RC 106</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Window &amp; Door Installation RC 107</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Insulation RC 108</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Drywall &amp; Joinery RC 109</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Cabinet Building &amp; Finishing RC 110</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Cooperative Voc Ed RC 111</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>15</td>
</tr>
</tbody>
</table>
Course Offerings

See page 23 for definition of course numbering system

RC RESIDENTIAL CARPENTER

RC 101 SAFETY (1-0-1)(F). A review of federal, state and local safety codes as they pertain to the building trades. Also included is an introduction to on-the-job practices.

RC 102 BLUEPRINT READING AND MATH (1-0-1)(F). An introduction to blueprint reading and trade math providing students the ability to function in a lab situation. Also covered is volume of cylinders, and relevant mathematical principles and their use in various formulas. Additional measuring techniques will be introduced.

RC 103 ESTIMATING AND SCHEDULING (1-0-1)(F). An introductory course into the science of estimating quantities and costs. Included is a segment on scheduling for a project which will make the estimating portion relate to the scheduling portion.

RC 104 SITE LAYOUT AND EXCAVATION (1-3-2)(F). Provides the knowledge required to prepare a job site for excavation. Equipment such as the transit, dumpy, plumb bob and batter boards will be used. Various soils, compactability, excavation procedures, being able to excavate to grade, along with compaction equipment and the ability to compute compaction to percentage of density will be stressed.

RC 105 CONCRETE (1-3-2)(F). Covers the basic skills needed in all phases of concrete work, concrete batch and batching methods as well as reinforcing steel methodology. Concrete placing, finishing and protection will also be discussed.

RC 106 FRAMING (1-3-2)(F). Framing will be studied in the classroom and then performed on-the-job. Instruction will be given in floor, wall, and roof framing as well as special detail framing such as stair construction and rafter layout. Fastening systems, layout methods, methods of erection, and material selection will be covered.

RC 107 WINDOW AND DOOR INSTALLATION (1-3-2)(S). Covers all phases of preparation and installation of doors and windows. An overview of various types of windows and doors will be covered such as energy efficient and passive solar. Fire ratings will be discussed as well as commercial application of windows and doors.

RC 108 INSULATION (1-2-2)(S). Covers the proper selection and installation of insulating materials. The insulating value of "R" will be the key element of this course. Special insulation applications will be introduced such as insulation of heating ducts and rigid foam insulation. The economics of insulation will also be stressed.

RC 109 DRYWALL AND JOINERY (1-3-2)(S). Covers the installation of sheetrock to code, taping of drywall joints, texturing of drywall and preparation for paint. Also covered are the methods of trimming a house out with wood to include wood selection and identification as well as various finishes.

RC 110 CABINET BUILDING AND FINISHING (1-3-2)(S). Cabinet construction, layout, design and hardware will be covered along with installation and the application of plastic laminates and tile. Appliance installation and planning will be an integral part of this course. Also included is the selection of various paints, both latex and oil base, varnish lacquer, stains, as well as sanding. Safety and ventilation will be important elements.

RC 111 COOPERATIVE VOCATIONAL EDUCATION (on-the-job training)(0-20-3)(F). A maximum of 10 credits will be awarded for supervised on-the-job training which will run throughout the course every afternoon. The on-the-job training consists of the practical application of the principles and practices taught in the prescribed courses.

Respiratory Therapy Technician

Certificate of Completion
Instructors: David Nuereenberg, Dr. Charles Reed, Vera McCrink

The Respiratory Therapy Technician program is designed to provide students with the necessary theory and skills to become employed as a Respiratory Therapy Technician upon graduation and be eligible to write the Certified Respiratory Therapy Technician National Examination. The program includes the study of anatomy, physiology, microbiology, pharmacology, pathology and specialized subjects related to respiratory therapy.

Clinical experience consists of supervised, acute and long term care experience in treatment of respiratory disease. The various acute and long term care facilities provide a vastly diversified experience in cardiorespiratory care.

The program is fully accredited by the Council on Allied Health Education and Accreditation of the American Medical Association.

A Certificate of Completion is awarded upon completion of the program.

FALL SEMESTER

Anatomy & Physiology RS 111 .......................... 6
Basic Science RS 112 ..................................... 2
Clinical Assessment RS 113 ............................ 2
Gas Therapy Theory RS 114 ............................ 2
Gas Therapy Lab RS 115 ................................ 1

Intro to Respiratory Therapy RS 116 ..................... 1
Communications RS 117 .................................. 1
Intermittent Positive Pressure Breathing RS 118 .... 1
Microbiology RS 119 ..................................... 1
Pharmacology RS 120 .................................... 3
Clinical Practicum I RS 121 ............................ 2

TOTAL ................................................. 22

SPRING SEMESTER

Cardiopulmonary Pathophysiology RS 151 ............ 5
Cardiopulmonary Resuscitation RS 152 ............... 2
Electrocardiography RS 153 ............................. 1
Mechanical Ventilation Theory RS 154 ................ 1
Mechanical Ventilation Lab RS 155 ..................... 1
Pulmonary Function Theory RS 156 .................... 2
Pulmonary Function Lab RS 157 ........................ 2
Clinical Practicum II RS 158 .......................... 4

TOTAL .............................................. 18

SUMMER SEMESTER

Clinical Lecture Series RS 175 ........................ 3
Respiratory Care Review RS 176 ........................ 5
Clinical Practicum III RS 179 ........................... 8

TOTAL .............................................. 16

Course Offerings

See page 23 for definition of course numbering system

RS RESPIRATORY THERAPY TECHNICIAN

RS 111 ANATOMY AND PHYSIOLOGY (6-0-6)(F). A study of the body systems, functions and their interrelationships with a focus on the cardiopulmonary systems. PREREQ: PERM/INST.

RS 112 BASIC SCIENCE (2-0-2)(F). A general science study including a review of basic mathematics, chemistry, and physics with emphasis on gas laws. PREREQ: PERM/INST.

RS 113 CLINICAL ASSESSMENT (2-0-2)(F). The practice of respiratory assessment including breath sounds, inspection, auscultation, palpation, percussion, chest physiotherapy care. PREREQ: PERM/INST.

RS 114 GAS THERAPY THEORY (2-0-2)(F). The detailed study of gases, aerosols, and humidity and their application to respiratory care. PREREQ: PERM/INST.

RS 115 GAS THERAPY LAB (0-4-1)(F). Practical application of all gas therapy apparatus. Students will assemble, disassemble, and apply gas delivery equipment. PREREQ: PERM/INST.

RS 116 INTRODUCTION TO RESPIRATORY THERAPY (1-0-1)(F). The introduction to clinical practice, basic patient care and charting. PREREQ: PERM/INST.

RS 117 COMMUNICATIONS (1-0-1)(F). Includes the study of terminology, legal aspects, ethics, and job-seeking skills. PREREQ: PERM/INST.

RS 118 INTERTMITTENT POSITIVE PRESSURE BREATHING (1-0-1)(F). A study and application of intermittent positive breathing therapy and including basic, indications, contraindications, advantages, and hazards. PREREQ: PERM/INST.

RS 119 MICROBIOLOGY (1-0-1)(F). A study of the classification, morphology, identification, and physiology of microorganisms with special emphasis on handling, cleaning, culturing, and sterilization of contaminated equipment. PREREQ: PERM/INST.

RS 120 PHARMACOLOGY (3-0-3)(F). An introduction to commonly used drugs in respiratory care including principles and routes of drug administration, actions, indications, contraindications, and physiologic responses. PREREQ: PERM/INST.

RS 121 CLINICAL PRACTICUM (0-0-2)(F). The student will obtain experience under the direct supervision of clinical instructors in community medical facilities. PREREQ: PERM/INST.

RS 151 CARDIOPULMONARY PATHOPHYSIOLOGY (4-0-4)(S). A study of the cardiopulmonary systems and their effects on other body systems, normal physiology, and pathologic entities including the role of respiratory care in certain disease states. PREREQ: PERM/INST.

RS 152 CARDIOPULMONARY RESUSCITATION (1-4-2)(S). A study of the biologically dead patient, the physiology of cell, tissue, organ and system death. C.P.R. techniques, airway management, and intubation will be practiced. Students will meet American Heart Association CPR certification. PREREQ: PERM/INST.

RS 153 ELECTROCARDIOGRAPHY (1-0-1)(S). A study of the normal and abnormal cardiac tracings, and basic EKG interpretations, and the practice of EKG techniques. PREREQ: PERM/INST.

RS 154 MECHANICAL VENTILATION THEORY (1-0-1)(S). A comprehensive study of ventilators, including the mechanical and physiological aspects of long-term ventilatory support, and care of the patient on life support systems. PREREQ: PERM/INST.

RS 155 MECHANICAL VENTILATION LAB (0-4-1)(S). Lab practice with models of ventilators including special techniques and augmented by clinical experience.
The Surgical Technology Program, in cooperation with two local hospitals, is 9 months in length and consists of competency-based classroom, laboratory and clinical instruction. The program is accredited by the American Medical Association, Committee on Allied Health and Education Accreditation. A Certificate of Completion is awarded upon graduation from the program. Students are then eligible to take the National Certification Exam for Surgical Technologists.

Surgical Technology—Nine Month Program
Certificate of Completion
Instructor: Sharon Gollick

The Surgical Technology Program, in cooperation with two local hospitals, is 9 months in length and consists of competency-based classroom, laboratory and clinical instruction. The program is accredited by the American Medical Association, Committee on Allied Health and Education Accreditation. A Certificate of Completion is awarded upon graduation from the program. Students are then eligible to take the National Certification Exam for Surgical Technologists.

Classroom and laboratory work includes instruction and practice in operating room techniques, infection: process, prevention and control, care of surgical patient and human anatomy and physiology.

Clinical experience is supervised hands-on hospital experience in scrubbing for a variety of surgical procedures. Failure to meet both the theory and clinical areas may result in termination from the program.

<table>
<thead>
<tr>
<th>Classes begin Fall Semester only.</th>
<th>1st SEM</th>
<th>2nd SEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction &amp; Basic Sciences ST 100</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Operating Room Techniques ST 101</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Sterilization &amp; Disinfection ST 102</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preparation of Surgical Patient ST 110</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Surgical Procedures ST 111</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Peri Operative Care Surgical Patient ST 116</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Surgery Clinical Practice ST 132</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anatomy &amp; Physiology for Surgical Technology ST</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Intro Comp Appl Occup Rel ST 262</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>18</td>
<td>18</td>
</tr>
</tbody>
</table>

Course Offerings
See page 23 for definition of course numbering system

ST SURGICAL TECHNOLOGY

ST 100 INTRODUCTION AND BASIC SCIENCES (3-0-3)(F). The study of: (1) The Health Care Team and its Language; (2) The Evolution of Asepsis; (3) Ethical Moral and Legal responsibilities; (4) The Operating Room Suite; (5) Principles of Asepsis; (6) Introduction to Pharmacology; (7) Introduction to Oncology; (8) Disease Conditions; (9) Diagnostic Procedures; (10) Communication in Surgical Technology, including introduction to computers.

ST 101 OPERATING ROOM TECHNIQUES (3-3-4)(F). The study of: (1) Safety and Economics in the Operating Room; (2) Duties of the Scrub and Circulating Technician; (3) The Surgical Assistant—Scrub, Gowning and Gowning; (4) Draping Techniques; (5) Suturing and Needles; (6) Sponges, Dressings, Drains, Care of Specimens; (7) Instruments and Special Equipment.

ST 102 STERILIZATION AND DISINFECTION (1-1-1)(S). The study of: (1) Introduction to Microbiology—The Microbe; (2) Introduction to Microbiology—The Body’s Defenses; (3) Injury, Wound Healing and Hemostatis; (4) Infection—The Process, Prevention and Control; (5) Sterilization and Disinfection Methods.

ST 110 PREPARATION OF THE SURGICAL PATIENT (2-4-3)(F). The study and practice designed to enable the student to become skilled in assisting with the preparation, transportation, positioning and anesthesia of the surgical patient.

ST 111 SURGICAL PROCEDURES (6-4-7)(S). The study of: (1) General Surgical Procedures; (2) General Abdominal Procedures; (3) Orthopedic Surgery; (4) Obstetric and Gynecological procedures; (5) General and Transplant Surgery; (6) Plastic Surgery; (7) Ophthalmic Surgery; (8) Ear, Nose, Throat, Oral Surgery; (9) Neurosurgery; (10) Microsurgery; (11) Cardiovascular and Thoracic Surgery; (12) Pediatric and Geriatric Surgery. Each of the modules includes a brief history, procedures, special considerations and the drugs used.


ST 132 SURGERY CLINICAL PRACTICE (0-36-9)(S). Clinical experience in surgery, scrubbing, and orientation to circulating.

ST 140 ANATOMY AND PHYSIOLOGY FOR SURGICAL TECHNOLOGY (6-0-6)(F). A study of the normal structure and function of the body cells, tissues, organs and systems, including interrelationship of body systems.

ST 262 INTRODUCTION COMPUTER APPLICATION TO OCCUPATIONAL RELATIONS (2-0-2)(F). A study of job seeking skills, written communication, interpersonal relations, and hands-on use of computer technology to complete personal data packet.

Water/Wastewater Technology—Eleven Month Program
Certificate of Completion
Instructor: Gerald Dennis

The Water/Wastewater Technology Program is designed to prepare a student for employment as an entry level water/wastewater treatment plant operator. The program covers all phases of treatment plant operations, related math and sciences, maintenance, public relations, communications and report writing. Hands-on experience is provided when the studentorks at an area water or wastewater facility.

<table>
<thead>
<tr>
<th>SUBJECTS</th>
<th>1st SEM</th>
<th>2nd SEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water/Wastewater Mechanical Lab WW 110</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>
Course Offerings

See page 23 for definition of course numbering system

<table>
<thead>
<tr>
<th>WW WASTEWATER TECHNOLOGY</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>WW 110 WATER/WASTEWATER MECHANICAL LAB I (3-8-5)(F)</td>
<td>Introduction to and general use of hand tools, power tools, and bench mounted tools. Nomenclature of the various types of pumps, installation of packing and mechanical seals in pumps and valves will be discussed and practiced. Compressors, clarifiers, and other mechanical devices used in water/wastewater treatment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WW 111 WATER/WASTEWATER MECHANICAL LAB II (3-8-5)(S)</td>
<td>Hands on assembly and disassembly of the various pieces of machinery used in the treatment processes. Overview of the types and abilities of pumps and the purpose of the use of pumps in the operation of plant equipment. Trouble-shooting of equipment will be emphasized. PREREQ: WW 110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WW 120 WATER/WASTEWATER BIO-CHEM LAB I (3-8-5)(F)</td>
<td>Introduction to standard laboratory equipment, operator maintenance of laboratory equipment, laboratory safety procedures and practices. Basic water and wastewater testing will be performed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WW 121 WATER/WASTEWATER BIO-CHEM LAB II (3-8-5)(S)</td>
<td>Continuation of laboratory procedures. Standardization of chemicals and testing apparatus. Operator maintenance of equipment. Chemistry mathematics dealing with the normalizing of solutions and the balancing of reaction equations. Testing procedures required for the various methods of activated sludge process control. Performing tests required N.P.D.E.S. permit reporting. PREREQ: WW 120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WW 133 WATER/WASTEWATER TECHNICAL MATHEMATICS I (3-0-3)(F)</td>
<td>Calculation of length, area and volume of various shapes of tanks, channels, and containers. Calculation of flow rates, velocity, force, pressure and hydraulic heads, detention times, surface loading and other calculations relating to those treatment processes will be covered.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WW 134 WATER/WASTEWATER TECHNICAL MATHEMATICS II (3-0-3)(F)</td>
<td>Intermediate mathematics covering algebra, chemistry calculations, and horsepower calculations to include efficiency curves to determine power ratings and electrical requirements as related to the process. PREREQ: WW 133</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WW 153 WATER/WASTEWATER TREATMENT PLANT OPERATIONS I (3-0-3)(F)</td>
<td>Introduction to water treatment plant operations, including well construction, preparation and operation of distribution systems, plant operation including general flow formation and the use of chemical addition, sedimentation, filtration, chlorination and storage. Wastewater collection systems, pretreatment, primary sedimentation, along with secondary treatment processes including trickling filters, aerobic biological filters, rotating biological contactors, oxidation ditches and lagoon operation and chlorination.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WW 154 WATER/WASTEWATER TREATMENT PLANT OPERATIONS II (3-0-3)(S)</td>
<td>Advanced treatment processes including coagulation, flocculation, sedimentation, softening, stabilization, fluoridation, chlorination, dechlorination and secondary treatment processes including a heavy emphasis on activated sludge control. Aerobic and anaerobic digestion operation and the disposal of the solid waste will be discussed. Safety in and around tanks, digesters, and collection systems will be emphasized extensively along with street barricades and street work safety. Plant interaction, report writing, budget preparation. PREREQ: WW 153</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WW 161 WATER/WASTEWATER IN PLANT PRACTICUM II (3-0-3)(SU)</td>
<td>Supervised experience in area water and/or wastewater facilities. Students gain experience in all phases of treatment in a variety of facilities and with several processes.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Welding and Metals Fabrication—Eleven Month Program

Certificate of Completion
Instructor: Ron Baldner

The Welding and Metal Fabrication Program provides the student with instruction, practical experience, and related theory in Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), Flux-cored Arc Welding (FCAW), Gas Tungsten Arc Welding (GTAW), manual and automatic Oxy-Acetylene Burning, Brazing, Soldering, Air Carbon Arc Gouging, and Plasma Arc Gouging and Cutting.

<table>
<thead>
<tr>
<th>SUBJECTS</th>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welding Lab W 106-107</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Welding Lic./Lab W 108</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Blueprint Reading &amp; Layout W 125-126</td>
<td>3</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Welding Communication W 111</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Welding Theory W 155-156</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Intro Microcomputers W 157</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

TOTAL 15 15 7

The student will also learn Blueprint reading and Layout skills and apply them by using common hand layout tools, mechanical metal shears, mechanical metal bending and forming equipment, hole punching in plate and structural shapes, drilling equipment, precision automated Oxy-acetylene burning equipment, Computer Numerical Controlled (CNC) Plasma cutting, Precision CNC metal shearing, Precision CNC Oxy-Acetylene shape cutting equipment, CNC assisted metal bending (pressbrake) and other tools of the trade.

<table>
<thead>
<tr>
<th>Course Offerings</th>
<th>See page 23 for definition of course numbering system</th>
</tr>
</thead>
<tbody>
<tr>
<td>WW 106 WELDING LABORATORY (0-20-5)(F)</td>
<td>This course will allow the student to apply and practice those skills discussed in the WELDING THEORY and BLUEPRINT READING AND LAYOUT courses. Emphasis will be on acquiring new skills in a number of areas related to the occupation including shielded metal arc welding (SMAW), Stick welding; Oxy-Acetylene brazing; Air carbon arc welding (CAW); Gas Metal Arc Welding (GMAW); Flux-cored Arc Welding (FCAW), Material Identification; Electrode selection; and Layout and Fabrication Skill.</td>
</tr>
<tr>
<td>WW 107 WELDING LABORATORY (0-20-5)(S)</td>
<td>This course will allow the student to apply and practice those skills discussed in the WELDING THEORY and BLUEPRINT READING AND LAYOUT courses. Emphasis will be on acquiring job entry level skills in the following areas: Shielded metal arc welding (SMAW); Oxy-Acet. Brazing (manual and automatic); Oxy-Acet. Brazing, soldering, and welding (OAW); Gas Metal Arc Welding (GMAW); Flux-Cored ArC Welding (FCAW); Material Identification; Electrode selection; Layout and Fabrication Skill; Air Arc Gouging; Welder Qualification tests. PREREQ: W 106 or PERM/INST.</td>
</tr>
<tr>
<td>WW 108 WELDING LECTURE/LABORATORY (6-24-6)(SU)</td>
<td>Summer session (2 months) for basic students to continue on track and for advanced students to work into TIG, PIPE and qualification tests. Further emphasis on blueprint analysis, properties of materials, and safe operating procedures is given. PREREQ: W 107 or PERM/INST.</td>
</tr>
<tr>
<td>WW 111 WELDING COMMUNICATIONS (3-0-3)(F)</td>
<td>An examination of interpersonal communication. Focuses on communication in life-long learning, awareness of self, communication relationships and written communications. PREREQ: W 106 or PERM/INST.</td>
</tr>
<tr>
<td>WW 125 BLUEPRINT READING AND LAYOUT (3-0-3)(F)</td>
<td>This course will include the basics of Orthographic drawing, layout and fabrication techniques for plate and gauge material developments or rectangular or triangular shapes, flat pattern developments, rectangular shapes, and the related math required to accomplish the above listed developments.</td>
</tr>
<tr>
<td>WW 126 BLUEPRINT READING AND LAYOUT (7-0-7)(S)</td>
<td>This course involves using advanced blueprint reading and layout techniques to develop triangular constructions, rectangle to rectangle transitions, round to round transitions, circles and filled shapes as well as the related math. Also included will be structural detailing, layout and fabrication of structural shapes and the related symbols, abbreviations and ordering information. PREREQ: W 125 or PERM/INST.</td>
</tr>
<tr>
<td>WW 155 WELDING THEORY (4-0-4)(F)</td>
<td>The purpose of this course is to provide the student with a practical working knowledge of the following topics: 1. Basic Welding Theory, 2. Oxy-Acetylene Burning, 3. Electrode Selection, 4. Continous Wirefeed Welding processes, 5. Oxy-Acetylene Brazing, Soldering and Welding, 6. Properties of Materials, 7. Material Identification and Basic Metallurgy</td>
</tr>
<tr>
<td>WW 156 WELDING THEORY (1-0-1)(S)</td>
<td>The purpose of this course is to provide the student with a practical working knowledge of the following topics: 1. Welding Sheetmetal with the SMAW, 2. Control of Arc Blow and Weldment Distortion, 3. Air Arc Gouging, 4. Welder Qualification Testing, PREREQ: W 155 or PERM/INST.</td>
</tr>
<tr>
<td>WW 157 INTRODUCTION TO MICROCOMPUTERS (2-0-1)(SU)</td>
<td>This course introduces the student to microcomputer skills related to the welding field, including Disk Operating System and basic word processing.</td>
</tr>
</tbody>
</table>

W 262 OCCUPATIONAL RELATIONSHIPS (2-0-2)(S) | An examination of occupational requirements. Focus on job seeking skills, employment and employer relations, social security, job safety laws and workers' compensation laws, Cardio Pulmonary Resuscitation and First Aid. |
Graduate College

Dean: Kenneth M. Hollenbaugh, Ph.D.
Math/Geology Building, Room 124
Telephone (208) 385-3647

Graduate Admission Coordinator: Virginia Heminway
Math/Geology Building, Room 118
Telephone (208) 385-3903

Graduate Program Coordinators

Art Education: Heather Hanlon, Ed.D., Professor of Art

Athletic Administration: Glenn R. Potter, Ed.D., Chairperson and Professor of Health, Physical Education, and Recreation

Business: David F. Groebner, Ph.D., Professor, College of Business

Communication: Robert R. Boren, Ph.D., Chairperson and Professor of Communication

Earth Science: Monte D. Wilson, Ph.D., Professor of Geosciences

Education: Phyllis J. Edmundson, Ed.D., Associate Dean and Professor, College of Education

English: Dale K. Boyer, Ph.D., Professor of English

Exercise and Sport Studies: Linda M. Petlichkoff, Ph.D., Assistant Professor of Health, Physical Education, and Recreation

Geology: Walter S. Snyder, Ph.D., Associate Professor of Geosciences

Geophysics: John R. Pelton, Ph.D., Associate Professor of Geosciences

History: Errol D. Jones, Ph.D., Associate Professor of History

Instructional & Performance Technology: Mark Eisley, Ph.D., Assistant Professor of Instructional & Performance Technology

Interdisciplinary Studies: Phillip Eastman, Ph.D., Professor of Mathematics, Associate Dean, College of Arts and Sciences

Music: Jeanne Marie Belfy, Ph.D., Associate Professor of Music

Public Administration: James B. Weatherby, Ph.D., Associate Professor and Director of Public Administration

Raptor Biology: Marc Joseph Bechard, Ph.D., Professor, Department of Biology

Social Work: David Johnson, M.S.W., Chairperson and Associate Professor of Social Work

Admission As A Graduate Student

The Graduate Admissions Office of the Graduate College provides admission counseling, evaluates all transcripts for admission to graduate programs, and verifies the completion of admission requirements. Students holding a bachelor's or higher degree can be classified as graduate, senior, sophomore or special for purposes of financial aid application and fee payment. Classification status is determined by the students educational objectives.

Admission requirements for students pursuing master's degrees vary according to the graduate program. Please see the graduate program requirements listed below.

1. All students holding a bachelor's or higher degree must submit an application for admission to the Graduate Admissions Office and pay a nonrefundable $15.00 application fee.

2. All graduate students, except the categories exempted below, must submit official transcripts from each post-high school institution attended directly to the Graduate Admissions Office. An official transcript is one certified by the issuing institution and mailed by that institution directly to the Graduate Admissions Office.

Exempt categories: Students pursing general graduate study or undergraduate courses of interest.

Programs

Boise State University offers the following graduate degrees: Master of
Business Administration, Master of Arts in Communication, Master of Arts/Science in Education, Master of Arts in English, Master of Science in Exercise and Sport Studies, Master of Public Administration, Master of Arts in History, Master of Music, Performance/Pedagogy, Master of Arts/Science in Interdisciplinary Studies, Master of Science in Raptor Biology, a Master of Science in Geology, Master of Science in Geophysics, Master of Science in Instructional & Performance Technology, Master of Fine Arts in Visual Arts and Master of Social Work, Master of Physical Education, Athletic Administration.


The Master of Public Administration Degree Program has three areas of emphasis: (1) General, (2) Human Services, and (3) Criminal Justice.

Graduate Faculty

The graduate faculty is comprised of those full-time faculty who have been approved by the Graduate Council to teach graduate level courses, participate in the conduct of graduate programs and supervise graduate students.

Part-time faculty who are approved by the Graduate Council to teach a graduate course or serve on graduate committees, are appointed as adjunct graduate faculty. Such appointments are for specific assignments and are renewable but not perpetual.

General Information for Graduate Students

Application for admission to the Graduate College may be made at any time. However, there are admission deadlines for some programs and these are listed under the program description. It is recommended, however, that at least two months before the initial enrollment, the Office of Graduate Admissions will have received the application for admission, $15.00 application processing fee, official transcripts of all undergraduate and graduate work and any predictive exam scores. This will provide sufficient time to process the application prior to the semester the applicant wishes to commence graduate study. The transcripts are to be sent directly to the Boise State University Office of Graduate Admissions by the Registrar of the college or university which the applicant previously attended. For that purpose the applicant should communicate with the Registrars concerned and then allow them sufficient time to process and mail the transcripts. Applicants are strongly advised to submit the application for admission and the $15.00 application processing fee prior to requesting transcripts.

Graduate students pursuing a second baccalaureate degree or teacher certification must meet all the requirements and follow the same policies and procedures that apply to undergraduates in the same degree program. For example, some baccalaureate programs require admission to upper division standing with a specified grade point average, or have certain enrollment restrictions. Carefully read the program description and requirements for the undergraduate program you plan to pursue in order to determine your eligibility.

All documents received by the University in conjunction with applications for admission become the property of Boise State University. Under no circumstances will they be duplicated except for University use. Nor will the original returned to the applicant or forwarded to any agency or other college or university.

Admission to the Graduate College

An applicant may be admitted to the Graduate College as an unclassified or non-degree-seeking student to take courses of interest when the following criteria have been met:
1. The applicant has earned a baccalaureate degree from an accredited institution.
2. The applicant has a grade point average of at least 2.75/4.00.

A student may be admitted to a graduate degree program when these additional criteria have been met:
1. Completes the GRE general exam or other predictive exam as specified by the program.
2. Submits all transcripts, letters of recommendation, and other materials specified by the program.

3. Meets the GPA requirement for the program.
4. Is recommended for admission to the degree program by the graduate program coordinator and receives written notification of admission from the Graduate Dean.

Graduate Status Classification for Matriculated Students: All applicants are admitted to the Graduate College initially with unclassified status and retain this status until they have been accepted into a graduate program with either provisional or regular status. Credits earned by a student in unclassified status may not necessarily be accepted towards a graduate degree if the student applies for and is admitted to a graduate program at a later time. No more than nine credit hours taken in unclassified status may be included in any graduate degree program without waiver by the Graduate Dean upon recommendation by the school or department in which the student will work.

Provisional Status: Applicants may be admitted to the Graduate College with provisional status if the department or academic unit in which they plan to study requires additional evidence of their qualification for admission with regular status. No student may maintain provisional status indefinitely. The department or academic unit concerned will normally make a final determination of students with provisional status by the time they have completed twelve credits of approved study.

Regular Status: The applicant has been admitted with full graduate standing into a graduate degree program.

Graduate Courses for Undergraduate Credit

Boise State University seniors may take up to two 500 level courses for Upper Division credit applied to their baccalaureate degree program. The necessary permit forms are available through the Graduation Evaluators Office. Determination of what constitutes a senior for the purpose of this policy is left to the Graduate Dean. (MBA courses are excluded from this policy.)

Graduate Credit for Seniors

A Boise State University senior with the approval of the department in which he or she plans to work and the Graduate Dean, may enroll for graduate credit during the student's senior year insofar as these credits will not prejudice his or her graduation during that academic year. The necessary Senior Permit Forms are available at the Graduation Evaluators Office. Credits earned in this manner are "reserved" to count toward a graduate degree at BSU. (MBA courses are excluded from this policy.)

Academic Scholarship Requirements

Academic excellence is expected of students doing graduate work. A student whose academic performance is not satisfactory may be withdrawn from the degree program by the Dean of the Graduate College upon the recommendation of the department or academic unit concerned. To be eligible for a degree in the Graduate College, a student must achieve a grade point average of B (3.00) or better in all work exclusive of deficiencies, specifically included in his or her program of study. No grade below C may be used for any 300 or 400 level courses in a graduate program. Grades below C cannot be used to meet the requirements of a graduate degree.

Repeat, Retake Policy: A student who earns a grade of D in a graded 500 level course at BSU may include no more than one repeated course toward a Master's Degree Program. A student who earns a grade of F may not count a retaken course toward any Master Degree Program at Boise State University. Therefore, a student who receives an F in a required course is automatically excluded from further Master degree work. With a D in one of these courses there is a single chance of redemption.

Credit Requirements: A minimum of thirty semester credits of course work approved by the graduate student's supervisory committee is required. More than thirty semester credits may be required in certain programs.

Supervisory Committee Assignment: Upon admission of the applicant with regular graduate status, a supervisory committee, consisting of a chairperson and other faculty members, will be appointed by the department fielding the program. This supervisory committee or the advisor, as determined within each degree program of study, will establish with the student a program of study, direct any thesis or graduate projects and administer final examination(s).
Students admitted with provisional status will be assigned a temporary advisor who will be responsible for building a tentative program of study. This advisor will guide the student with respect to meeting the stipulations of the provisional admission. Once the provisional stipulations have been satisfactorily met by the student, the department concerned will recommend to the Dean of the Graduate College that the student be admitted with regular graduate status.

Residence Requirements: A minimum of twenty-one semester credits of approved graduate work taken on the university campus is required. All appropriate graduate work taken through inter-institutional cooperative graduate programs, if approved by the department fielding the program, can be accepted as residence credit.

Transfer of Credits: A maximum of nine semester graduate credits taken at other institutions may be transferred for credit toward a Master degree provided the courses are an acceptable part of the program of study planned by the student’s supervisory committee. Such courses must have been taken in an accredited college or university. Only courses with a C or better may be transferred for credit. Boise State University for application to a graduate degree. In general, the transfer of extension credits is discouraged. Exception may be made by departments after a detailed examination of the specific courses taken. No correspondence course will be accepted for graduate credit. Courses used to satisfy requirements for a graduate degree at another institution are not transferable.

Challenge Policy: The provisions of the challenge policy stated in the Catalog Section, “Admission Requirements to the College” under subsection “Challenging Courses, Granting Credit by Examination” apply to graduate courses. In particular, the decision to allow or not to allow challenges will be made by the department fielding the course to be challenged. For interdisciplinary courses, the decision will be made by the college officer in charge of the graduate program to which the course applies.

Program Admission and Continuation Requirements

Application for Predictive Examinations: Predictive examination scores may be required by certain departments. With respect to those departments which stipulate as part of the admissions criteria performance scores from predictive examinations, it is necessary that application be made without delay to the Office of the Graduate College to take the exam for the specific course(s). Students wishing to pursue graduate study in Business Administration should contact the Office of the Dean, College of Business, Boise State University, or the Graduate Admissions Office to secure the forms necessary to make application for taking the GMAT predictive examination. Every effort should be made to take the GMAT as soon as possible because students will not be given pro-gra status before the GMAT results are reported. Courses taken before the student is admitted (i.e., “Unclassified Status” courses) will not necessarily be allowed toward the MBA even if the student is admitted subsequently. Students should contact the Graduate Admissions Office to secure application forms for taking the GRE.

Program Development Form: Graduate students with regular or provisional status will complete a Program Development Form with their advisor or committee before the end of the first academic period (summer, fall or spring) in which they take graduate work at Boise State University, after having been notified of admission with regular or provisional status. The Program Development Form will be available from the colleges offering graduate degree programs. The advisor or committee will file the completed Program Development Form with the Graduate College. Each change in program must be completed by filing a new Program Development Form showing the changes from the previous form. Any courses being offered as transfer credit, as credit reserved, or as residence credit through an inter-institutional cooperative program must be claimed at the time the Program Development Form is originally filed, or before the end of the first academic period (summer, fall or spring) after which the credit has been earned, whichever is the earlier date.

It is the responsibility of the graduate student to keep all program changes up to date for a graduate degree.

Time Limitations: All work offered toward a Master’s degree from Boise State University must be completed within a period of seven calendar years. The seven-year interval is to commence with the beginning of the oldest course (or other academic experience) for which credit is offered in a given Master Degree Program, and the interval must include the date of graduation when the Master degree from BSU is awarded.

Foreign Language Requirements: Language requirements are determined by the department concerned. If a foreign language is required, students must demonstrate that they possess a reading knowledge of a language specified by the department.

Thesis Requirements: The requirement of a thesis or similar project is determined by the department or interdisciplinary unit concerned. The final copy of the thesis must be reviewed by the student’s supervisory committee and submitted to the Dean of the Graduate College at least three weeks before commencement.

Candidacy: Students should apply for admission to candidacy and graduation as soon as they have completed eighteen hours of graduate work with a grade point average of at least 3.00 in an approved graduate program of study, have removed all listed deficiencies, and have met any specific foreign language requirements.

Candidacy involves specifying, on the appropriate form, the list of courses and projects which comprise the student’s program. Changes in the planned program after admission to candidacy must be recommended in writing by the student’s committee or advisor and be approved by the Dean of the Graduate College.

Final Examination Requirements: The requirements of a final examination, written, oral, or both, in any non-thesis non-project program is optional with the department or interdisciplinary unit which fields the student’s program. When the examination is required, it is administered by the unit concerned. The dates for these examinations are set by the Graduate College. Students are listed in the calendar of the BSU catalog. A student is not eligible to apply for the final examination until he or she has been admitted to candidacy (filed the candidacy and graduation form.)

Failure in the examination will be considered terminal unless the supervisory committee recommends, and the Dean of the Graduate College approves, a re-examination. Only one re-examination is permitted. At least three months must elapse before a re-examination may be scheduled.

The requirement of a final examination defense of any thesis or project is optional with the department or interdisciplinary unit concerned. When required, a final examination in defense of the thesis or project must be conducted at least three weeks before commencement. On a final examination defense of a thesis or project, an additional member, who may be from outside the department or college, may be appointed by the Graduate Dean at his discretion. Application for the final comprehensive examination(s) is made through the office of the dean of the college fielding the program.

Course Numbering System: See page 23 for definition of course numbering system.

Credit Limitation in Courses Graded Pass or Fail and Directed Research: A maximum of six credits earned with a grade of P will be allowed toward the credit requirements for a Master’s degree. Master’s programs may include directed research credits, at the discretion of the graduate student’s supervising committee or professor, through a letter grade. No credit will be granted the student for more than six credits in any one semester. Only three credits of Internship and/or Directed Research may be applied to the MBA degree requirements.

Undergraduate Courses for Graduate Credit: Courses numbered at the 300 or 400 level may be given "G" designation to carry graduate credit. The department or school concerned will have the right to limit the number of "G" credits which can count toward any degree for which it has responsibility, and in no case can more than one-third of the credits be in courses at the 300 or 400 level. No course numbered below 500 carries graduate credit unless the "G" is affixed.

Graduate students enrolled in "G" courses will be required to do extra work in order to receive graduate credit for the courses.

Application for Graduate Degree

The last step in completing a graduate program consists of arranging for final record checking. To accomplish this, one completes the form "Application for Graduate Degree" which can be obtained from the Graduate Admissions Office, Math/Geology Building, Room 118. This form, with all appropriate signatures is to be submitted to the Graduation Office, Administration Building, Room 102 along with the $10.00 diploma fee. The form must be submitted by the deadline set each semester for apply-
The requirements for admission attempt to recognize the differences among applicants with regard to experience and educational background.

1. Applicants to the MBA program must have graduated from an accredited college or university.
2. Acceptance is based on the applicant's prior academic performance, leadership experience, professional experience, aptitude for graduate study, general motivation, and managerial attributes.
3. A GMAT score of 475 and a cumulative GPA of 2.9 (C=2.0) are generally considered minimal.
4. For students must score a minimum of 550 on the TOEFL or its equivalent. Foreign students may also be asked to take an English proficiency exam at BSU.
5. Two years of significant work experience is required. This may be waived if applicants have a GMAT score of 600 or higher.
6. Current professional resume which accurately reflects professional work experience.
7. Two letters of reference (one preferably from an academic source) which address your strengths, weaknesses, how you might benefit from an MBA, and what you can contribute to our MBA program, and
8. A brief response (maximum 2 pages, double spaced) to one of the following:
   A. Discuss your career goals both short-term and long-term. What role does an MBA program, in general, and Boise State University's MBA program in particular play in helping you achieve these goals?
   B. Discuss two or three situations in the past three years where you have taken a leadership role. How do these events demonstrate your managerial potential?
   C. Please give a brief, candid evaluation of yourself. Include some discussion of the abilities and other attributes you believe are your strengths and some discussion of areas you would like to develop more fully. What do you consider most unique or distinctive about yourself?
9. A student must be admitted to the MBA program in order to take MBA classes.
10. All applicants must be accepted by the Graduate College of Boise State University in order to achieve the Master degree.

Matriculation Requirements

General Prerequisites for Applicants: Admission will be granted to applicants who hold a bachelor's degree from an accredited college or university and who meet the standards set by the College of Business of Boise State University. Common to all programs is a foundation of course work in basic fields of Business Administration. Students who have completed a bachelor's degree in Business within the last five years normally will have completed most of these requirements as part of their undergraduate program. The Master of Business Administration program is also designed to serve the student who has completed his or her bachelor's degree in non-Business fields such as the Sciences, Engineering and the Liberal Arts.

Specific Prerequisites for Applicants: All applicants must fulfill the following requirements prior to enrolling in MBA classes. (New applicants for the programs should furnish documentary evidence of GMAT scores and copies of official transcripts upon initial application. For fall enrollment, students should arrange to take the GMAT by March. For spring enrollment, the GMAT should be taken no later than October.)

The requirements for admission attempt to recognize the differences among applicants with regard to experience and educational background.

1. Applicants to the MBA program must have graduated from an accredited college or university.
2. Acceptance is based on the applicant's prior academic performance, leadership experience, professional experience, aptitude for graduate study, general motivation, and managerial attributes.
3. A GMAT score of 475 and a cumulative GPA of 2.9 (C=2.0) are generally considered minimal.
4. For students must score a minimum of 550 on the TOEFL or its equivalent. Foreign students may also be asked to take an English proficiency exam at BSU.
5. Two years of significant work experience is required. This may be waived if applicants have a GMAT score of 600 or higher.
6. Current professional resume which accurately reflects professional work experience.
7. Two letters of reference (one preferably from an academic source) which address your strengths, weaknesses, how you might benefit from an MBA, and what you can contribute to our MBA program, and
8. A brief response (maximum 2 pages, double spaced) to one of the following:
   A. Discuss your career goals both short-term and long-term. What role does an MBA program, in general, and Boise State University's MBA program in particular play in helping you achieve these goals?
   B. Discuss two or three situations in the past three years where you have taken a leadership role. How do these events demonstrate your managerial potential?
   C. Please give a brief, candid evaluation of yourself. Include some discussion of the abilities and other attributes you believe are your strengths and some discussion of areas you would like to develop more fully. What do you consider most unique or distinctive about yourself?
9. A student must be admitted to the MBA program in order to take MBA classes.
10. All applicants must be accepted by the Graduate College of Boise State University in order to achieve the Master degree.

Undergraduate students will no longer be allowed in MBA classes under the University's Permit for Seniors to Take Graduate Courses policy.

Application deadlines:

Summer, Fall entry ............................. April 30

Spring entry ..................................... October 31

Degree Requirements

The Master of Business Administration degree consists of a maximum of 57 semester hours of credit from the offerings listed on the following pages or other graduate courses suitable to an MBA degree, as accepted by the MBA Admissions Committee.

Foundation Courses ................................ 27
Advanced Courses .................................. 21
Electives ............................................. 9

Depending upon their undergraduate course work, students may select 3-6 credit hours from the 400 level "C" courses from the undergraduate College of Business program. Only those courses listed on the following pages are approved. Advisors should be consulted regarding those courses.

Under certain conditions with the approval of the MBA program coordinator and the Department head concerned, MBA students may earn up to a maximum of 3 credit hours of Directed Research and/or internship credits which apply to graduation requirements.

Course Offerings

See page 23 for definition of course numbering system

MBA--COURSES DESCRIPTIONS:

FOUNDATION COURSES

These courses assume that the student has had no previous course work in business. Conversely, any or all of these courses may be waived if the student has already taken them at an accredited business school, such as would be the case if the student had completed a baccalaureate degree in business within the last five years.

AC 511 ACCOUNTING FOR MANAGERS (3-0-3) (F). The student can expect to develop a working knowledge of financial and managerial accounting tools, techniques and procedures.

EC 514 ECONOMIC THEORY AND ANALYSIS (3-0-3) (F). This course is an accelerated, integrated introduction to economic analysis of the price system and the aggregate performance of developed economies. Supply and demand, basic market structures, income distribution, employment, inflation, growth and international trade.

FI 525 CORPORATE FINANCE (3-0-3) (S). Concepts and techniques of corporate institutional and investment finance are examined. These include time value of money, corporate banking relationships, current assets management, and efficient markets. PREREQ: AC 511, PR 513.

GB 516 LAW FOR MANAGERS (3-0-3) (F). This course explores the history and development of the partnership and corporate forms of business organization and the legal environment which creates and regulates a manager's duties toward the corporation, employees, shareholders, and members of the general public.

IS 515 INFORMATION SYSTEMS (3-0-3) (F). This course is a study of the impact of the computer on managers and on the environment in which managers work. Topics include database, MIS, the impact of information systems on management and the management decision process, and the actual management and control of information systems. PREREQ: IS 101 or equivalent computer work experience.

MG 529 ORGANIZATIONAL THEORY AND BEHAVIOR (3-0-3) (S). This course covers the process of planning, organizing, directing, and controlling. Main topics include theories of organizational performance, structure and design, interpersonal and leadership skills. Emphasis is placed on application of theory to business situations and development of interpersonal skills.

MK 529 MARKETING MANAGEMENT (3-0-3) (S). This course includes a comprehensive examination of the activities and models used in marketing. It also includes identifying and interpreting buyers' needs, market segmentations, and designing a balanced marketing program.

PR 513 BUSINESS STATISTICS (3-0-3) (F). This course examines the use of statistics in decision-making. Presentation and summarization of data, estimation, hypothesis testing, regression analysis, analysis of variance, time series and forecasting, and non-parametric methods.

PR 523 PRODUCTION AND SYSTEMS MANAGEMENT (3-0-3) (S). This course stresses the management of the production/operation function and its integration with other organizational activities. Typical areas covered are: forecasting models, design and layout of the production system, scheduling, location analysis, quality control, and material acquisition. PREREQ: PR 513.

ADVANCED COURSES

AC 531 ACCOUNTING--PLANNING AND CONTROL (3-0-3) (F). This course includes the study of the planning and control processes to assist in the making of business decisions. Problems and cases are considered in profit planning and analysis, cost and analysis for pricing and capital budgeting. The overall objective is an understanding of techniques of cost planning and control. PREREQ: AC 511 or equivalent.

FI 545 ADVANCED FINANCIAL MANAGEMENT (3-0-3) (F). An analysis of financial planning and control in the dynamic environment of changing financial
markets. Risk-return analysis, capital budgeting, debt-equity financing, dividend policy, and merger and acquisitions are major topics. PREREQ: FI 525, EC 514 or equivalent.

GB 536 BUSINESS IN A GLOBAL SOCIETY (3-0-3)(F/S). This course is an examination of the interaction between the business and the economic, social, political, and legal order on a national and international basis. A case approach is used to focus attention on effects of this broad environment on managers. Some ethical issues and cross-cultural issues are explored. PREREQ: GB 516 or equivalent.

GB 546 STRATEGIC MANAGEMENT (3-0-3)(F/S). This capstone course integrates concepts, practices and methods in strategic planning and environmental analysis. Emphasis is placed on evaluation of existing strategy, business risks and opportunities and on the development of long-range plans and programs, executive and managerial controls. PREREQ: AC 531, PR 533, FI 545, MK 539 and MG 538.

MG 538 MANAGING PEOPLE IN ORGANIZATIONS (3-0-3)(F/S). This course is a systematic approach to the major phases of human resource management in organizations, including knowledge bases and theories; personal constraints and opportunities; program controls, evaluations and costs; and results of effective and efficient human resource management. PREREQ: MG 528 or equivalent.

MK 539 STRATEGIC MARKETING MANAGEMENT (3-0-3)(F/S). An analysis and integration of marketing concepts and models with organizational and environmental constraints. Emphasis on identifying opportunities, problems, selection, and development of alternatives. Also formulation and implementation of strategies, plans, and programs. Consumer, industrial, institutional and international markets included. PREREQ: MK 529 or equivalent.

PR 533 DECISION ANALYSIS (3-0-3)(S). A study of decision making in complex situations. Aids for identifying and modeling the decision problem, analyzing and responding to multiple objectives, utilizing subjective inputs, and evaluating and incorporating information. PREREQ: PR 513 or equivalent.

MBA—Elective Courses

AS 512 COMMUNICATION TECHNIQUES FOR MANAGERS (3-0-3)(Intermittent). Analysis of management communication requirements in business. Development of a critical sense and analytical ability through evaluation of research, reports, and case studies. Writing and speaking skills emphasized through written reports, oral presentation and small group activities.

EC 560 ECONOMICS OF PUBLIC POLICY (3-0-3)(F/S). Contribution of economic analysis to the justification, design and implementation of economic policy. The role surrounding the need for public policy in a private property, market economy and the benefits and costs associated with government intervention. The relationships between the goals and the instruments of U.S. economic policy. PREREQ: EC 514.

GB 545 INTERNATIONAL BUSINESS (3-0-3)(F). An overview of (1) the international business environment; (2) community characteristics and conditions affecting firms that conduct business overseas; and (3) firm level decisions about marketing, finance and personnel, and other functions.

MG 541 HUMAN RESOURCE MANAGEMENT (3-0-3)(F/S). Effective management of human resources including discussion of the supervisory processes conducive to reducing labor costs and increasing productivity. Special attention is given the human, organizational, and environmental constraints which limit managerial actions. Techniques for effectively functioning within these constraints.

MK 520 MARKETING PROBLEMS (3-0-3)(Intermittent). Analytical approach to marketing problem solving and decision making. Covers market definition, personal selling, advertising and sales promotion, distribution channels, strategy formulation, product development procedures, and customer services. Case study approach is utilized.

PR 552 STATISTICAL METHODS FOR BUSINESS DECISIONS (3-0-3)(INTERMITTENT). The application of the techniques and the reason for their employment in decision processes. Computer application programs are employed to assist in the learning process. Topics generally covered include: multiple regression analysis, forecasting and multivariate analysis. PREREQ: PR 523 or equivalent courses.

PR 554 OPERATIONS RESEARCH METHODS FOR DECISION MAKING (3-0-3)(Intermittent). An introduction to operations research, applying quantitative tools and interpreting the results. Particular attention is given to using the computer to analyze quantitative models. Typical areas covered are: linear programming, network models, and inventory control theory. PREREQ: PR 523 or equivalent courses.

SELECTED TOPICS: Contemporary topics courses offered interminently.

CM COURSES DESCRIPTIONS

CM 500 GRADUATE STUDIES IN COMMUNICATION (3-0-3). Studies the history of communication, the modes of inquiry into communication, the contemporary structure of the field, and expectations about scholarly activity within the discipline.

CM 501 COMMUNICATION THEORY AND RESEARCH (3-0-3). Examines explanatory, interpretive and critical theories of scientific inquiry as they relate to the study of human communication. Examines the theory and methodology of qualitative and quantitative research into human communication. PREREQ: CM 500.

CM 580-589 SELECTED TOPICS IN COMMUNICATION (Variable credit). Intensive study of selected topics in each area. Specific course content will vary from semester to semester. Consult current class schedule for specific topics to be offered each semester. Courses may be repeated for a total of six credits in each course.

CM 580 SELECTED TOPICS - COMMUNICATION THEORY AND PHILOSOPHY
CM 581 SELECTED TOPICS - COMMUNICATION RESEARCH METHODOLOGY
CM 582 SELECTED TOPICS - COMMUNICATION EDUCATION
CM 583 SELECTED TOPICS - COMMUNICATION TECHNOLOGY
CM 584 SELECTED TOPICS - JOURNALISM AND MASS COMMUNICATION
CM 585 SELECTED TOPICS - COMMUNICATION LAW AND POLICY
CM 586 SELECTED TOPICS - COMMUNICATION AND PUBLIC AFFAIRS
CM 587 SELECTED TOPICS - ORGANIZATIONAL COMMUNICATION
CM 588 SELECTED TOPICS - INTERPERSONAL COMMUNICATION
CM 589 SELECTED TOPICS - COMMUNICATION HISTORY
CM 598 GRADUATE SEMINAR (1-0-1).

Upon selection of an approved project or thesis, the student will prepare a documentary and an oral report of the topic, defending it before fellow graduate students and faculty.

CM 590 PRACTICUM
CM 591 PROJECT
CM 592 COLLOQUIUM
CM 593 THESIS
CM 594 WORKSHOP
CM 595 READING AND CONFERENCE
CM 596 DIRECTED RESEARCH
CM 597 SPECIAL TOPICS
Master of Arts or Science in Education

The College of Education offers two Master's degrees: Master of Arts or Science in Education and Master of Science in Exercise and Sport Studies.

The Associate Dean of the College of Education has been assigned the authority and responsibility for the overall administration and operation of the graduate programs in the College.

A Master's degree in Education with emphases in Art, Curriculum & Instruction, Early Childhood, Earth Science, Educational Technology, Mathematics, Reading and Special Education is presented through the Department of Teacher Education, the related subject departments and the College of Education.

Application for admission to the graduate program in Education may be made at any time. It is recommended, however, that at least two months before the first enrollment, the Graduate Admissions Office will have received the application for admission, $15.00 application processing fee and official transcripts of all undergraduate and graduate work. The transcripts are to be sent directly to the Boise State University Graduate Admissions Office by the Registrar of each college or university which the applicant previously attended.

Admission will be granted to an applicant who holds a Bachelor's degree from an accredited college or university and who has some professional relationship to instruction. The candidate must show promise of meeting the standards set by the College of Education and participating departments as well as the specific regulations of the particular program for which he or she applies.

An applicant for regular status in the program must have attained a GPA of at least 3.00 for the last two years of undergraduate study, or an overall GPA of 2.75. Provisional status may be granted to an applicant not meeting the listed requirements, if deemed appropriate.

The name of the faculty member who will serve as chairperson of the candidate's advisory committee is listed in the letter of acceptance to the candidate following guidelines established by the department. After the candidate has written the examination, the committee will meet with the candidate to review the examination prior to final approval or rejection.

### Graduate Core

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TE 551</td>
<td>Fundamentals of Educational Research</td>
<td>3</td>
</tr>
<tr>
<td>TE 559</td>
<td>Philosophy of Education</td>
<td>6</td>
</tr>
<tr>
<td>TE 565</td>
<td>Interpreting Educational Research</td>
<td>1</td>
</tr>
<tr>
<td>TE 566</td>
<td>Learning Theory and Classroom Instruction</td>
<td>1</td>
</tr>
<tr>
<td>TE 568</td>
<td>Techniques of Classroom Management</td>
<td>1</td>
</tr>
<tr>
<td>TE 569</td>
<td>Testing and Grading</td>
<td>1</td>
</tr>
<tr>
<td>TE 573</td>
<td>Instructional Techniques—Elem School</td>
<td>1</td>
</tr>
<tr>
<td>TE 578</td>
<td>Parents in the Educational Process</td>
<td>1</td>
</tr>
</tbody>
</table>

### Additional Electives

Additional credits to the above will be determined by the respective departments.

### Curriculum and Instruction Emphasis

#### Option I

**Course Code** | **Course Title**                              | **Credits** |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>TE 551</td>
<td>Fundamentals of Educational Research</td>
<td>3</td>
</tr>
<tr>
<td>TE 559</td>
<td>Philosophy of Education</td>
<td>6</td>
</tr>
<tr>
<td>TE 565</td>
<td>Interpreting Educational Research</td>
<td>1</td>
</tr>
<tr>
<td>TE 566</td>
<td>Learning Theory and Classroom Instruction</td>
<td>1</td>
</tr>
<tr>
<td>TE 568</td>
<td>Techniques of Classroom Management</td>
<td>1</td>
</tr>
<tr>
<td>TE 569</td>
<td>Testing and Grading</td>
<td>1</td>
</tr>
<tr>
<td>TE 573</td>
<td>Instructional Techniques—Elem School</td>
<td>1</td>
</tr>
<tr>
<td>TE 578</td>
<td>Parents in the Educational Process</td>
<td>1</td>
</tr>
</tbody>
</table>

### Early Childhood Emphasis

1. Graduate Core ........................................... 6
2. TE 543 Early Childhood: Readings ..................... 3
3. Two of the following three courses: ..........................
   - TE 544 Early Childhood: Advanced Child Develop .... 3
   - TE 546 Early Childhood: Environments & Programs .... 3
   - TE 547 Early Childhood: Language Acq & Dev ........ 3
4. TE 590 Practicum: Early Childhood .................. 2-4
5. Option electives (choose A or B below) ..................
   A. Thesis/Project
      - TE 551 Fundamentals of Ed. Research .............. 3
      - TE 591 Project or TE 593 Thesis ................ 6
      - Approved electives .............................. 5-7
   OR
   B. Comprehensive Written Examination
      - TE 559 Philosophy of Education .................. 3
      - TE 551 Fundamentals of Ed. Research .............. 3
      - TE 559 Project or TE 593 Thesis ................ 6
      - Approved electives .............................. 11-13

### Reading Emphasis

For those Primarily Responsible for Elementary School Instruction

1. Graduate Core ........................................... 6
2. TE 501 Foundations of Reading Instruction .......... 3

### Option II

**Course Code** | **Course Title**                              | **Credits** |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>TE 551</td>
<td>Fundamentals of Educational Research</td>
<td>3</td>
</tr>
<tr>
<td>TE 559</td>
<td>Philosophy of Education</td>
<td>6</td>
</tr>
<tr>
<td>TE 565</td>
<td>Interpreting Educational Research</td>
<td>1</td>
</tr>
<tr>
<td>TE 566</td>
<td>Learning Theory and Classroom Instruction</td>
<td>1</td>
</tr>
<tr>
<td>TE 568</td>
<td>Techniques of Classroom Management</td>
<td>1</td>
</tr>
<tr>
<td>TE 569</td>
<td>Testing and Grading</td>
<td>1</td>
</tr>
<tr>
<td>TE 573</td>
<td>Instructional Techniques—Elem School</td>
<td>1</td>
</tr>
<tr>
<td>TE 578</td>
<td>Parents in the Educational Process</td>
<td>1</td>
</tr>
</tbody>
</table>

### Approved electives

Additional credits to the above will be determined by the respective departments.
For Those Primarily Responsible for Secondary School Instruction

1. Graduate Core ................................................. 6
2. TE 501 Foundations of Reading Instruction ........................ 3
3. TE 508 Diagnosis & Correction of Read Prob-Sec .................. 3
4. TE 504 Seminar in Reading Education ............................ 3
5. Option electives (choose A or B below)
   A. Thesis/Project
   TE 551 Fundamentals of Ed. Research .......................... 3
   Reading electives ............................................... 3
   Approved electives ............................................. 6
   OR
   B. Comprehensive Written Examination
   TE 559 Philosophy of Education ............................... 3
   or
   TE 551 Fundamentals of Ed. Research
   NOTE: Students electing Option II must take a research class, which may be TE 565 Interpreting Educational Research (1 credit) as part of core or TE 551 Fundamentals of Educational Research (3 credits).
   Reading electives ............................................... 9
   Approved electives ............................................. 6
   TOTAL ................................................... 33

NOTE: Completion of the required courses in the Master of Arts in Education, Reading emphasis may not qualify the candidate for a reading endorsement for state certification. With the assistance of his or her advisor, the candidate can select appropriate electives to meet certification requirements.

Special Education Emphasis
For students interested in an Emphasis in Educationally Handicapped and/or Severe Retardation

Educationally Handicapped:
1. Graduate Core ................................................. 6
2. TE 514 Counseling/Consulting Skills for Educators ................ 3
4. TE 523 Emotionally Disturbed Child in the Classroom ............ 3
5. TE 590 Practicum: Special Education ................................ 3
6. TE 534 Issues and Trends in Special Educ. ......................... 3
7. Option electives (choose A or B below)
   A. Thesis/Project option
   TE 551 Fundamentals of Educ. Research ........................ 3
   Reading electives ............................................... 6
   Approved electives ............................................. 6
   OR
   B. Comprehensive Written Examination
   TE 559 Philosophy of Education ................................ 3
   or
   TE 551 Fundamentals of Ed. Research
   NOTE: Students electing Option II must take a research class, which may be TE 565 Interpreting Educational Research (1 credit) as part of core or TE 551 Fundamentals of Educational Research (3 credits).
   Reading electives ............................................... 9
   Approved electives ............................................. 6
   TOTAL ................................................... 33

NOTE: Completion of the required courses in the Master of Arts in Education. Reading emphasis may not qualify the candidate for a reading endorsement for state certification. With the assistance of his or her advisor, the candidate can select appropriate electives to meet certification requirements.

Severe Retardation:

1. Graduate Core ................................................. 6
2. TE 514 Counseling/Consulting Skills for Educators ................ 3
3. TE 517 Seminar on the Severely Handicapped Learner ............ 3
4. TE 523 Emotionally Disturbed Child in the Classroom ............ 3
5. TE 590 Practicum: Special Education ................................ 3
6. TE 534 Issues and Trends in Special Ed. .......................... 3
7. Option electives (choose A or B below)
   A. Thesis/Project option
   TE 551 Fundamentals of Ed. Research .......................... 3
   TE 591 Project or TE 593 Thesis ............................... 6
   Approved electives ............................................. 3
   OR
   B. Comprehensive Written Examination
   TE 559 Philosophy of Education ............................... 3
   or
   TE 551 Fundamentals of Ed. Research
   NOTE: Students electing Option II must take a research class, which may be TE 565 Interpreting Educational Research (1 credit) as part of core or TE 551 Fundamentals of Educational Research (3 credits).
   Approved electives ............................................. 9

Electives:
Students are to take at least 6 credits of elective course work, with at least 3 credits recommended outside of the College of Education.

Suggested Electives:
- TE 450G Behavior Intervention Techniques ........................ 3
- TE 502 Diagnosis & Correction of Read Prob ........................ 3
- TE 503 Clinic for Reading Specialists ................................ 3
- TE 505 Individual Tests and Measurements ........................ 3
- TE 590 Practicum: Special Education ................................ 3
- TE 596 Directed Research: Special Education ...................... 3

Second Master's Degree
A student who has earned a master's degree in Education from Boise State University may earn a second degree in another area of emphasis.

Guidelines for the Award of a Second Master's Degree
1. A candidate must meet all program requirements prescribed by the second master's curriculum.
2. Program requirements for the second degree that have already been met in the program for the first degree awarded may be counted toward the second degree at the discretion of the student's graduate
3. A minimum of 21 credits of new course work shall be required for the second degree.

4. The seven-year time limit applies to all courses to be counted toward the second degree.

Planned Fifth Year
Purpose: Continuing education is a vital element in maintaining professional competence among teachers. Yet not all teachers desire the structure and demands imposed by a master's program. The purpose of the Planned Fifth Year is to enable and encourage teachers to further their professional growth and meet career goals through a planned and intellectually rigorous program of study. The goals of the program are largely determined by the candidate. The candidate may choose 1) to broaden or deepen knowledge and skills related to current teaching assignment or, 2) to seek an additional endorsement or advanced certification.

Admission Requirements
1. Be a certified teacher.
2. Meet the admission standards of graduate study (2.75) overall G.P.A. or 3.00 in the last two years of study.

Program Requirements
All students will complete thirty (30) credits including:

1. TE 582 Instructional Theory ............................. 3
2. Graduate Core OR TWO of the following courses .......................... 6
   TE 551 Fundamentals of Educational Research .......................... 3
   TE 559 Philosophy of Education ..................................... 3
   TE 581 Curriculum Planning and Implementation ..................... 3
3. A minimum of 9 credits of content courses .................................. 9
4. Electives ..................................................... 12
TOTAL ......................................................... 30

A. A minimum of 20 credits must be earned after admission.
B. Transfer credits are limited to nine (9).
C. A maximum of 10 credits may be undergraduate work.
D. A maximum of 10 credits may be pass/fail.
E. A maximum of 6 credits of 'C' grades will be accepted.
F. Overall G.P.A. for the program must be 3.00.
G. The program must be planned with an advisor and must be completed within seven years of the first credits applied to the program.

This is not a degree or certification program. If, as a result of course work taken in the program, the candidate becomes eligible for a different certificate or endorsement, it is the candidate's responsibility to make application to the State Department of Education.

Course Offerings
See page 23 for definition of course numbering system

P. PSYCHOLOGY
See appropriate department listing for detailed course descriptions of these undergraduate courses which may be taken for graduate credit.

P 421G PSYCHOLOGICAL MEASUREMENT (3-0-3)(F).
P 405G ADVANCED STATISTICAL METHODS (3-0-3)(S).

Graduate

P. PSYCHOLOGICAL SCIENCE (3-0-3)(S).

P 502 ADVANCED EDUCATIONAL PSYCHOLOGY (3-0-3), A study of contemporary issues involving both theoretical and methodological considerations in the history and systems of educational psychology. Special emphasis will be given to group behavior in terms of principles relevant to educational objectives. PREREQ: P 101 and TE 225. Offered on demand.
P 505 PERSONALITY DEVELOPMENT (3-0-3)(S). Critical consideration of the main personality theories, particularly those which emphasize current concepts regarding learning, perception and motivation. Study of the interaction of emotional and cognitive factors in personality development at different age levels is pursued. PREREQ: P 101. Offered on demand.
P 506 ADVANCED SOCIAL PSYCHOLOGY (3-0-3)(F/S). Theoretical and empirical approaches to explaining behavior in social contexts. The course will focus both on the individual level (internal factors such as attitudes, attributes, stereotypes, and perceptual factors, including those relevant to understanding psychopathology) and on the nature of social behavior in interactions (agression, communication, influence, attraction, and intimacy). PREREQ: PERM/INST.
P 507 COGNITIVE PSYCHOLOGY (3-0-3)(F/S). The course will examine the fundamental principles of memory and thought, the experimental evidence to support these principles, and the theoretical perspectives used to understand them. Specific topics include pattern recognition, attention, memory structures and processes, concepts and categorization, and problem solving. PREREQ: PERM/INST.

Master of Arts or Science in Education

TE TEACHER EDUCATION
Undergraduate

See appropriate department listing for detailed course descriptions of these undergraduate courses which may be taken for graduate credit.


Graduate

TE 501 FOUNDATIONS OF READING INSTRUCTION (3-0-3)(S).

G. The program must be planned with an advisor and must be completed within seven years of the first credits applied to the program.

P. PSYCHOLOGY
See appropriate department listing for detailed course descriptions of these undergraduate courses which may be taken for graduate credit.

P 421G PSYCHOLOGICAL MEASUREMENT (3-0-3)(F).
P 405G ADVANCED STATISTICAL METHODS (3-0-3)(S).

Graduate

P 502 ADVANCED EDUCATIONAL PSYCHOLOGY (3-0-3)(S).

P 503 PERSONALITY DEVELOPMENT (3-0-3)(S).

P 505 SOCIAL PSYCHOLOGY (3-0-3)(S). Current practices and principles in modern social science education, including objectives, social problems, unit, development, work-study skills, organization of the program materials and media, and research findings basic to social studies will be developed.
P 511 ADVANCED PRACTICES IN TEACHING ELEMENTARY SCHOOL MATHEMATICS (3-0-3)(S). Emphasis on creative methods and strategies for teaching elementary school mathematics. Also includes a review of current research, curriculum trends and exploration of experimentation with unique materials for teaching mathematics.
P 512 ADVANCED PRACTICES IN TEACHING LANGUAGE ARTS AND LINGUISTICS (3-0-3)(F). Emphasis will be given to the role of language arts in the school curricula, stressing modern approaches to language development, semantics, phonetics, phonics, and orthography.
P 513 ADVANCED PRACTICES IN TEACHING ELEMENTARY SCIENCE (3-0-3)(S). The program is designed to teach students advanced design concepts and how to design special education programs for students with special needs. The course will include the theoretical and programmatic considerations of instructional design. The course may be used in the instruction of gifted and talented students. Emphasis is placed on the selection and organization of content and experimental activities.
P 514 COUNSELING/CONSULTING SKILLS FOR EDUCATORS (3-0-3)(S). This course will provide the counseling and consulting skills for educators to work with parents and other professionals. Instruction will focus on developing skills to work with students who experience various social and emotional concerns relating to learning. Major areas to be addressed will include theories and approaches to counseling and consulting, communication skills, intervention programs. PREREQ: GRAD or PERM/INST.
P 515 ADVANCED THEORY OF INSTRUCTIONAL DESIGN FOR SPECIAL EDUCATORS (3-0-3)(F). The course is designed to teach students advanced design concepts and how to design special education programs for students with special needs. The course will include the theoretical and programmatic considerations of instructional design. The course may be used in the instruction of gifted and talented students. Emphasis is placed on the selection and organization of content and experimental activities.
P 516 INSTRUCTIONAL DESIGN FOR CURRICULUM DEVELOPMENT (3-0-3)(F). This course is designed to teach students advanced design concepts and how to design special education programs for students with special needs. The course will include the theoretical and programmatic considerations of instructional design. The course may be used in the instruction of gifted and talented students. Emphasis is placed on the selection and organization of content and experimental activities.
P 517 SEMINAR ON THE SEVERELY HANDICAPPED LEARNER (3-0-3)(S). The course is designed to teach students advanced design concepts and how to design special education programs for students with special needs. The course will include the theoretical and programmatic considerations of instructional design. The course may be used in the instruction of gifted and talented students. Emphasis is placed on the selection and organization of content and experimental activities.
P 518 TECHNIQUES FOR CREATIVE WRITING IN ELEMENTARY SCHOOLS (3-0-3)(S). Methods and techniques for encouraging creative writing in the elementary school.
P 519 ADVANCED STUDY OF CHILDREN'S LITERATURE (3-0-3)(S).
provides an in-depth literary analysis of children's literature from preschool to early adolescence, including multicultural literature. The course presents an analysis of children's literature activities for classrooms, libraries, and other settings. Odd years.

TE 522 INDIVIDUALIZATION OF READING INSTRUCTION (3-0-3)(SU/S). Emphasis upon the individualized approach to reading instruction is developed. Techniques of conferencing and book selection, skill development and independent language arts activities are explored.

TE 523 THE EMOTIONALLY DISTURBED CHILD IN THE CLASSROOM (3-0-3) (F/S). This course is designed to assist school personnel in understanding the educational and psychological needs of students with severe behavior problems. PREREQ: PERM/INST.

TE 531 EDUCATION FOR THE CULTURALLY DIFFERENT LEARNER (3-0-3)(S). A study of the development of children and adolescents in different cultures in comparative relationship to existing values. The lifestyle of various minority groups and implications for education will be studied in light of these different learner; (1) learning styles, (2) media, (3) process of change. Idaho minority groups will be emphasized.

TE 534 ISSUES & TRENDS IN SPECIAL EDUCATION (3-0-3) (Fall even years). This course will investigate the current issues and trends in the field of special education. It will be organized around six topical areas: (1) identification, (2) assessment, (3) eligibility, (4) service delivery, (5) intervention approaches, and (6) instructional strategies. Discussion will be literary based and will focus on all areas of exceptionality in both elementary and secondary school settings. PREREQ: GRAD or PERM/INST.

TE 538 INSTRUCTIONAL COURSEWARE DESIGN (3-0-3)(S). Students will design instruction with the assistance of a microcomputer and link the instruction with video technology. Students will investigate several authoring languages to facilitate the development and delivery of instruction. PREREQ: IP 537.

TE 541 EDUCATION IN EMERGING NATIONS (3-0-3)(F). The course provides an analysis of the impact of national goals and the educational system in the twentieth century. Contemporary educational systems will be studied in light of three major factors: (1) religious factors; (2) natural factors such as race, language and environment; (3) secular factors such as Humanism, Socialism and Nationalism.

TE 543 EARLY CHILDHOOD: READINGS (3-0-3)(S). Past and current research in early childhood education will be reviewed and synthesized in a seminar format. Students will determine a specific research area to study in depth.

TE 544 EARLY CHILDHOOD: ADVANCED CHILD DEVELOPMENT (3-0-3)(F). The student will examine in depth the physical, social-emotional, cognitive language, and creative development of children, birth to age eight.

TE 546 EARLY CHILDHOOD: ENVIRONMENTS AND PROGRAMS (3-0-3)(S). The student will examine critical elements in the development and administration of effective early childhood programs including evaluating children, setting up the environment, developing and implementing curriculum, and teaching methods.

TE 547 EARLY CHILDHOOD: LANGUAGE ACQUISITION AND DEVELOPMENT (3-0-3)(F). The student will examine various theories and stages of language development, and will study approaches to facilitate language development in children of English and non-English speaking backgrounds.

TE 549 COUNSELING TECHNIQUES FOR CHEMICAL DEPENDENCY (3-0-3)(F/S). A study of counseling techniques and practices used in dealing with people of all ages who are chemically dependent. Special attention will be paid to the impact of chemical dependency in family members and counseling strategies for adolescents. This course may be taken for either H or TE but not both.

TE 551 FUNDAMENTALS OF EDUCATIONAL RESEARCH (3-0-3)(F/S/SU). This course will introduce students to the elements of experimental and non-experimental research designs. Instruction in using research resources and interpreting statistics will be given and students will analyze current research related to education. Students will learn how to develop a research proposal and will write a scholarly research paper.

TE 555 SUPERVISION OF INSTRUCTIONAL PERSONNEL (3-0-3)(S). A course designed to improve the supervision skills of elementary/secondary cooperating teachers and other supervisory personnel. Emphasis will be placed on a variety of observation and evaluation strategies designed to improve instruction.

TE 559 PHILOSOPHY OF EDUCATION (3-0-3)(S)(SU). Students will analyze and evaluate past and contemporary philosophies and the values derived from them as they apply to education. A formal paper will be required.

TE 561 SCHOOL LAW FOR THE CLASSROOM TEACHER (1-0-1)(SU). This course will provide school personnel with an overview of school law designed to help them become more aware of students' rights and how they can be legally asserted. The emphasis will be on "preventive" law, thus avoiding litigation.

TE 562 SCHOOL ORGANIZATION AND FINANCE (1-0-1)(SU). This course will provide a broad overview of the federal, state and local organizational structures of schooling in America with particular attention given to funding and sources of authority. Issues of policy making as they affect teachers will be examined.

TE 563 CONFLICTING VALUES INFLUENCING EDUCATION (1-0-1)(SU). Students will explore ideological positions which have influenced educational policies. They will be asked to carefully consider their own values and analyze how these positions affect their modes of classroom operation. PREREQ: Graduate status. COREQ: TE 570.

TE 564 INSTRUCTIONAL COURSES secondary SCHOOLS (1-0-1)(SU). In this course, students will investigate instructional techniques which have sound basis in research and theory and which promote development of thinking skills in students.

TE 565 INTERPRETING EDUCATIONAL RESEARCH (1-0-1)(SU). This course will prepare students to read, understand, and critically analyze educational research in their own fields. It includes basic research terminology, strengths and weaknesses in research design, and interpretation of research results. COREQ: TE 570.

TE 566 LEARNING THEORY AND CLASSROOM INSTRUCTION (1-0-1)(SU). Students will investigate major learning theories and their implications for instruction and curriculum development.

TE 568 TECHNIQUES OF CLASSROOM MANAGEMENT (1-0-1)(SU). This course will explore approaches to effectively working with students in elementary and secondary classrooms. Skill development and theoretical considerations related to developing healthy and productive learning environments will be emphasized.

TE 569 TESTING AND GRADING (1-0-1)(SU). This course will include an introduction to test development and analysis of the relationship between national goals and the educational system in the United States. Students will learn how to develop a research proposal and will write a scholarly research paper.

TE 570 GRADUATE CORE ISSUES IN EDUCATION (3-0-3)(SU). This course is part of the graduate education core. The content of this course varies, depending upon the current educational issues, but always includes readings, large group presentations, and small group discussions over philosophical, psychological, and sociological aspects education.

TE 573 INSTRUCTIONAL TECHNIQUES—ELEMENTARY SCHOOL (1-0-1)(SU). In this course, students will investigate instructional techniques which have sound bases in research and theory and which promote the development of thinking skills in primary elementary students.

TE 576 FUNDAMENTALS OF BILINGUAL EDUCATION/ESL (3-0-3)(S). This course is designed to give experienced teachers study of Bilingual Education and English as a Second Language. Students study the historical and cultural foundations, the current legal issues, psycholinguistic research, issues in language assessment, and different approaches. Also included are experiences. Also included are current and historical methodologies and approaches used throughout the country. Offered on demand.

TE 578 PARENTS IN THE EDUCATIONAL PROCESS (1-0-1)(SU). This course will give students a broad understanding of the role of parents in education and the role of the teacher in initiating and/or implementing parental involvement. Particular attention will be given to ways of involving parents who typically do not participate in the educational process.

TE 581 CURRICULUM PLANNING AND IMPLEMENTATION (3-0-3)(F/S/SU). This is a general course for practicing teachers intended to give them a foundation in curriculum theory and practice. They will develop understanding of how curriculum is developed, organized, implemented and evaluated. Current issues and trends in curriculum with some historical perspective will be explored.

TE 582 INSTRUCTIONAL DESIGN (3-0-3)(F/S/SU). This course includes investigations of research and theory about educational contexts, motivation, learning and development as they relate to models of instruction. Students will develop skills in selecting appropriate instructional models to achieve specific purposes in a variety of educational settings.

TE 590 PRACTICUM (Variable).

TE 591 PROJECT (0-0-6).

TE 593 THESIS (0-0-6).

Master of Arts in Education—Art Emphasis

1. The Master's Degree in Education, Art Emphasis, is designed to meet the needs of art specialists.

2. The following will be submitted to the Art Department Admissions Committee:
   A. The names and addresses of three art educators or professional persons who are acquainted with the student's academic qualifications to pursue graduate study.
   B. A statement of the student's professional objectives and philosophy of art education and how these will be furthered by graduate study.
   C. Electives: The remainder of the students' work may be elected in relation to background, interests, and professional objectives in consultation with his/her major advisor and committee.

Course Offerings

See page 23 for definition of course numbering system
AR-ART

AR 501 ART APPRECIATION IN THE EDUCATIONAL PROGRAM (3-0-3) (F). Emphasis will be placed on understanding the motivations behind interpretation of ideas and symbols. Also emphasized will be communication of this understanding to the various age groups represented on the secondary school level. PREREQ: Graduate status or PERM/INST.

AR 521 TEACHING THROUGH EXPERIMENTAL ART MEDIA (0-6-2)(SU). (Previously approved for Elementary Master's Degree). Varied and unusual experimental art media to be used in conjunction with individual teaching techniques. Students will have the opportunity to solve procedural problems and adapt art media to teaching experiences. Some outside reading will be required, as well as written paper. PREREQ: Graduate standing. Summers only by request.

AR 522 TEACHING THROUGH EXPERIMENTAL ART MEDIA (0-6-3)(SU). Varied and unusual experimental art media to be used in conjunction with individual teaching techniques. Students will have the opportunity to solve procedural problems and adapt art media to teaching experiences. Some outside reading will be required, as well as a written paper. PREREQ: Graduate standing. Summers only by request. Alternate years.

AR 551 SPECIAL METHODS: CURRICULUM DEVELOPMENT IN ART EDUCATION (3-0-3)(F). Designed for the secondary school art teacher, this course will be geared to creative curriculum planning. It will be held in a workshop seminar format to facilitate student interaction and the opportunity to experiment and develop new ideas. PREREQ: Graduate status and PERM/INST.

AR 580-589 SERIES SELECTED TOPICS (3-0-3). An opportunity for the student to work independently with a particular topic in a specific area or media. A total of nine credits allowable which can be divided into several areas or concentrated, distribution determined by the graduate student and committee.

AR 580 SELECTED TOPICS - DRAWING
AR 581 SELECTED TOPICS - PAINTING
AR 582 SELECTED TOPICS - CRAFTS
AR 583 SELECTED TOPICS - SCULPTURE
AR 584 SELECTED TOPICS - PHOTOGRAPHY
AR 585 SELECTED TOPICS - CERAMICS
AR 586 SELECTED TOPICS - PRINTMAKING
AR 587 SELECTED TOPICS - DESIGNING
AR 588 SELECTED TOPICS - ILLUSTRATION
AR 589 SELECTED TOPICS - ART HISTORY

AR 591 PROJECT (6 credits).
1. A scholarly paper embodying results of original research which are used to substantiate a specific view.
2. Art show with a full faculty review.
3. A submitted portfolio of work with a full faculty review.
PREREQ: Graduate status.

AR 593 THESIS (V-V-6). The thesis, or culminating project, may be defined, but is not limited to a combination of any two of the following:
1. A scholarly paper embodying results of original research which are used to substantiate a specific view.
2. Three written reports directed toward the student's particular area of study.
3. A curricular proposal in written form which could be considered for implementation in the schools.
PREREQ: Graduate standing.

AR 590 SEMINAR IN ART (3-0-3)(S). (Previously approved for Elementary Master's Degree). Upon selection of an approved topic, the student will research it thoroughly, present an annotated bibliography, and present an oral report of the topic. Emphasis will be placed on utilizing visual material in his presentation. The student will then present a research paper concerning his topic. PREREQ: Graduate standing.

Master of Science in Education—Earth Science Emphasis

The curriculum for the Master of Science in Education, Earth Science emphasis, stresses current developments in the earth science disciplines. In addition to subject matter knowledge emphasis is placed on the varied methods that can be used for teaching earth science. Because of the varied backgrounds of candidates, the course offerings are designed to allow flexibility in planning individual programs. A preliminary examination, oral or written, will be administered to each candidate.

Required courses include the Graduate Core, and a 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 the graduate committee. A final comprehensive oral and/or written examination over course work and the thesis or project is required.

Course Offerings

See page 23 for definition of course numbering system

Master of Arts or Science in Education

GO GEOLOGY

Undergraduate

See appropriate department listing for detailed course descriptions of these undergraduate courses that may be taken for graduate credit.

GO 403G ENGINEERING GEOLOGY (2-3-3)(S) (Field trip required).
GO 412G HYDROGEOLOGY (3-0-3)(S) (Field trip required).
GO 460G VOLCANOLOGY (2-0-2)(F)(Field trip)(odd years).
GO 471G REGIONAL FIELD STUDY (1, 2, or 3 CIR/F/SU).

Graduate

GO 502 GREAT MYSTERIES OF THE EARTH (3-0-3)(F). The earth abounds with mysteries that are seemingly related to natural phenomena. Lost continents, UFO's, Loch Ness Monster, Bermuda Triangle, Big Foot, ancient astronauts, water witching, and other mysteries, both real and contrived, are discussed in terms of evidence and interpretation in the context of natural laws and processes. Techniques of skeptical inquiry and the scientific method are applied to develop critical thinking. PREREQ: Graduate standing and PERM/INST.

GO 511 ADVANCED ENVIRONMENTAL GEOLOGY (3-0-3)(S). Land-use planning, techniques for investigation of superficial materials and water resources. Geologic hazards, surficial deposits and their engineering and hydrologic properties, ground and surface water, waste disposal. Term reports required, field trips required. This course can be taken for undergraduate credit by filling our necessary forms. PREREQ: GO 221 or PH 220.

GO 514 ADVANCED STRUCTURAL GEOLOGY (2-3-3)(F)(Alternate years). Geometric, kinematic and dynamic analysis of plutonic rocks and metamorphic tectonics. Structural elements in plutons, their formation and interpretation as indicators of the tectonic processes involved, displacement, mesoscopic and microscopic study of rock fabrics, the mechanisms and processes of their formation and deformation, and their use as kinematic and strain indicators. PREREQ: GO 310, GO 314, GO 323 and GO 324 or PERM/INST.

GO 523 ADVANCED IGNEOUS PETROLOGY (3-0-3)(S) (Odd Years). A study of igneous rocks with emphasis on their origin and the processes responsible for their diversity. Exercises will make use of the petrographic microscope and the departmental computer facilities. A field trip is required. PREREQ: GO 323, GO 324, C 131.

GO 531 REGIONAL GEOLOGY OF NORTH AMERICA (3-0-3)(S). A systematic study of the geologic provinces of North America with special emphasis on geological relationships and tectonic evolution. Each province is investigated in terms of its structural and geologic history and mineral resources. PREREQ: Graduate status of PERM/INST.

GO 561 EARTH SCIENCE TEACHING TECHNIQUES (3-0-3 or 4-0-4)(F/S). This course is designed to acquaint the student with the objectives, methods, and materials of instruction in Earth Sciences. Emphasis will be placed on the preparation and presentation of lectures, laboratory exercises and field trips. This course provides the student with internship experience in the laboratory and lecture classroom. PREREQ: Graduate status or PERM/INST.

GO 571 GEOCHEMISTRY (3-0-3)(S). Chemical equilibrium applied to natural water systems. Oxidation and reduction in sedimentation and ore genesis, methods of exploration geochemistry, crystalization of magmas, ore-forming solutions, isotope geochemistry. This course can be taken for undergraduate credit by filling necessary forms. Field trip required. PREREQ: GO 101, C 133, M 204.

GO 591 PROJECT (7-3 to 0-6). 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 are held with the instructor and a final report is required. PREREQ: Graduate status and 15 credits in Earth Science or PERM/INST.

GO 593 THESIS (0-3 to 0-5). 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 library research. A final report suitable for presentation at a meeting of Earth Science professionals is required. PREREQ: Admission to candidacy.

GO 596 DIRECTED RESEARCH (0-1 to 0-4). Field, laboratory or library research project. Students may work on an individual problem or select a problem from a list provided by the instructor. Weekly progress meetings, final report. PREREQ: Physical Geology or Fundamentals of Geology and/or PERM/INST.

GO 598 GRADUATE SEMINAR (0-1 to 0-3). The preparation and presentation of oral and written reports on topics in earth science and/or science education. Presentation of oral reports may take the form of debate. Preparation of visual aids and geologic illustrations will be emphasized. PREREQ: Admission to candidacy or PERM/INST.

GS GENERAL SCIENCE

GS 501 HISTORY OF SCIENCE (3-0-3)(F/S). This is a survey of humanity's efforts to understand the natural world. "Ancient Science" is presented as an introduction to the evolution of science since the 16th century. "Modern Science" is presented with an understanding of the changing nature of scientific research in the evolution of science are presented. "Science Today" is a study of the objectives, methods, and materials of instruction in Earth Sciences. Emphasis will be placed on understanding the motivations behind interpretation of ideas and symbols. Also emphasized will be communication of this understanding to the various age groups represented on the secondary school level. PREREQ: Graduate status or PERM/INST.

This degree requires 30 hours of course work, including the Graduate Core in Education (see page 183), a mathematics sequence and seminar, and electives in mathematics and other areas chosen in consultation with a committee. The student must complete all requirements in item 1 below, plus those in one of the three options 2a, 2b, or 2c.
1. Common Requirements
A. Graduate Core  ............................................. 6
B. Mathematics Sequence  ..................................... 6
Real Analysis I, II M 501-502 or
Abstract Algebra I, II M 541-542
C. Seminar in Mathematics M 598 ............................. 3
D. Mathematics Electives  .................................... 6
E. A written examination over mathematics course work
2. One of the following three options:
A. Examination Option
  1) One additional graduate mathematics course, exclusive of M 503, 504, or 561  .............. 3
  2) Free electives .............................................. 6
  3) An oral examination over all course work.
B. Project Option
  1) Mathematics Project M 591 ................................. 3
  2) Free electives .............................................. 9
C. Thesis Option
  1) Mathematics Thesis M 593 .................................. 3
  2) Free electives .............................................. 9
D. Additional Information
  1) Credit in Workshop (594 or 599) is limited to a total of 3 credits to be applied in partial fulfillment of the emphasis in Mathematics.
  2) Some students may be required to remove deficiencies before admission to candidacy. Students with strong undergraduate mathematics backgrounds may apply to challenge, waive, or replace parts of the emphasis requirements.
  3) Students considering this program should consult with the Chair of the Mathematics Department. Enrollment in graduate courses has been such that completion dates for this program cannot be guaranteed.

Course Offerings

See page 23 for definition of course numbering system

M MATHEMATICS

Undergraduate
See appropriate department listing for detailed course descriptions of these undergraduate courses which may be taken for graduate credit.

M 406G THEORY OF FUNCTIONS OF A COMPLEX VARIABLE (3-0-3)(F).
M 456G LINEAR PROGRAMMING (4-0-4)(S).

Graduate
M 503 THE TEACHING OF ALGEBRA (3-0-3). Contemporary approaches to teaching secondary school algebra; treatment of selected topics in modern algebra; methods and materials; research relevant to the teaching of algebra. PREREQ: M 302
M 504 THE TEACHING OF GEOMETRY (3-0-3). Contemporary approaches to teaching secondary school geometry; treatment of selected topics in geometry; methods and materials; research relevant to the teaching of geometry. PREREQ: M 311.
M 505 FOUNDATIONS OF MATHEMATICS (3-0-3). The axiomatic method and its role in modern mathematics. The role of the theories of sets and groups in the development of mathematics. Modern philosophies of mathematics. PREREQ: M 302 or PERM/INST.
M 511 GENERAL TOPOLOGY (3-0-3). Set separation axioms, topologies, connectedness, compactness, generalized convergence, continuity, product spaces. PREREQ: M 401 or M 501 or PERM/INST.
M 541-542 ABSTRACT ALGEBRA I, II (3-0-3). Mappings, the integers, groups, sub-groups, morphisms, rings, integral domains, polynomial rings, fields, field extensions. PREREQ: M 302 or PERM/INST.
M 547 HISTORY OF MATHEMATICS (3-0-3). The course is designed for mathematics teachers in the secondary school. 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 an introduction to, and history of, some of the developments in mathematics during the last century. PREREQ: PERM/INST.
M 561 MATHEMATICS FOR OPERATIONS RESEARCH (4-0-4)(F/S). The mathematics techniques used to solve problems involving several variables. Linear systems, matrices, linear programming with the simplex method, differential and integral calculus with emphasis on applications in management decision situations. PREREQ: PERM/INST.
M 564 MATHEMATICAL MODELING (3-0-3)(SU). Introduction to mathematical modeling through case studies. Deterministic and probabilistic models; optimization.

Examples will be drawn from the physical, biological, and social sciences. A modeling project will be required. PREREQ: M 361 and CS 122 or PERM/INST.

M 571 MATHEMATICS CURRICULUM (7-12 (3-0-3). 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. PREREQ: At least one year's experience teaching in secondary school mathematics.

M 591 PROJECT (May be taken for 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. PREREQ: The student must be admitted to candidacy.

M 593 THESIS (May be taken for 3 to 6 credits). Original mathematical research or a new interpretation or novel exposition of existing mathematics. Course is arranged with supervising faculty member. PREREQ: Admission to candidacy.

M 598 SEMINAR IN MATHEMATICS (3-0-3). 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.

Master of Arts in English

To be considered for regular status as a graduate student in the Department of English, an applicant must meet general Graduate College requirements and the following departmental requirements:

1. Normally, a Bachelor of Arts in English. However, an applicant may demonstrate instead a strong background in an area of study in the graduate curriculum of the English Department to be considered for admission.
2. A G.P.A. of at least 2.75 for all undergraduate work or a G.P.A. of at least 3.0 for the last sixty semester credit hours of undergraduate work.
3. Scores for the Graduate Record Examination (GRE). The applicant should score at least 500 on the Verbal Section of the GRE. An applicant who wishes to emphasize literary study, creative writing, or teaching on the secondary level must provide for the Subject Test for Literature in English in addition to those scored on the General Test. Scores on sections other than the Verbal Section are for information purposes only.

Program Requirements

The course of study for the Master of Arts in English will consist of a minimum of thirty-three graduate-level semester credit hours selected by students and their advisors.

E 500, Introductory Seminar, is prerequisite to other graduate-level courses. However, with the consent of advisors, students may take other graduate courses concurrently.

A maximum of nine credit hours of courses carrying a "G" designation may be counted toward the M.A. degree in English.

Since the content of the courses numbered E 510, E 520, E 530, E 540, E 550, E 560, E 570, and E 597 may vary from semester to semester, students may repeat these courses for credit.

A maximum of nine graduate credit hours taken in other departments may be counted toward the M.A. degree in English.

To satisfy the requirements for the M.A. in English, students must complete a thesis or project or pass a comprehensive examination. No credit hours are granted for taking the examination. Student not taking the comprehensive examination should register for E 591, Project, or E 593, Thesis, in their final semester to receive the three hours credit for a completed project or thesis that applies to the thirty-three credit hour minimum required for the degree.

Course Offerings

See page 23 for definition of course numbering system

E ENGLISH

Undergraduate
See appropriate department listing for detailed course descriptions of these
undergraduate courses which may be taken for graduate credit.

E 412G WOMEN WRITERS (3-0-3)(F/S).

E 487G MODERN BRITISH AND AMERICAN POETRY (3-0-3)(F/S).

E 488G METHODS AND THEORIES OF LITERARY CRITICISM (3-0-3)(F/S).

Graduate

E 500 INTRODUCTORY SEMINAR (3-0-3)(F/S). An introduction to bibliography and orientation to sources of information. Students research a concept or problem in literature or writing under supervision. PREREQ: Admission to graduate program or PERM/CHAIR.

E 501 THE TEACHING OF WRITING (3-0-3)(F/S). Theories and methods of teaching writing for experienced teachers. Special emphasis on new discoveries about the learning process in writing courses and in the teacher's role in helping individual students. PREREQ: E 301, E 500, and teaching experience or PERM/CHAIR.

E 502 ADVANCED TECHNICAL COMMUNICATION (3-0-3)(F/S). An advanced study of technical communication for those students who are or expect to become professional technical communicators. Students will write reports and manuals related to fields of interest and background. The topics of study include modern theories of readability, focusing on research in semantics, syntax, and pragmatics, and recent developments in document conventions. PREREQ: E 302 or E 402 or PERM/INS.

E 503 TECHNICAL EDITING (3-0-3)(F/S). Advanced course in the editing of technical documents. Major projects are related to each student's field of interest. Topics of study include the theory and ethics of editing, as well as text screening, copyediting, typemarking, keying, troubleshooting, and graphics. PREREQ: E 502 or PERM/INS.

E 504 ETHICS OF TECHNICAL COMMUNICATION (3-0-3)(S). An examination of the various ethical issues inherent in the practice of technical communication. Topics include the ancient debate about the claims of philosophy and rhetoric; Kant's categorical imperative; the modern standards of rights, justice, and utility; the employee's obligations to the employer, the public, and the environment; and the consequences of ethical decisions faced by technical communicators, including plagiarism and copyright violation, the fair use of words and graphics, trade secrets, whistle-blowing, and codes of conduct. The course will use the case study method.

E 505 LINGUISTICS (3-0-3)(F/S). Modern linguistic theories and their application to literature and teaching English. An examination of how various grammatical models represent the complexities of language sound, sequence, and structure. Application of theory to language at work. Alternate years. PREREQ: E 500 and LI 305 or equivalent or PERM/CHAIR.

E 508 WRITING FOR THE MARKET (3-0-3)(F/S). A writing course which studies literary journals, trade journals, and little magazines, considers the slick and the popular magazine market, and looks at tradebook publication with the intention of preparing the student to complete manuscripts for publication. PREREQ: An advanced writing course or PERM/INS.

E 509 BOOK ARTS (3-0-3)(F/S). A historical survey of various aspects of bookmaking, including papermaking, typography, printing, binding, and desktop publishing, as well as book distribution/marketing, and production of artist's and eccentric bookworks. Course culminates in production of a classroom-edition of each student's original writings or art works in an appropriate format devised by the student. PREREQ: E 305 or E 306 or PERM/INS.

E 510 MAJOR AUTHOR (3-0-3)(F/S). A consideration of minor and major artistic creations of an author with attention devoted to major influences on the writer and his/her influences on others. Aspects of interest include the literary history and its relation to his/her work, the society and culture of the times, his/her place and stature in the genres in which he/she worked, his/her use or disregard of tradition, as well as an investigation of contemporary criticism and critical evaluation since the writer's time. PREREQ: E 500 or PERM/CHAIR. (Repeatable for credit)

E 520 GENRE (3-0-3)(F/S). A study of a well-defined literary category, such as novel, short story, epic, or tragedy. Examination of representative texts in order to discover the evolution of a specific literary genre while at the same time establishing its typical features. PREREQ: E 500 or PERM/CHAIR. (Repeatable for credit)

E 525 CREATIVE WRITING WORKSHOP (3-0-3)(F). An advanced workshop in poetry and fiction. Students will study the form and theory of poetry and fiction from the perspective of practicing writers and will apply these principles to the analysis and criticism of another's work. PREREQ: E 305, 306, or PERM/INS.

E 530 PERIOD (3-0-3)(F/S). A study of a selected chronological period of American or British literature with focus on major authors, genres, or topics. PREREQ. E 500 or PERM/CHAIR. (Repeatable for credit)

E 540 MYTH IN LITERATURE (3-0-3)(F/S). An exploration of the use of myth in literature as a source of content and structure. The nature and working of myth and the way it enters conscious creation of art. Themes such as the quest, the initiation, the Adamic myth in American literature, and of myths in the works of major authors may be explored. PREREQ. E 500 or PERM/CHAIR. (Repeatable for credit)

E 550 LITERATURE AND CULTURE (3-0-3)(F/S). The interaction between a body of literature and the social, economic, and political forces that characterize the culture in which it originates. The influence of culture on literary form and content. PREREQ: E 500 or PERM/CHAIR. (Repeatable for credit)

E 554 INTRODUCTION TO APPLIED RESEARCH AND PROJECTS IN THE ENGLISH LANGUAGE ARTS (3-0-3)(F/S). Methods of and approaches to conducting applied research in classrooms and the workplace and developing projects in the English Language Arts from such research. This course is recommended for students electing the project option for the M.A. in English. Intended primarily for classroom teachers, the course is appropriate for others who offer instruction, including technical writing trainers and teachers of literacy in GED centers, workplace literacy projects, and community education projects. PREREQ: E 501 or E 581 or PERM/CHAIR.

E 560 FOLKLORE (3-0-3)(F/S). Materials selected from oral tradition and culture with attention to aspects of collecting, classifying, comparing, analyzing, and archiving. Theories of folklore composition and the social function of folklore. PREREQ: E 500 or PERM/CHAIR. (Repeatable for credit)

E 561 THEORIES OF RHETORIC AND COMPOSITION (3-0-3)(F/S). A study of the theoretical context of current writing and writing pedagogy. Influential theories of invention, arrangement, and style, from ancient and modern times, are examined and compared. Special attention is paid to the relationships of current rhetorical and cognitive theories to writing processes and written products. PREREQ: Admission to Graduate Program or PERM/CHAIR.

E 570 LITERARY MOVEMENTS (3-0-3)(F/S). 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. PREREQ: E 500 or PERM/CHAIR. (Repeatable for credit)

E 581 LITERATURE FOR USE IN JUNIOR AND SENIOR HIGH SCHOOLS (3-0-3)(F/S). A literary content course for prospective teachers of secondary school English. Primary emphasis on critical reading of literature for adolescents in secondary school. Secondary emphasis on methods of analysis appropriate to students. All genres as well as classic and popular authors. PREREQ: E 102, two literature courses or PERM/CHAIR.

E 582 SELECTED TOPICS IN TEACHING ENGLISH LANGUAGE ARTS (3-0-3)(F/S). Study of current theories and topics in teaching the English Language Arts — in composition, language, or literary theory — of special interest to the experienced teacher. A specific focus will be announced each time the course is offered. Although targeted primarily at classroom teachers, the course may be appropriate for others who offer instruction, including technical writing trainers and teachers of literacy in GED centers, workplace literacy projects, and community education projects. Alternate years. PREREQ: E 301 or E 381 or E 481 or teaching experience or PERM/INS.

E 585 SELECTED TOPICS IN LINGUISTICS (3-0-3)(F/S). An investigation of a particular topic in linguistics, drawn generally from psycholinguistics, sociolinguistics, semantics, pragmatics, discourse, syntax, or morphology. Course work will include lecture, discussion, and a paper or project, depending on the nature of the topic. Repeatable once for credit. PREREQ: LI 305.

E 591 PROJECT (V-O-V). A project may include, but is not limited to, a library research paper, experimental research on some aspect of pedagogy, or preparation of written curriculum with related teaching materials. PREREQ: Admission to candidacy and approval of the student's graduate committee.

E 593 THESIS (V-O-V). A scholarly paper containing the results of original research. PREREQ: Admission to candidacy and approval of the student's graduate committee.

E 595 READING AND CONFERENCE (V-O-V). Directed readings in selected materials from subject areas in which the English Department faculty has expertise. These readings will be reported on and discussed in a context arranged by the student and the director and approved by the student's graduate committee. PREREQ: Admission to candidacy.

**Master of Science in Exercise and Sport Studies**

**Objectives**

The objective of this program is to provide a scholarly approach to the academic discipline of exercise and sport studies. Along with the required core, students will elect an area of focus from the scientific or behavioral dimensions and culminate their study with some form of scholarly endeavor (project or thesis).

**Degree Requirements**

**CORE REQUIREMENTS 15 CREDITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physiological Anatomy PE 500</td>
<td>3</td>
</tr>
<tr>
<td>Physiology of Activity PE 510</td>
<td>3</td>
</tr>
<tr>
<td>Biomechanics PE 520</td>
<td>3</td>
</tr>
<tr>
<td>Psychology of Exercise &amp; Sport PE 530</td>
<td>3</td>
</tr>
<tr>
<td>Motor Learning PE 560</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>15</td>
</tr>
</tbody>
</table>

**RESEARCH TOOLS 6 CREDITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Statistical Methods P 405G</td>
<td>3</td>
</tr>
<tr>
<td>Stat Meth in Phy Educ PE 552</td>
<td>3</td>
</tr>
<tr>
<td>Fund of Educational Research TE 551</td>
<td>3</td>
</tr>
<tr>
<td>or Research Design in Phys Educ PE 551</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>6</td>
</tr>
</tbody>
</table>

**ELECTIVES 6-9 CREDITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psycho/Soc Aspects of Act PE 401G</td>
<td>3</td>
</tr>
</tbody>
</table>
Course Offerings

See page 23 for definition of course numbering system

Undergraduate

PE 306G HUMAN GROWTH AND MOTOR LEARNING 3
PE 310G EXERCISE PHYSIOLOGY 3
PE 311G KINESIOLOGY 3
PE 401G PSYCHOLOGY OF ACTIVITY (3-0-3)(S).
PE 402G ADVANCED ATHLETIC TRAINING (3-3-3)(S).

Graduate

PE 500 FUNCTIONAL ANATOMY (3-0-3). A study of gross human anatomy from the descriptive approach with emphasis on the skeletal, muscular, nervous and circulatory systems. Includes cadaver dissection. In addition, indepth study of joint function and structure, gross-motor-movement, and skill will be included. Video analysis will be utilized.

PE 510 PHYSIOLOGY OF ACTIVITY (3-0-3). A study of the various factors affecting human performance and subsequent adaptations of the body to single and repeated bouts of exercise.

PE 515 EXERCISE PHYSIOLOGY LAB (2-2-3). Practical application of the principles that govern response and adaptation of the human body to exercise, utilizing laboratory equipment to collect data and analyze results. PREREQ: PE 510 or PERM/INST.

PE 520 BIOMECHANICS (3-0-3). A study of the internal and external forces acting on the human body and the effects produced by these forces. Analysis of movement will focus on qualitative techniques.

PE 525 MECHANICAL ANALYSIS OF MOTOR ACTIVITIES (3-0-3). An introduction to the analysis techniques used to study the mechanics of human motion. Topics will include cinematography, videography, force transducers, electromyography and computer analysis techniques. PREREQ: PE 520 or PERM/INST.

PE 530 PSYCHOLOGY OF EXERCISE AND SPORT (3-0-3). A study of psychological factors as they relate to exercise, sport and performance. Content includes personality traits, motivation, anxiety/avoidance, and intervention/coping strategies.

PE 535 SOCIOLOGY OF EXERCISE AND SPORT (3-0-3). A study of the relationships among sport and other facets of society, including social organization, group behavior and social interaction patterns.

PE 540 APPLIED PRINCIPLES OF CONDITIONING (2-2-3). Advanced study of the conditioning process. Emphasis on application of the conceptual to practical situations. Includes program planning, objectives, exercise analysis for conditioning specificity, exercise prescription and other conditioning variables affecting performance. PREREQ: PE 510 or PERM/INST.

PE 545 EXERCISE TESTING AND PRESCRIPTION (2-2-3). A study of the current methods and procedures used in coronary heart disease risk detection and reduction, including the recommended guidelines by the American College of Sports Medicine for exercise testing and prescription.

PE 550 PHILOSOPHY OF EXERCISE AND SPORT (3-0-3). A study of the philosophical foundations underlying exercise and sport. Topics include values development, design and evaluation of individual and program philosophy and goal structuring.

PE 551 RESEARCH DESIGN IN PHYSICAL EDUCATION (3-0-3). Includes critical analysis of published research in terms of research design, statistical procedures, concepts of validity, experimentation and control; classification of various research methods; various types of research problems; and the relevant attributes of experimental designs. A research proposal is a requirement of the course.

PE 552 STATISTICAL METHODS IN PHYSICAL EDUCATION (3-0-3). An introduction to statistical techniques utilized in the treatment of data in the motor behavior area. The techniques to be covered include measures of central tendency and variability; correlation measures; probability; analysis of variance and regression analysis. PREREQ: High school algebra, equivalent of PE 309 or P 295.

PE 560 MOTOR LEARNING (3-0-3). A study of the relevant empirical evidence and research in the field of motor learning and performance, including the learning process, feedback, timing, information processing, transfer, perception, motivation and practice conditions.

PE 570 HEALTH PROMOTION (3-0-3). An introduction to health promotion in the commercial/industrial sector, including planning, development, and implementation of programs aimed at the achievement of total well-being.

PE 575 COMPUTERS IN EXERCISE AND SPORT (3-0-3). An introduction to computer applications in the exercise and sport sciences, including methods for collecting data. Processing of data will include both microcomputer software and the Statistical Analysis System (SAS) package.

PE 590 PRACTICUM (0-0-3). Available on a selective, limited basis. Culminating experience designed to provide students with an opportunity to apply skills learned in the classroom. PREREQ: PERM/INST.

PE 591 PROJECT (3 credits). Students select a project related to Exercise and Sport Studies and pursue it to a logical conclusion. PREREQ: PERM/INST.

PE 593 RESEARCH AND THESIS (6 credits). A scholarly paper containing the results of original research. PREREQ: Admission to candidacy and approval of the student’s graduate committee.

PE 596 DIRECTED RESEARCH (variable credits). Opportunity for the student to pursue a topic of interest on an individual basis.

Master of Physical Education
in Physical Education/Athletic Administration

A Cooperative Graduate Studies Program

Idaho State University (ISU) and Boise State University (BSU) have agreed to offer ISU's existing Master of Physical Education (MPE) graduate degree in Athletic Administration on the BSU campus. Entering students will be able to complete the entire 30-33 credit hour degree on the BSU campus and take up to 15 credits of BSU courses as part of the program requirements. Further stipulations of this cooperative venture are:

1. ISU will continue to be the degree granting institution. Students will initially apply for admission to ISU, and if accepted, apply for admission to BSU. An application fee must be paid to each institution.

Courses from both institutions that are offered on the Boise campus will be printed in the BSU Class schedule after Physical Education courses and listed under a separate and distinct heading of "Athletic Administration (AA)". Since the registration system at BSU is not programmed for 600 level course numbers, ISU classes will be given an Athletic Administration 500 level equivalent number. Under the title of each course it will be stated that the course is part of the ISU Cooperative Athletic Administration Program.

2. ISU will be limited to offering three credits per semester on BSU's campus for each Fall and Spring term. The maximum number of credits during the summer will be six.

3. All students will be formally advised by ISU Graduate Faculty.

4. All projects, thesis, and comprehensive exam committees will be chaired by ISU Graduate Faculty. BSU faculty who hold At-Large Graduate Faculty status at ISU may serve as committee members and upon request will submit comprehensive examination questions and participate in the evaluation of same.

Registration: Students will register at Boise State University for all ISU and BSU courses taken on the Boise campus in accordance with the procedures stated in the BSU Class Schedule Bulletin.

Student must have written permission from their ISU advisor to register for all ISU courses at BSU.

Fees: Students will pay fees to Boise State University and receive BSU activity cards (consistent with current BSU practices for full-time and part-time students) and thereby receive the appropriate services and use of campus facilities.

Financial Aid: Students taking ISU and/or BSU courses on the Boise campus will be considered as "in-residence" at Boise State. Therefore, students applying for financial aid will do so through the Financial Aid Office at BSU.

Due to a limited number and amount of scholarship funds at BSU, scholarship monies are not available to students in cooperative programs.
If there are scholarships at ISU specifically earmarked for the Athletic Administration program, or if scholarships are developed for this program, they will be awarded by ISU and handled through the BSU Financial Aid Office as are all other outside donor awards.

Graduation: Idaho State University graduation requirements must be met by each student seeking an MPE degree in Athletic Administration. Therefore, students shall apply for graduation through ISU and a final evaluation of their transcripts will be completed by the ISU Registrar.

Cooperative MPE degree in Athletic Administration between ISU and BSU (students would be limited to taking a maximum of 15 BSU credits, subject to approval from their ISU advisor).

Course Requirements
Leadership & Management HPE 605 (AA 505) ........................................... 3
Philosophy of Athletics PE 615 (AA 515 or PE 550) ................. 3
Athletics & the Law PE 631 (AA 531) .................................................. 2
Management of Athletics PE 635 (AA 535) ........................................... 3
Research & Writing HPE 640 (AA 540 or PE 551) .................. 3
Issues in Administration HPE 649 (AA 549) ...................................... 3

Thesis Option
Thesis HPE 650 (AA 550) ................................................................. 6
Approved Electives ............................................................................. 7

Non-Thesis Option
Advanced Theory of Competitive Coaching PE 610 (AA 510 or PE 3) 3
Sports Medicine PE 645 (AA 545) .................................................... 2
Approved Electives ............................................................................. 11

Master of Science, Geology
A Cooperative Graduate Studies Program
Boise State University and Idaho State University have a cooperative agreement which allows students to obtain a Master of Science degree and complete all but 12 credit hours while in residence at BSU. Students may initiate and complete a thesis in residence at BSU; the thesis committee will consist of faculty members from both universities. A minimum of 12 credit hours (one semester) are to be completed in residence at ISU, and the degree will be awarded by Idaho State University. The student may include one or more fields in their studies, such as biostatigraphy, economic geology, environmental geology, geomorphology, exploration geophysics, hydrogeology, mineral exploration, ore deposits, paleontology, petrography and petrology of igneous rocks, stratigraphy, structural geology, shallow subsurface seismic, and volcanic stratigraphy. University of Idaho hydrology courses taken at BSU may also be counted toward the cooperative MS degree.

Admission Requirements: Application for admission may be made by graduates of accredited institutions holding a baccalaureate degree in geology or related geoscience. Regular admission will be awarded based on grade point, GRE scores and letters of recommendation to applicants who have earned a minimum grade point average of 2.75 during the last two years of academic work. Continued enrollment in the program requires a minimum 3.0 grade point average and satisfactory progress toward the degree.

Additional information may be obtained from the Department of Geosciences, Boise State University, 1910 University Drive, Boise, ID 83725 or from the Chairperson, Department of Geology, Idaho State University.

Course Offerings
See page 23 for definition of course numbering system

The following is a partial list of courses taught at Boise State University which may be used to fulfill the Masters credit requirements. Course descriptions for undergraduate courses are included in the listing for the Department of Geology and Geophysics earlier in this Catalog. Course descriptions for graduate courses are listed under the Master of Science in Education, Earth Science Emphasis, program description.

GO 403G Engineering Geology
GO 410G Exploration Well Logging
GO 412G Hydrology
GO 431G Petroleum Geology
GO 460G Volcanology
GO 471G Regional Field Geology
GO 511 Advanced Environmental Geology
GO 514 Advanced Structural Geology
GO 523 Advanced Igneous Petrology
GO 531 Regional Geology of North America
GO 541 Methods and Techniques of Gathering, Measuring and Testing Geologic Data
GO 551 Current Topics in Geology
GO 560 Geochemistry
GO 583 Thesis
GO 596 Directed Research
GO 597 Special Topics
GO 598 Graduate Seminar
Idaho State University Courses:
Geol 648 Research Problems
Geol 650 Thesis

University of Idaho Courses:
Hydro 502 Directed Study
Hydro 569 Contaminant Hydrology
Hydro 577 Computer Applications in Geohydrology

Master of Science, Geophysics
Boise State University offers a Master of Science degree in geophysics through the Department of Geosciences. The objective of the program is to prepare students for professional employment and for geoscience study at the Ph.D. level. The degree requires 30 total credits distributed as follows: 12 graduate geophysics course credits; 12 credits in approved science or engineering courses; and 6 thesis research credits leading to an approved thesis. Current research emphases at BSU are in high-resolution geophysical methods, marine geophysics, geothermal systems, earthquake seismology and seismic hazards, computer-aided interactive interpretation, and studies of crustal deformation.

The BSU Master of Science program in geophysics interacts cooperatively with the University of Idaho (UoI) Master of Science program in geophysics through the joint listing of graduate geophysics courses, the application of BSU graduate geophysics courses for UoI credit, and the application of UoI graduate geophysics courses for BSU credit. Cooperation is extended to Idaho State University (ISU) in that up to 12 credits earned in approved courses at ISU can be applied to a Master of Science in geophysics at BSU or UoI. In addition, faculty at BSU, UoI, and ISU may form joint supervisory committees when expertise from outside of the student’s resident institution is judged to be beneficial. These cooperative efforts by BSU, UoI, and ISU add flexibility and geographic accessibility to graduate education in geophysics within Idaho.

Admission Criteria: Applicants should have a BS or equivalent degree from an accredited institution in one of the following fields: geophysics, geology, hydrology, physics, chemistry, mathematics, engineering, or business. Evaluation for admission requires three personal references, transcripts from all colleges and universities attended, and scores on the GRE General Test. Students whose native language is not English must submit a TOEFL score of 550 or higher. A copy of a report resulting from a previous university course, professional position, or research experience is also requested as evidence of the applicant’s ability to complete a significant project and write an acceptable scientific report. Pre-ference is given to those applicants whose records indicate a high proba-bility for successful completion of publishable graduate research. Application materials should be requested from Graduate Admissions, Boise State University, 1910 University Drive, Boise, ID 83725, telephone (208) 385-3903.

Graduate Assistantships: Graduate assistantships including tuition and fee waivers are funded from three sources: appropriated state funds, endowments, and research grants and contracts. Applicants to the M.S. Geophysics program who submit all documents required by the administration procedure by February 1 of any given year will be considered for state appropriated or endowed graduate assistantships to start the following fall semester; notification of successful applicants will be made by March and April. Information on graduate assistantships funded by research grants and contracts is available from the Coordinator of the geophysics graduate program.

Supervisory Committee: Each admitted student will be assigned a supervisory committee whose purpose is to design the program of courses, guide the student’s research, conduct the thesis defense, and approve the final thesis. The supervisory committee consists of at least three members: a chairperson from BSU who takes on the primary advising role, and at least two members chosen in any combination from BSU, UoI, ISU, or other institutions (selection based on a direct interest in the student’s research). The Coordinator of the geophysics graduate program works...
Closely with each supervisory committee and will serve as temporary advisor to each new student until a supervisory committee can be assigned.

Credit Requirements: The BSU Master of Science in geophysics requires 30 semester credits distributed as follows:

1. 12 credits in BSU GP 500-level geophysics courses approved by the supervisory committee and by the Coordinator of the geophysics graduate program.
2. 12 credits in elective courses approved by the supervisory committee and by the Coordinator of the geophysics graduate program.
3. 6 credits for research leading to a written thesis (BSU GP 593).

All 30 credits must be taken for a letter grade. On-campus geophysics graduate students are also required to take geophysics graduate seminar (GP 598) for a letter grade whenever it is offered. Transfer credits may not be used for requirements 1 or 2 except that a maximum of 6 credits of requirement 1 may be satisfied with Uol 500-level geophysics courses. A maximum of 9 transfer credits may be applied to meet requirement 2 except that all 12 credits of requirement 2 may be satisfied with transfer credits from Uol and/or ISU. Certain courses are normally ineligible for requirements 1 and 2 including courses applied to a previously obtained degree, courses used to meet admission requirements, and courses required to remedy background deficiencies. The purpose of requirement 1 is to broaden the student’s background in graduate level geophysics in a formal classroom setting; independent study, directed research, project, or special topics courses which do not fit this description are not applicable toward requirement 1. The purpose of requirement 2 is to provide an opportunity for elective courses within geophysics or in an associated field of science or engineering; these are often courses which are appropriate to a student’s thesis, post-graduate education, or employment goals. In all cases, the courses applied to meet the credit requirements 1 and 2 must be approved by the student’s supervisory committee and by the Coordinator of the geophysics graduate program, and the majority of the 30-credit total requirement (i.e., at least 16 credits) must be earned in residence at BSU.

Thesis Requirements: A thesis representing research of sufficient quality to warrant publication in a peer-reviewed journal is required of all candidates for the Master of Science in geophysics. Actual publication is not required, but is held out as a goal for all graduate students. The research results must be presented at a formal public defense, and the final written thesis must be approved by the supervisory committee, by the Coordinator of the geophysics graduate program, and by the Dean of the Graduate College. In order to provide sufficient time for thorough evaluation of thesis research, a student should allow 3-6 months between preparation of the first draft of the thesis and the day of the formal defense. Frequent communication between the student, the supervisory committee, and the Coordinator is essential throughout this period.

Graduate College Requirements: The general requirements of the BSU Graduate College also govern the Master of Science in geophysics degree program.

BSU Geophysics Course Offerings

See page 23 for definition of course numbering system

GP GEOPHYSICS
See appropriate department listing for detailed description of undergraduate courses (400G level) which may be taken for graduate credit.

GP 410G EXPLORATION WELL LOGGING(2-3-3)(F).

GP 420G GEOPHYSICAL APPLICATIONS OF DIGITAL SIGNAL PROCESSING(3-0-3)(S).

GP 430G MATHEMATICAL MODELING IN GEOPHYSICS(3-0-3)(S).

Graduate

GP 510 INTEGRATED GEOLOGY AND GEOPHYSICS IN PETROLEUM, MINERAL AND GROUNDWATER EXPLORATION AND DEVELOPMENT (4-0-4)(F). Role of integrated geological and geophysical methods in the design and implementation of natural resource exploration and development projects. Emphasis depends on class interests, but typical examples will be drawn from petroleum, mineral, and groundwater industries. Requires extensive outside reading and study of case histories. Project and report required. PREREQ: PERMVINST.

GP 515 STRATIGRAPHIC INTERPRETATION OF SEISMIC DATA (3-0-3)(S). Seismic sequence and seismic facies analysis, isochronous reflections, seismic stratigraphy of depositional systems, sea level cycles, seismic modeling, hydrocarbon indicators, lithology from velocity and seismic amplitude variation with offset, use of shear waves and vertical seismic profiling. Interpretation project involving seismic modeling. PREREQ: GP 330G.

GP 520 ENGINEERING GEOPHYSICS (3-0-3)(F). Geophysical techniques applied to the evaluation of shallow subsurface structural and physical properties at engineering, industrial, waste disposal, and construction sites. Application of high-resolution geophysical methods to problems in seismic hazards, groundwater, hazardous waste, land subsidence, construction of critical facilities and landfills. Field and laboratory exercises. PREREQ: GP 301, GP 410G.


Uol Graduate Course Offerings

Geoph 502 Directed Study ARRD
Geoph 520 Exploration Geophysics 3
Geoph 521 Mining Geophysics 3
Geoph 523 Seismic Stratigraphy 3
Geoph/Geol 540 Prebetic Methods 3
Geoph/Geol Isopotes 3
GeophyGeol 590 Photography 3
Geoph/Min 503 Stress Analysis 3
Geoph/Min 504 Advanced Rock Mechanics 3

Master of Arts in History

Objective
The Master of Arts in History degree at Boise State University is designed to prepare students for advanced work in the field of history.

Application Procedures
Application for admission to the History graduate program may be made at any time. It is recommended, however, that the prospective student make application at the Graduate Admissions Office at least one full semester prior to expected enrollment. At that time the student will pay the application fee, fill out an application form and make provision to have transcripts from all schools of higher education previously attended sent directly to Boise State University Graduate Admissions office.

Applicants must also send directly to the History Department Graduate Coordinator a letter of application explaining why the student wishes to be admitted, a sample of the applicant’s writing skills (seminar paper, senior thesis, or published article) and at least two letters of recommendation from persons competent to judge the applicant’s potential for graduate study in history. The History Department will take no action on the application until all of the above materials have been submitted.

Admissions
Admission will normally be granted to applicants who hold a bachelor’s degree in history, or its equivalent, from an accredited institution or who have a strong history background (more than 20 semester credits) within their bachelor program. Those students without a strong history background may be required to remove deficiencies before admission.

Applicants for regular status in the History Graduate program must have maintained a GPA of at least 3.00 overall, a 3.20 in history and a 3.20 overall for the last two years of undergraduate study. Students not meeting minimum requirements for regular status are encouraged to apply for provisional status.
Students selecting a double emphasis will develop their program in consultation with their advisory committee. Applicants must also be aware that some areas require foreign language skills or some other research tool.

Program Requirements

The Master of Arts in History will consist of a minimum of thirty-three hours planned by the student in conjunction with the graduate coordinator or with the student's advisory committee. Students have two options from which to choose:

1. Option 1. 33 credits with thesis
   - core ........................................................................ 6 credits
   - major field .............................................................. 12 credits
   - minor field .............................................................. 9 credits
   - thesis ........................................................................ 6 credits

2. Option 2. 33 credits with project
   - core ........................................................................ 6 credits
   - major field .............................................................. 15 credits
   - minor field .............................................................. 9 credits
   - project ...................................................................... 3 credits

Regardless of which option is selected candidates for the M.A. must publicly defend their thesis or project at an oral examination scheduled by their advisory committee.

REQUIRED COURSES (CORE):

<table>
<thead>
<tr>
<th>HY HISTORY</th>
<th>3 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historians &amp; Historical Interpretation HY 500</td>
<td></td>
</tr>
<tr>
<td>Sources of Western Traditions HY 512</td>
<td>3 credits</td>
</tr>
<tr>
<td>Sources of Nonwestern Traditions HY 513</td>
<td>3 credits</td>
</tr>
<tr>
<td>Sources of American Values HY 520</td>
<td>3 credits</td>
</tr>
</tbody>
</table>

Course Offerings

See page 23 for definition of course numbering system.

HY HISTORY

Undergraduate

See appropriate department listing for detailed course descriptions of those undergraduate courses which may be taken for graduate credit.

HY 334G UNITED STATES SOCIAL AND CULTURAL HISTORY (3-0-3) (F/S).
HY 423G EUROPEAN DIPLOMATIC HISTORY 1871--PRESENT (3-0-3) (F/S).

Graduate

HY 500 HISTORIANS AND HISTORICAL INTERPRETATION (3-0-3). A study of major historians and schools of historical interpretation from Ancient Greece to the twentieth century. Discussion concentrates on written history and the problems of interpretation. Oral and written participation and a major paper are required. PREREQ: admission to graduate program or PERM/CHAIR.

HY 512 SOURCES OF WESTERN TRADITION (3-0-3). Selected topics in the History of Western thought beginning with the Classical Greeks through the present era. A study of intellectual and cultural trends reflected in the western philosophical tradition, both secular and religious. PREREQ: Admission to the graduate program or PERM/CHAIR.

HY 513 SOURCES OF NONWESTERN TRADITION (3-0-3). Selected topics dealing with the problems and possibilities of the historical study of societies other than one's own, with special reference to Africa, Asia and Latin America. PREREQ: Admission to the graduate program or PERM/CHAIR.

HY 520 SOURCES OF AMERICAN VALUES (3-0-3). 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 thereafter and the reaction to industrialism. PREREQ: Admission to graduate program or PERM/CHAIR.

HY 580 GRADUATE SEMINAR IN U.S. HISTORY (3-0-3). Studies of the principal themes or problems within well-defined periods of 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. PREREQ: Admission to the graduate program or PERM/CHAIR.

HY 581 GRADUATE SEMINAR IN EUROPEAN HISTORY (3-0-3). Critical analysis of source materials and historical literature on topics of restricted scope in European history. Emphasizes reading, discussion, writing and research. Student participation in discussion and reports are expected. PREREQ: Admission to graduate program or PERM/CHAIR.

HY 582 GRADUATE SEMINAR IN THIRD WORLD HISTORY (3-0-3). Critical analysis of source materials and historical literature on topics of restricted scope in Third World history. Reports and discussion on various aspects of the topic under consideration will be performed by the students under the direction of the instructor. Emphasis will be placed on reading, discussion, research and writing. PREREQ: Admission to graduate program or PERM/CHAIR.

HY 590 PRACTICUM/INTERNSHIP
HY 591 PROJECT (3 credits).
HY 592 HISTORY COLLOQUIUM (3 credits).
HY 593 THESIS (6 credits).
HY 594 WORKSHOP

Incompletes in any graduate course, except thesis (HY 593) and project (HY 591), will be granted only under extraordinary circumstances and the work must be made up before the student enters for the subsequent semester. Students wishing to take an overload (more than 9 graduate credits) must secure written permission from their advisory committee or chairperson, the graduate coordinator and the department chairperson.

Master of Arts or Science in Interdisciplinary Studies

General Information

Boise State University offers a Master of Arts/Master of Science degree program in Interdisciplinary Studies. In consultation with faculty, students may combine courses from more than one school or college or more than one department to create an individualized pattern of educational experience. The program is designed for mature students who wish to continue education at the graduate level but do not seek specialized training concentrated in a major area. This program is not a substitute for the traditional master's degree; rather, it is intended for students with broader interests in several fields or those whose career goals do not match fully with a single identifiable academic unit or department. Emphasis is placed on continued intellectual and cultural development in a constantly changing society where new career interests may extend over several traditional specializations.

The Interdisciplinary Studies Program is administered by the Graduate College, housed in the College of Arts and Sciences and directly supervised by the Director of Interdisciplinary Studies who is the Associate Dean of that College. A university-wide Interdisciplinary Studies Committee consisting of the Graduate Dean and one member from each academic college oversees the program. The Director of Interdisciplinary Studies serves as the Chairperson of that Committee. Each student in the program will also have a graduate committee composed of three faculty members from the disciplines making up the interdisciplinary program. The student's graduate committee will have the responsibility of helping the student select his or her particular course of study and will recommend to the Interdisciplinary Studies Committee that it be accepted as the student's formal Plan of Study. The Interdisciplinary Studies Committee shall be responsible for approving the members of the student's graduate committee and approving the student's plan of study.

Admission Requirements

1. File an application for admission to the Graduate College in room MG 118, and request official transcripts from each institution attended previously to be sent directly to the Graduate Admissions Office.

2. The standard admission policy for applicants to the BSU Graduate College will be followed.

3. The applicant must submit an application for entrance into the Interdisciplinary Studies Degree Program to the Director of Interdisciplinary Studies in room SN 106.

4. The applicant must maintain a cumulative GPA of 3.00.

5. The applicant must submit to the Director of Interdisciplinary Studies a three page written justification and rationale of why the courses in
his or her Degree Plan are included in the Plan and how they will enable the applicant to accomplish identified intellectual, professional, or vocational goals.

Degree Requirements
Each program is developed individually according to the student's interests and background but must be intellectually defensible and clearly interdisciplinary in nature. The following must be incorporated into the program:
1. Course work must be selected from a minimum of two academic areas.
2. As many as 11 credits of 300-400G courses may be applied toward the program.
3. Courses may not be challenged for credit; if comparable content can be demonstrated, other courses will be substituted. No more than 6 transfer credits will be accepted toward the program.
4. The degree will consist of a total of 33 credits, of which no more than 16 credits may be earned in the College of Business. Students may select from a thesis/project or from a written examination option. The thesis/project will carry 6 credits.
5. For those students selecting the examination option, the student's graduate committee will draw up the examination questions. Following the written examination, the student will meet with the committee for an oral review of the results.
6. For students selecting the thesis/project option, upon completion of the work, the student will meet with his or her committee for a final review of the work.
7. The thesis/project option and the examination option must both require the student to draw critically upon the two or more disciplines studied and to integrate disciplinary insights.
8. All work offered toward the MA/MS Degree Program in Interdisciplinary Studies must be completed within a period of seven academic calendar years.

Procedures
Following an interview, the Director of Interdisciplinary Studies will assist the students in forming a graduate committee. The student will develop the program with the committee; the Interdisciplinary Studies Committee (consisting of one representative from each academic College and the Graduate Dean) will judge whether the plan is in keeping with the policies established, and approve said plan for acceptance for the degree. Revisions to the plan of study must be approved by the student's graduate committee chairperson, the Director of Interdisciplinary Studies, and the Graduate Dean.

Master Science in Instructional & Performance Technology
The Master of Science Degree in Instructional & Performance Technology (IPT) is intended to prepare students for careers in the areas of instructional design, job performance improvement, human resources, training, and training management. The IPT program prepares students with skills needed to identify, analyze, and solve a variety of human performance problems in settings such as industry, business, the military, education, and private consulting.

The M.S. program emphasizes scholarly understanding of research and theory as they apply to instructional technology and performance technology. Students are also exposed to a broad range of practical skills and knowledge in instructional systems design, program development, computer assisted instruction, consulting, media selection/utilization, instructional use of computers, and program evaluation. In addition, students learn how to appraise and select proposed training programs and delivery methods.

Human performance improvement in organizations requires more than education or training alone. In this program students explore the many factors that affect human performance, including: knowledge and skills, job expectations, task design, incentive systems, feedback systems, tools, job aids, and resources. In the IPT program, students learn how to think strategically, be proactive, and design interventions (predominately training or instruction) that will get the desired results. They learn how to define and clarify those results and how to integrate training with other factors that impact human performance.

Distance Education Option
In addition to the traditional mode of delivering on-campus classes, Boise State University also offers its M.S. program in IPT through distance education methods. This constitutes an entirely nonresident course of study for a complete M.S. in IPT. Students all over the continent participate in BSU's IPT program from their home locations through time and location—flexible (TLF) classes.

TLF classes are conducted by computer conferencing (via personal computers and telephone connections). TLF classes are distinct from correspondence courses in many important ways. Two of these are: (a) each student in the class sees the questions and comments of all the rest of the students in a natural flow of normal class discussion and (b) interaction between teacher and student and among peer students is much more immediate than possible through mailing systems. Computer conferencing permits (and encourages) a high level of interaction among class members.

TLF classes are delivered through a combination of media in addition to the medium of computer conferencing. For example, for any given course, the media used might include printed materials, videotapes, audio tapes, computer-assisted instruction, computer programs, data bases, slow-scan video, facsimiles, and personal telephone contact.

The distance option of the IPT program uses the same admission standards and required courses as the on-campus option. However, the course fees are higher than for on-campus classes, special equipment is required, and course offerings are scheduled through Continuing Education. (TLF courses do not follow the normal schedule indicated in the course descriptions below; schedules for TLF courses are available in official release from Continuing Education.) The reason for the additional cost is that the TLF courses are entirely self-sustaining and are not state-tax subsidized. TLF courses are available to on-campus students if they choose to pay the additional expense.

In order to be admitted to the distance option, applicants must own or have convenient access (a minimum of 2 hours per day, 5 days per week) to a complete computer system which includes the following components: a fully IBM-compatible PS/2, IBM AT, 286, 386, or 486 color graphics (EGA or better) capability; and at least 10 megabytes of free space available on a hard disk drive (this means applicants must have at least a 20 megabyte hard drive); DOS 3.0, or higher (DOS 5.0 is recommended); a Hayes-compatible, 2400 BAUD modem (zoom modem recommended); and a 3.5" floppy drive or the means to convert 3.5" floppies to the size and density typically used by the applicant. Distance students are encouraged (but not required) to gain access to a fax machine for both sending and spontaneous receiving.

The distance option is fully accredited by the Northwest Association of Schools and Colleges (NASC). Distance students in the program have been enthusiastic about the rigor and value of their academic experience. The distance option clearly meets the needs of busy professionals who are seeking to increase their knowledge, skills, and credibility in the training profession but cannot relocate to attend traditional courses.

Admission Criteria: Admission decisions will be based on the following information:
1. Documented evidence of an earned baccalaureate degree from an accredited institution.
2. A minimum GPA of 2.75 overall or 3.0 for the last two years of course work at accredited institutions (all course work must be verified by official transcripts). If a person fails to meet the GPA requirement, that person may apply for special consideration for provisional admission.
3. A minimum score of 50 on the Miller Analog Test (MAT) and a minimum score of 80 on the IPT entrance assessment.
4. Appropriateness of background experience and of the fit between the prospective student's career goals and what the IPT program offers.

Requirements:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intro Instructional &amp; Performance Technology IP 536</td>
<td>3</td>
</tr>
<tr>
<td>Instructional Design IP 537</td>
<td></td>
</tr>
<tr>
<td>Evaluation Methodology IP 530</td>
<td></td>
</tr>
<tr>
<td>*Instructional Theory TE 582</td>
<td></td>
</tr>
<tr>
<td>*Instructional Courseware Design TE 538</td>
<td></td>
</tr>
<tr>
<td>Delivery Technology for Instruction IP 550</td>
<td></td>
</tr>
<tr>
<td>Project IP 591 or Thesis IP 593</td>
<td>6</td>
</tr>
<tr>
<td><strong>Requirements subtotal</strong></td>
<td>24</td>
</tr>
</tbody>
</table>

Electives:
Students are expected to take at least 9 credits of relevant elective course work. Appropriate electives will be selected by the student and
his/her advisor based on an evaluation of the student's educational and professional goals.

Suggestions:
- Fund of Educ Research TE 551 (3)
- Human Factors Engineering IP 561 (3)
- Artificial Intelligence Applications for Instruction IP 539 (3)
- Management Concerns for Performance Technologists IP 571 (3)
- Directed Research IP 596 (3)
- Practicum/Internship IP 590 (3)
- Selected Topics in Instructional Technology IP 583 (3)
- Organizational Theory & Behavior MG 528 (3)
- Communication Techniques for Managers AS 512 (3)
- Quantitative Methods for Public Decisions PA 511 (3)
- Advanced Technical Communication E 502 (3)
- Public Policy Process PA 501 (3)

Electives sub-total 9

PROGRAM TOTAL 33

*See page 185 for course descriptions.

Course Offerings

See page 23 for definition of course numbering system

IP INSTRUCTIONAL/PERFORMANCE TECHNOLOGY

IP 520 VIDEO DELIVERY SYSTEMS (3-0-3)(Demand). Students will investigate the video and audio applications of technology for instruction such as Instructional Television Fixed Service (ITFS), teleconferences, and educational television. PREREQ: PERM/INST.

IP 530 EVALUATION METHODOLOGY (3-0-3)(SU). Students learn how to use methods of inquiry and analysis to evaluate the effectiveness of instructional or performance improvement programs. They explore various models of both formative and summative evaluations and ways to implement the results of such research efforts.

IP 536 INTRODUCTION TO INSTRUCTIONAL AND PERFORMANCE TECHNOLOGY (3-0-3)(F). This course provides an overview of the field of Instructional and Performance Technology, its products and processes. Students learn the historical, philosophical, and theoretical foundations of the field.

IP 537 INSTRUCTIONAL DESIGN (3-0-3)(F). This course gives an overview of several models for instructional systems design and examines the processes involved in designing instructional interventions, such as analyzing instructional needs, determining and organizing content and process, selecting appropriate media, evaluating, and revising. PREREQ: IP 536 or PERM/INST.

IP 539 ARTIFICIAL INTELLIGENCE APPLICATIONS FOR INSTRUCTION (3-0-3)(Demand). This course provides students with an overview of artificial intelligence and an introduction to expert systems. Students learn how expert systems can be used to increase the efficiency and effectiveness of instruction and performance interventions.

IP 550 DELIVERY TECHNOLOGY FOR INSTRUCTION (3-0-3)(F). Students investigate the applications of various types of media and technology to instruction and performance intervention. Special emphasis is placed on video applications. PREREQ: IP 537 or PERM/INST.

IP 561 HUMAN FACTORS ENGINEERING (3-0-3)(Demand). This course provides a basic introduction to the design of performance environments (including human-machine and human-human interfaces). Students learn principles of work and learning design systems that help to improve human performance.

IP 571 MANAGEMENT CONCERNS FOR PERFORMANCE TECHNOLOGISTS (3-0-3)(Demand). This course provides students with an exposure to current topics in management which are related to understanding performance systems.

IP 583 SELECTED TOPICS IN INSTRUCTIONAL TECHNOLOGY (3-0-3)(Demand). Students explore issues and topics of current interest. Content will be revised continually to reflect current developments in the field of instructional & performance technology. PREREQ: IP 536 or PERM/INST.

IP 590 PRACTICUM/INTERNSHIP (Variable).
- IP 591 PROJECT (0-V-6).
- IP 593 THESIS (0-V-6).

IP 596 DIRECTED RESEARCH (Variable). Master's programs may include directed research credits at the discretion of the graduate student's supervising professor or committee. A student may earn a maximum of 9 semester hours with no more than 6 in a given semester or session.

Master of Music—Performance/Pedagogy

Master of Music—Music Education
1. Admission Requirements: The Master's in Music degree, Music Education emphasis, is designed to meet the needs of music education specialists. Admission will be granted to applicants who hold a Bachelor's degree in music from an accredited college or university and who give promise of meeting the standards set by the Department of Music.

2. Predictive Examination: Before a graduate student can be admitted to regular status, predictive examinations in music education, music history, and music theory must be completed. The purpose of predictive examinations is to determine the student's strengths and weaknesses so that the individual academic program can be formulated that will best serve the student's needs. Any course used to remove deficiencies does not count toward the degree.

3. Graduation Requirements: (Total 36-39 credits) 36 credits minimum, stipulated below, are required for graduation. The actual number of credit hours may vary depending on the needs of individual students as determined by the results of predictive examinations. Candidates are required to establish an area of emphasis in one of the following: elementary, choral, or instrumental music education.

A. Core Courses
- Intro to Music Research MU 503 (3)
- New Developments in Music Education MU 570 (3)
- History & Philosophy of Music Education MU 576 (3)

B. Non-Music Education Courses
- Music Theory (3)
- Music History (3)
- Private Music lessons (2 semesters minimum) (4)
- Music Ensemble (2)

C. Music Electives
1) 6 credits in the student's area of emphasis: elementary general music, choral music, or instrumental music
2) 3 credits additional approved electives in music
3) No more than four (4) workshop elective credits, of which one may be a music conference credit, may be applied towards the degree.

D. Comprehensive Examination
A written comprehensive examination in music must be completed prior to registration for the student's culminating activity. This exam will be tailored to each student's graduate course work.

E. Oral Examination
If needed, an oral examination relating to the written comprehensive examination or to the culminating activity may be requested at the discretion of the candidate's Committee.

F. Culminating Activity (3-6 credits from one of the choices listed below)

1) Lecture/Recital MA 551 (3)
2) Project MU 591
   a) Culminating Paper (3)
   b) Research in Selected Topics (20 questions: 4 areas) (3)
3) Thesis MU 593 (6)

Master of Music—Performance/Pedagogy

1. Performance/Pedagogy Core
- Intro to Music Research MU 503 (3)
- Music Lit of Major Instrument MU 557 or Voice (3)
- Music Literature Elective (3)
- Music History Elective (3)

2. Performance Option
- Pedagogy or additional Theory or History (6)
- Graduate Music Elective (3)
- Private Lessons MU 544 (2 semesters minimum) (8)
- Graduate Performance Recital MA 546 (3)

3. Pedagogy Option
- Pedagogy MU 563-564 (6)
- Additional Theory or History (6)
- Private Lessons MU 545 (2 semesters minimum) (4)
- Graduate Recital or Thesis
   (Choose 1, 2, or 3 below:) (3-6)
   1) Graduate Performance Recital MA 546 (3)
   2) Lecture Recital MA 544 (3)
   3) Thesis MU 593 (6)

TOTAL PROGRAM 31-32

Course Offerings

See page 23 for definition of course numbering system

MA MUSIC APPLIED—PERFORMANCE CLASSES, RECITALS

MA 544 LECTURE/RECITAL (0-V-3). A full lecture/recital elected as the culminating project for the Master of Music degree, Music Education or Performance/Pedagogy emphasis major. The lecture is to demonstrate scholarly study on a selected topic and
Students will be assigned on the basis of an audition. Performance, Technical Study, Musical Interpretation, Literature, and Teaching Technique will be stressed. All 500 level MC courses are repeatable. See undergraduate Private Lesson Performance Studies course numbering system for explanation of course numbers.

**MC 501 (0-5-1), 502 (0-5-2), 504 (0-1-4).** Woodwind instruments private lessons.

**MC 511 (0-5-1), 512 (0-5-2), 514 (0-1-4).** Brass instruments private lessons.

**MC 521 (0-3-1), 522 (0-3-2), 524 (0-1-4).** Percussion instruments private lessons.

**MC 531 (0-3-1), 532 (0-3-2), 534 (0-1-4).** Voice private lessons.

**MC 541 (0-5-1), 542 (0-5-2), 544 (0-1-4).** Keyboard instruments private lessons.

**MC 551 (0-5-1), 552 (0-5-2), 554 (0-1-4).** Fretted string instruments private lessons.

**MC 561 (0-5-1), 562 (0-5-2), 564 (0-1-4).** Bowed string instruments private lessons.

### ME MUSIC ENSEMBLE

**Undergraduate**

**ME 321G MARCHING BAND (0-V-1)(F).**

**ME 350G ORCHESTRA (0-5-1)(F).**

**Graduate**

**ME 510 CHORAL ENSEMBLE (0-2-1)(F).** A general chorus open to all interested students. The format of the classes will be related to the size of the enrollment, i.e., choir, chamber ensemble or collegium musicum.

**ME 515 OPERA THEATER (0-5-1).** Advanced study/experience in singing-acting technique and movement through performing in productions from the opera and/or musical theater repertoire. May be repeated for up to 4 credits maximum. PREREQ: PERM/INST.

**ME 520 INSTRUMENTAL ENSEMBLE (0-6-1)(F).** A performing group or groups will be formed, depending on the size of enrollment, such as trios, quartets, band or orchestra. Opportunities to perform ensemble music of various kinds will be given. Emphasis will be placed on techniques of ensemble playing, articulation, and proper performance practice of ensemble literature.

### MU MUSIC, GENERAL

#### Undergraduate

See appropriate department listing for detailed course descriptions of these undergraduate courses which may be taken for graduate credit.

**MU 410G ADVANCED FORM AND ANALYSIS (2-0-2)(S).**

**MU 423G SIXTEENTH CENTURY COUNTERPOINT (3-0-3)(F).**

**MU 424G COUNTERPOINT SINCE 1600 (3-0-3)(F).**

**MU 425G DICTION FOR SINGERS I (2-0-2)(F).**

**MU 426G DICTION FOR SINGERS II (2-0-2)(F).**

#### Graduate

**MU 501 HISTORY OF MUSIC IN THE UNITED STATES (3-0-3)(F).** Designed for either the non-specialist or specialist in music, this course will survey the role which music has played in the development of American culture. Among the topics covered will be early New England music, music of the Blacks, Indians, and other ethnic groups. Social and historical interrelationships with music will be examined and discussed.

**MU 503 INTRODUCTION TO MUSIC RESEARCH (3-0-3)(F).** This course will provide an introduction to the basic research literature pertinent to the student's major area of emphasis; an interpretation of research findings; and the means to develop skills and techniques needed for the writing of an extended research paper, thesis and/or dissertation, articles for publication and book/performance reviews.

**MU 505 SEMINAR IN CHORAL MUSIC: PERFORMANCE PRACTICES AND STYLES (3-0-3)(F).** An historical, generic survey of the repertoire in choral literature. Emphasis will be placed on facets of interpretation through a study of representative compositions from the standpoint of performance practice, stylistic techniques, and the reading of primary sources of pertinent information.

**MU 506 SEMINAR IN INSTRUMENTAL MUSIC: PERFORMANCE PRACTICES AND STYLES (3-0-3)(F).** Analysis and study of works from the Baroque through the present era. Particular attention will be paid to performance practices of ornamentation, style, tempo, scoring, dynamics, etc. Band transcriptions also included.

**MU 511 20TH CENTURY MUSICAL STUDIES (3-0-3)(F).** A study of 20th century compositional techniques and performance practices through analysis, discussion of aesthetics, listening, performance, and creative writing. Contemporary techniques and their notation, such as serialism, improvisation, electronic music, microtones, and multi-media, will be explored and their application to the secondary school music classroom will be discussed.

**MU 512 ELECTRONIC MUSIC APPLICATIONS (3-0-3)(F).** A historical overview of electronic music and music technology. Hands-on experience with digital and analog synthesizers, effects processors, sampling, tape decks, computers and related software, and MIDI. Emphasis will be placed on the application of fundamental techniques of electronic music to creative composition.

**MU 551 SEMINAR IN MEDIEVAL THROUGH BAROQUE PERFORMANCE PRACTICES (3-0-3)(F).** The study of music literature in Western Europe from the late Middle Ages through the Baroque period through the historical survey of performance practices and their practical application.

**MU 552 SEMINAR IN MODERN MUSIC: FORM AND STYLE (1750-1980) (3-0-3)(F).** The study of music literature in Western Europe from the late Middle Ages through the Baroque period through the historical survey of performance practices and their practical application.

**MU 553 MAJOR INSTRUMENT LITERATURE (3-0-3)(F).** Advanced survey of the major instrument literature. The student will prepare a research paper on several typical or important works in the repertoire.

**MU 561 ADVANCED CONDUCTING (3-0-3)(F).** Designed for secondary music teachers, this course provides opportunity to discover and analyze technical conducting problems, both instrumental and choral, in music of the various historical eras, which forms a significant part of the secondary school repertoire.

**MU 563 MAJOR INSTRUMENT PEDAGOGY I (3-0-3)(F).** An advanced and in-depth investigation of pedagogical techniques, materials and principles used in the private teaching studio. Readings in the philosophy of teaching will be included.

**MU 564 MAJOR INSTRUMENT PEDAGOGY II (3-0-3)(F).** Development of lesson plans and supervised studio teaching in both private and group settings. Recommended preparation: MU 563.

**MU 570 NEW DEVELOPMENTS IN MUSIC EDUCATION (3-0-3)(F).** Designed to acquaint the music specialist with recent ideas in music education, including major trends in curriculum, new methodology, music in integrated courses, and reports of major conferences and symposia.

**MU 571 ADVANCED PRACTICES AND PRINCIPLES IN TEACHING MUSIC IN THE ELEMENTARY SCHOOL (3-0-3)(F).** Designed for the general classroom teacher of music specialist, the course deals with the study of singing and listening materials relevant to classroom music; K-6. Sequential curriculum plans will be developed for singing and listening experiences. PREREQ: MU 371 or PERM/INST.

**MU 572 LISTENING AND SINGING EXPERIENCES FOR THE ELEMENTARY SCHOOL (3-0-3)(F).** A study of causes and solutions for problems occurring in the instrumental rehearsal. Areas to be covered include vocal methods and techniques, organization and repertoire planning.

**MU 573 ADVANCED METHODS AND TECHNIQUES FOR THE INSTRUMENTAL INSTRUCTOR (3-0-3)(F).** A study of causes and solutions for problems occurring in the instrumental rehearsal. Areas to be covered include vocal methods and techniques, organization and repertoire planning.

**MU 574 ADVANCED METHODS AND TECHNIQUES FOR THE CHORAL INSTRUCTOR (3-0-3)(F).** A study of causes and solutions for problems occurring in the choral rehearsal. Areas to be covered include vocal methods and techniques, organization and repertoire planning.

**MU 575 ADMINISTRATION OF SCHOOL MUSIC (3-0-3)(F).** A seminar in problems of music supervision and administration covering areas such as budget, scheduling, curriculum, personnel and philosophy.

**MU 576 HISTORY AND PHILOSOPHY OF MUSIC EDUCATION (3-0-3)(F).** Includes both an introduction to the history of music education in the United States, from colonial New England to the present; and alternate views about the philosophy of music, including aesthetic experience, aesthetic education, and the nature and meaning of music.

**MU 591 PROJECT (0-6).** Details for the culminating project can be found in requirements for Master's degree in secondary education, music emphasis.

**MU 593 THESIS (0-6).** A scholarly paper embodying results of original research which are used to substantiate a specific view.
Master of Public Administration

In 1984 the State Board of Education designated Boise State University as the primary emphasis institution for public affairs education within the State of Idaho. The Master of Public Administration program is an important component of BSU's public affairs commitment.

The Master of Public Administration (MPA) is a professional graduate degree designed to prepare students for positions of leadership in public service. Professionals in all levels of government, nonprofit organizations, and private sector governmental affairs departments take advantage of the general administrative and policy analysis skills offered by the MPA program. The curriculum also provides the theoretical and practical dimension of public management necessary to assist students seeking public service careers. Four areas of emphasis are offered leading toward the MPA degree: (1) general public administration; (2) human services administration; (3) criminal justice administration; and (4) environmental and natural resources administration.

Admission to the MPA Program

Persons who wish to enter the MPA Program must submit a graduate application to the Graduate Admissions Office. After submitting the graduate application, applicants receive a certificate of admission to enroll in courses at BSU. The certificate of admission is a PREREQUISITE to admission into the MPA program, but does not by itself guarantee admission into the MPA Program. (The student is advised to consult the Graduate College section of this catalog for more detail, including requirements for admission to the Graduate College.)

All applicants to the MPA Program must meet the following requirements prior to enrollment in MPA courses:

1. Meet with the Director of the Public Affairs Program to discuss the admission process, the applicant's career interests, and reasons for entering the MPA Program.
2. Possession of a baccalaureate degree from an accredited institution.
3. Demonstration of satisfactory academic competency by attaining an overall GPA of 3.0 and a minimum combined 1000 on the Graduate Record Examination (GRE) verbal and quantitative sections.
4. Submittal of official transcripts from all previous academic institutions to the Graduate Admissions Office.
5. Submittal of three letters of reference, in which the applicant's academic ability, past work performance, and potential for success in the program are evaluative.
6. Submittal of the MPA Data Form, and a brief statement explaining the applicant's educational and career objectives.
7. Completion of the following academic prerequisites (through academic course work or approved equivalent experience):
   A. American National Government (3 semester credits).
   B. State and Local Government (3 semester credits).
   C. Introduction to Public Administration (3 semester credits).
   D. At least 3 semester credits in each of two of the following disciplines: Sociology, Economics, or Psychology.
   E. At least 3 semester credits in one of the following: accounting, data processing, computer skills, or statistics.
8. For those students selecting Human Services Administration as their area of emphasis, completion of at least 9 semester credit hours in sociology or social work.
9. For those students selecting Criminal Justice Administration as their area of emphasis, completion of at least 9 semester credit hours in Criminal Justice.

Applicants who do not meet these requirements may be recommended by the MPA Admissions Committee for admission with provisional graduate status. However, these students must remove all deficiencies before they will be recommended for regular graduate status.

MPA students must successfully complete at least 33 semester credit hours of approved MPA course work. Some students may also be required to complete the public service internship, which is explained below. Eighteen semester credit hours are in courses selected from the prescribed "core area" courses. The fifteen additional semester credit hours are in the student's "area of emphasis."

As a final project, all MPA students must complete three credits of directed research (included in the 15 credits of emphasis) and take the written and oral comprehensive exams based on their course work.

Each MPA student must complete a program development form in consultation with the student's MPA academic advisor. In completing this form, courses from the "core area" and "area of emphasis" are selected.

Transfer of Graduate Courses: Because of a cooperative agreement made with Idaho State University and the University of Idaho, the MPA credits earned at those institutions are accepted into the Boise State University program. Transfer of credit from all other institutions is limited to nine (9) semester credits.

Core Area Requirements: Each MPA student is required to complete 18 semester credit hours of approved MPA course work in the following "core areas."

1. Administration in the Public Sector
2. Research Methods in Public Administration
3. Budgeting in the Public Sector
4. Public Policy Process
5. Human Resources Management
6. Organization and Management Concepts and Behavior

The core courses emphasize the knowledge and skills necessary to be effective in public service management and leadership. Each class includes and explores of student values and public service ethics.

"Area of Emphasis" Requirements: Each MPA student is to complete a minimum of 15 additional semester credit hours. These credit hours are in the student's "area of emphasis." Areas of emphasis are concentrations or majors in the program. Included in the 15 semester credit hours of the selected area of emphasis is the directed research project (3 semester credits).

Public Service Internship: Those MPA students with less than one year of work experience in a public sector or other public affairs agency are to complete a "public service internship." The internship is served in a government office at the local, state or national level or in an appropriate public affairs organization, such as a private, nonprofit agency. The credits received for the internship are in addition to the 33 semester credit hours from the core area and area of emphasis. The internship component comprises 6 semester credit hours.

The internship is meant to be a meaningful experience for both the MPA student and the organization in which the internship is served. Through the internship, students can further enhance their preparation for administrative work. At the same time, they are expected to make a valuable contribution to their assigned organizations. Therefore, the internship is usually served when the student is near completion of the MPA Program.

Course Selection

NOTE: Selection of courses is to be made in consultation with the student's academic advisor.

1. Administrative in the Public Sector: Administrative in the Public Sector PA 500.
5. Human Resources Management: Public Personnel Administration PA 505.

Optional "Areas of Emphasis"

1. General Public Administration: This area of emphasis is provided to accommodate those students desiring preparation in public administration as "generalists," rather than a "specialist" in a particular area of specialization. At BSU the student may select the remaining 13 semester credit hours of course work from these courses: Program Evaluation PA 510, Quantitative Methods for Public Decisions PA 511, Government Planning PA 520, Intergovernmental Relations PA 521, Policy Issues and the Public Administrator PA 522, Administrative Law PA 530, Labor Relations Law in the Public Sector PA 531, Ethics in the Public Sector PA 571. Any of the courses identified as "selected topics," which will be offered as staff availability permits, may be selected to satisfy the General Public Administration area of emphasis. Arrangements may also be made in the following courses: Reading and Conference PA 575, Directed Research PA 596, Conference/Workshop PA 599.
3. Human Services Administration: Conflict & Change in Social Settings SO 510, The Sociology of Age Group Stratification SO 511,
Social Demography SO 512, Selected Topics—Human Services Administration SO 580, Reading and Conference SO 595.

4. Environmental and Natural Resources Policy and Administration: Natural Resource Policy and Administration PA 540, Environmental and Regulatory Policy and Administration PA 541, Energy Politics PA 542, and Public Land Policy and Administration PA 543. "Selected Topics" courses will be offered to supplement area of emphasis requirements.

5. State and Local Government Administration and Human Resources Management may be offered in the near future.

Course Offerings

See page 23 for definition of course numbering system

PA PUBLIC AFFAIRS COURSES

PA 500 ADMINISTRATION IN THE PUBLIC SECTOR (3-0-3)(F/S). Designed to introduce students to the broad field of public administration at the graduate level. The course surveys a number of important issues in contemporary public administration, including an emphasis on political, legal, economic and social institutions and processes.

PA 501 PUBLIC POLICY PROCESS (3-0-3)(F/S). Process of policy-making both within an agency and within the total governmental process, emphasizing policy and program planning, policy implementation and the value system of administrators.

PA 502 ORGANIZATIONAL THEORY (3-0-3)(F/S). Theories of organizational behavior and management with special attention given to public agency organizations. Issues and problems related to the non-profit sector will also be addressed.

PA 503 TECHNIQUES OF ANALYSIS IN PUBLIC ADMINISTRATION (3-0-3)(F/S). An introduction to quantitative and qualitative data analysis with an emphasis on using descriptive and inferential statistics as tools in both public policy analysis and public program analysis. The use of quantitative analysis to support management decision-making is examined. Computers, especially microcomputers, will be used in the analysis of quantitative data.

PA 504 PUBLIC BUDGETING AND FINANCIAL ADMINISTRATION (3-0-3)(F/S). Determination of fiscal policy, budgeting processes, and governmental forms of budgeting. Consideration of fiscal policy and processes in various program areas. Emphasis on the interface between technical and political processes.

PA 505 PUBLIC PERSONNEL ADMINISTRATION (3-0-3)(F/S). An examination of the personnel/human resource management role as it has evolved in the public sector. The multiple responsibilities of personnel managers in the public sector will be examined, and the link between public policy and personnel management will be identified.

PA 510 PROGRAM EVALUATION (3-0-3)(F/S). Application of social science research to administrative problems, including practical methods of gathering, analyzing, and interpreting data. Theory and basic techniques underlying quantitative analysis of public programs.

PA 511 QUANTITATIVE METHODS FOR PUBLIC DECISIONS (3-0-3) (F/S). Methods for operations research and management science are used to analyze decisions as well as to plan and monitor program implementation. The usefulness of these methods in public sector and other public affairs organizations is considered.

PA 520 GOVERNMENT PLANNING (3-0-3)(F/S). A study of the theories, objectives, techniques, and problems of governmental planning within cities, metropolitan areas, and regions, as well as at the national level of government in the United States. A discussion of the planning profession and the politics of planning.

PA 521 INTERGOVERNMENTAL RELATIONS (3-0-3) (F/S). Intergovernment cooperation and conflict in the American federal system, including national-state-local, and interlocal relations. PREREQ: PO 101, 102, 303.

PA 522 POLICY ISSUES AND THE PUBLIC ADMINISTRATOR (3-0-3)(F/S). Appropriate, relevant topics dealing with public policy and the roles of public administrators are discussed using concepts from organization and administrative theory and policy analysis.

PA 530 ADMINISTRATIVE LAW (3-0-3)(F/S). Sources of power and duties of administrative agencies, rules and regulations made by agencies through investigation and hearings, judicial decisions and precedents relating to administrative activities. PREREQ: PO 303 or PERMISSION

PA 531 LABOR RELATIONS LAW IN THE PUBLIC SECTOR (3-0-3)(F/S). A case study of the trends and development of the legal context of labor-management relations in the public sector, including collective bargaining relationships, management rights and responsibilities, political and civil rights of public employees, and alternative modes of dispute resolution. Collective bargaining and grievance exercises will be conducted.

PA 540 NATURAL RESOURCE POLICY AND ADMINISTRATION (3-0-3) (F/S). Examines the major issues, actors, and policies in the area of natural resources. Topics include: land and water management and use, the natural resource policy environment, the roles and behaviors of natural resource agencies, and alternative natural resource policy futures.

PA 541 ENVIRONMENTAL AND REGULATORY POLICY AND ADMINISTRATION (3-0-3)(F/S). Examines aspects of environmental regulatory politics and policy. Topics examined include: pollution and waste policy, and intergovernmental environmental management.

PA 542 ENERGY POLICIES (3-0-3)(F/S). Topics to be discussed in this energy policy related course include: alternative energy policies, energy and environmental protection, and the politics of the formulation of a national energy policy.

PA 543 PUBLIC LAND POLICY AND ADMINISTRATION (3-0-3)(F/S). Examines the major issues, actors, and policies affecting the public lands of the United States. Special attention is given to the role of institutions, and organizations which influence how public land policy is made.

PA 571 ETHICS IN THE PUBLIC SECTOR (3-0-3)(F/S). Examination of ethical dilemmas facing civil servants and elected officials utilizing case studies, current ethics statutes, and approaches in the public administration literature to the subject.

SELECTED TOPICS (3-0-3). To be offered as staff availability permits.

PA 580 ADMINISTRATIVE THEORY, ORGANIZATION AND BEHAVIOR

PA 581 TECHNIQUES AND SKILLS

PA 582 PUBLIC POLICY AND POLICY ANALYSIS

PA 583 ADMINISTRATIVE LAW AND ETHICS

PA 584 THE EXECUTIVE AND THE ADMINISTRATIVE PROCESS

PA 585 INTERGOVERNMENTAL RELATIONS

PA 586 COMMUNITY AND REGIONAL PLANNING

PA 587 COMPARATIVE PUBLIC ADMINISTRATION AND PLANNING SYSTEMS

PA 590 PUBLIC SERVICE INTERNSHIP (variable credit). Arranged as field experience for those students with no prior experience in governmental or other organizational assignments. Such internships will be established and arranged made for placement through the director of the MPA Program.

PA 595 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.

PA 596 DIRECTED RESEARCH (1-3 credits). A special project undertaken by the MPA student as advanced tutorial study in a specialized area according to the needs and interests of the student. Course embodies research, discussions of the subject matter and procedures with a designated professor and a documental paper covering the subject of the independent study.

PA 599 CONFERENCE OR 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.

CR CRIMINAL JUSTICE ADMINISTRATION COURSES

CR 510 SPECIAL PROBLEMS IN CORRECTIONAL TREATMENT (3-0-3) (F/S). Analysis of contemporary problems in the correctional programs of American society.

CR 511 SPECIAL PROBLEMS OF THE JUVENILE AND YOUTHFUL OFFENDER (3-0-3)(F/S). Examination of current processes in juvenile justice, rehabilitation programs, probation and utilization of community-based resources. Emphasis will be placed on preventive rehabilitative measures at the local level.

CR 580 SELECTED TOPICS—CRIMINAL JUSTICE ADMINISTRATION (3-0-3)(F/S). Examination, evaluation and research regarding contemporary problems in the criminal justice system. Students will be required to do extensive reading and inquiry into special areas of concern and interest.

CR 595 READING AND CONFERENCE (1-2 credits). Directed reading on selected materials in criminal justice administration and discussion of these materials, as arranged and approved through major advisor.

CR 598 SEMINAR IN CRIMINAL JUSTICE ADMINISTRATION (2-0-2)(F/S). Intensive analysis of selected subject areas of the system of criminal justice administration. PREREQ: CR 301.

SO SOCIOLOGY COURSES

SO 501 THE SOCIOLOGY OF EDUCATION (3-0-3)(F/S). A sociological analysis of the American school system, its problems and the social forces that shape the schools in contemporary society.

SO 510 CONFLICT AND CHANGE IN SOCIO-CULTURAL SYSTEMS (3-0-3)(F/S). Intensive examination of social and cultural change as related to technological evolution, value changes and the resultant conflict in society.

SO 511 THE SOCIOLOGY OF AGE GROUP STRATIFICATION (3-0-3) (F/S). Examination of the sociological effect of age as a major dimension of social organization and stratification in American society and Western civilizations. 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.

SO 512 SOCIAL DEMOGRAPHY (3-0-3)(F/S). Techniques and methods for analyzing population growth, trends, and movement as reflected in actuarial data, birth-death rate; mobility, fertility and fecundity as these affect the societal patterns, especially planning for human service programs.

SO 571 FEMINIST SOCIOLOGICAL THEORY (3-0-3)(F/S). An examination of the major theories of feminist theory in Sociology or theory directly useful to sociologists in search of understanding and explaining gender relations. The student will encounter new perspectives in Sociology that arise from the exchange of new ideas, new data, exciting possibilities for social change, and the emergence of new theoretical models to understand gender relations. PREREQ: Graduate standing.

SO 580 SELECTED TOPICS—HUMAN SERVICES ADMINISTRATION (3 credits).
Master of Science in Raptor Biology

General Information
The Master of Science degree program in Raptor Biology is designed for students holding or expecting a bachelor degree in one of the disciplines of the biological sciences, to enhance their knowledge and understanding of raptor biology and ecology. The affiliation of the program with the World Center for Birds of Prey, affords students a unique opportunity to study the techniques of captive breeding and release of rare and endangered birds of prey. In addition, the Snake River Birds of Prey Natural Area, with the largest concentration of nesting raptors in North America, provides a unique circumstance to study raptor biology and ecology.

Admission Requirements
1. Submit a graduate application along with the $15.00 matriculation fee to the Graduate Admissions Office. Please submit the application PRIOR to submitting any additional items.
2. Have the Registrar(s) of ALL post-secondary institutions attended send official transcripts.
3. Submit three letters of recommendation.
4. Have Graduate Record Exam scores forwarded.

All of the above materials are to be sent directly to the Graduate Admissions Office, Boise State University, 1910 University Drive, Boise, ID 83725. In addition, the applicant should send a cover letter discussing the applicant’s professional goals and his or her reasons for wishing to study raptor biology, directly to the Biology Graduate Studies Coordinator.

REGULAR STATUS may be granted to those students who submit the above materials if they have maintained a 2.75 GPA over the last two years of undergraduate study and average a 50 percentile in verbal, quantitative, and analytical portions of the GRE.

PROVISIONAL STATUS may be granted to those applicants who do not meet the requirements for regular status or who may require additional course work as determined by the Biology Department.

Students may apply for admission at any time; however, applications must be completed by March 1 for Fall Semester admission in order to be considered for assistantships. Other forms of financial aid, such as loans or the College Work Study Program, are available to graduate students. Prospective students should contact the Financial Aid Office and consult the BSU catalog. Enrollment in the program is limited.

Degree Requirements
Once accepted, the student and the student’s major professor (thesis advisor) select two additional faculty to comprise the student’s thesis committee. This committee reviews the student’s program and thesis. The committee also determines if there are any specific academic deficiencies that the student must meet in addition to the M.S. degree requirements.

A minimum of thirty (30) credits are required. Two (2) credits of graduate seminar (B 598) and six (6) credits of thesis (B 593) are required as part of the minimum 30 credits. The final copy of the thesis must be approved by the student’s thesis committee and submitted to the Dean of the Graduate College at least three (3) weeks before commencement.

Course List (BSU)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>B 401G</td>
<td>Organic Evolution</td>
<td>3</td>
</tr>
<tr>
<td>B 412G</td>
<td>General Parasitology</td>
<td>3</td>
</tr>
<tr>
<td>B 415G</td>
<td>Applied and Environmental Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>B 420G</td>
<td>Immunology</td>
<td>3</td>
</tr>
<tr>
<td>B 423G</td>
<td>Ecology</td>
<td>4</td>
</tr>
<tr>
<td>B 424G</td>
<td>Biometry B 801</td>
<td>3</td>
</tr>
<tr>
<td>B 502</td>
<td>Population and Community Ecology B 502</td>
<td>3</td>
</tr>
<tr>
<td>B 503</td>
<td>Raptor Ecology B 506</td>
<td>3</td>
</tr>
<tr>
<td>B 598</td>
<td>Seminar B 598 (1 credit)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Thesis B 593</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Directed Research B 596 (6 credits maximum in a semester)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Mycology BT 330G</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Advanced Writing E 401</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Mathematical Modeling M 564</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Public Policy Process PA 501</td>
<td>3</td>
</tr>
</tbody>
</table>

In addition, approved upper division and graduate courses at Idaho State University and/or the University of Idaho may serve as part of the graduate program at the determination of the student’s thesis committee.

Thesis/Project
By the end of the eighth week of the second semester in which the student is enrolled, an outline of the proposed research project must be submitted to the committee members. A budget must be included as part of the research proposal. During the second semester, the student must present a seminar on the proposed research which may consist of a literature review, current research, or progress on the research project.

Course Offerings

See page 23 for definition of course numbering system
Course Offerings

See page 23 for definition of course numbering system

**SW SOCIAL WORK**

**SW 502 FOUNDATIONS OF SOCIAL WORK (2-0-3)(F)**. Reviews the historical development of social work practice and social welfare. Identifies contemporary practice roles and societal responses in addressing social problems and individual needs. Social work philosophy, knowledge, skills, and values are presented for understanding social work practice and institutional social welfare. PREREQ: Admission to MSW program.

**SW 503 SOCIAL WORK PRACTICE (3-0-3)(F)**. Social work practice methods are defined and the theoretical base for intervention with different size systems (individuals, families, groups, and communities) are reviewed. Knowledge and practice skills for conducting assessments and developing helping relationships are covered. Assessment and interventions within a pluralistic society, including cultural, racial and gender differences, are emphasized. COREQ: SW 503 L.

**SW 503 L SOCIAL WORK PRACTICE SKILLS LAB (0-1-1)(F)**. A skills based lab designed to develop knowledge for understanding organizations and communities including the differential positions of status and power based on racial, ethnic, and gender diversity. Requires 20 clock hours per week in the agency setting. Evaluation criteria for the course will include upholding social work practice standards for ethical conduct. PREREQ: SW 503.

**SW 505 SOCIAL POLICY I (3-0-3)(F)**. Critically looks at contemporary welfare policies, examining them for general efficiency, cost effectiveness and practicality, nondiscrimination, and equitable coverage. Students will gain experience in identifying policy problems, scrutinizing policy choices and communicating their thoughts. A variety of analytical tools for policy analysis will be reviewed.

**SW 506 SOCIAL POLICY II (3-0-3)(F)**. This advanced policy course is designed to give students the knowledge and skills to design, implement, and manage social welfare policy and programs with a specific focus on policies and regulations which impact families. Emphasis is given to general efficiency, cost effectiveness and practicality, nondiscrimination, and equitable coverage in shaping policies to meet individual and family needs. Strategies such as needs assessment, mediation, and conflict resolution are identified as tools used in policy development and implementation. PREREQ: SW 505.

**SW 512 HUMAN DEVELOPMENT AND DIVERSITY (3-0-3)(F)**. Life stage, development, and oppression theory are used to explore the interactions of socio-economic, psychological, and cultural influences on human behavior with a focus on social problems and unmet needs. Emphasis is directed towards people of color, women, and gay and lesbian lifestyles.

**SW 514 ETHNICITY, GENDER AND CLASS (1-0-1)(F,SU)**. An experiential course in a small group format identifying and defining attitudes, beliefs, and values for social work practice with individuals and families from groups representing ethnic, gender, and class differences. Focus is on bias and prejudice resulting from students' life experiences.

**SW 515 SOCIAL WORK PRACTICE IN ORGANIZATIONS AND COMMUNITIES (3-0-3)(SU)**. Develops knowledge for understanding organizations and communities considering the differential positions of status and power based on racial, ethnic, and gender diversity. Requires 20 clock hours per week in the agency setting. Evaluation criteria for the course will include upholding social work practice standards for ethical conduct. PREREQ: SW 503.
SW 584 SELECTED TOPICS: SOCIAL WORK PRACTICE WITH HISPANIC POPULATIONS (3-0-3). Examines theories and skills related to social work practice with Hispanic individuals and families. Emphasis is on strengthening and empowering Hispanic individuals and families to perform caregiving roles within their environment.

SW 585 SELECTED TOPICS: ADVANCED SOCIAL WORK PRACTICE IN ORGANIZATION AND COMMUNITIES (3-0-3). Building upon the content of SW 525, this course develops advanced knowledge for social work practice in organizations and communities.

SW 586 SELECTED TOPICS: ADVANCED SOCIAL WORK PRACTICE WITH GROUPS (3-0-3). Teaches theory and practice of advanced group work in social work. Develops group facilitation skills in relation to selected populations: children, adolescents involved in juvenile justice system, the elderly, ethnic minorities, women, adults molested as children, and alcohol and substance abusers. The course will identify criteria for selecting group participants, contracting, setting goals, and making interventions, with an emphasis on action strategies and outcome assessment.

SW 587 SELECTED TOPICS: SOCIAL WORK SUPERVISION (3-0-3). Teaches knowledge and skills to carry out social work supervision in a variety of settings with a specialized focus on supervision to enhance social work practice skills with individuals and families. Reviews theories of management, organizational theory and patterns of communication within work groups.

SW 591 SOCIAL WORK FINAL PROJECT (1-0-2)(S). An independent study project demonstrating integration of theory, practice, and research. Students design, conduct, and evaluate a project related to social work practice in the student's field of specialization. Project may be original research, replication of prior research, or demonstration application of practice techniques in the student's specific field of practice or problem area. A written report of professional social work journal length and quality with an oral presentation is required.

SW 594 WORKSHOP

SW 597 SPECIAL TOPICS:

SW 598 SEMINAR: PROFESSIONAL ISSUES IN SOCIAL WORK PRACTICE (2-0-1). Integrative seminar of practice knowledge, skills, values, and use of self. Focuses on the integration of theory and practice in social work. The seminar, in conjunction with SW 591, will serve as a "capstone" offering in the MSW program.

Additional Graduate Courses

Graduate Credits in Chemistry

There are graduate level courses available that may be offered on special request by the department of Chemistry. Descriptions of these courses follow. In addition, there are some undergraduate chemistry courses for which graduate credit may be earned. These are listed below, but complete course descriptions are found with the Department of Chemistry listing. See page 23 for definition of course numbering system.

C CHEMISTRY

Undergraduate

See appropriate department listing for detailed course descriptions of these undergraduate courses which may be taken for graduate credit.

C 401G-402G ADVANCED INORGANIC CHEMISTRY (3-0-3)(F).

C 411G INSTRUMENTAL ANALYSIS (2-6-4)(S).

C 422G ADVANCED TOPICS IN CHEMISTRY (3-0-3).

C 431G INTRODUCTION TO BIOCHEMISTRY (3-0-3)(F).

C 432G BIOCHEMISTRY LABORATORY (0-3-1)(S).

C 433G BIOCHEMISTRY (3-0-3)(S).

C 440G SPECTROMETRIC IDENTIFICATION (2-3-3)(S).

C 443G ADVANCED CHEMICAL PREPARATION LABORATORY (1-3-2)(S).

Graduate

C 501 HISTORY OF CHEMISTRY (3-0-3). 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. PREREQ: Two years of college chemistry and one year of history or PERM/INST. Offered on demand.

C 503 SPECTROSCOPY (3-0-3). Concepts and practical usage of ultra-violet, infrared, nuclear magnetic, mass spectroscopy. Emphasis will be placed on use of instruments and interpretation of spectra. Prior knowledge of spectroscopy not required. PREREQ: Eight hours of general chemistry and six hours of organic chemistry. Offered on demand.

C 509 CHEMISTRY OF LIFE PROCESSES(3-0-3). 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. PREREQ: One year of general chemistry and organic chemistry. Offered on demand.

C 511 ADVANCED ANALYTICAL CHEMISTRY (3-0-3). 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. PREREQ:Quantitative Analytical Chemistry of PERM/INST. Offered on demand.

C 515 NUCLEAR AND RADIOCHEMISTRY(3-0-3). Atomic and nuclear structure, radioactivity, nuclear reactions, radio-active decay laws, interaction of radiation with matter, detection chemistry. Offered on demand.

H HEALTH SCIENCE

H 513 ADVANCED ASSESSMENT OF ALCOHOL/DRUG PROBLEMS (3-3-4)(S). Clinical application of concepts and principles presented in the undergraduate courses. Students will be required to supervise and appraise the critical assessments of two or more undergraduate students for the duration of the semester. PREREQ: H 415.


H 549 COUNSELING TECHNIQUES FOR CHEMICAL DEPENDENCY (3-0-3)(F/S). (Cross listed TE 549). A study of counseling techniques and practices used in dealing with people of all ages who are chemically dependent. Special attention will be paid to the impact of chemical dependency in family members and counseling strategies for adolescents. This course may be taken for either H or TE but not both.

PHYSICAL SCIENCE

PS 501 BASIC PHYSICAL SCIENCE FOR SCIENCE TEACHERS (3-0-3). Selected concepts of matter and energy that are widely applicable toward understanding our physical environment. A one-semester course for non-Science majors.
Boise State University Faculty
Full-Time Official Faculty as of June, 1992
NOTE: The date in parentheses is the year of first appointment.

A
Ackley Louise (1969)
Assistant Professor, English; A.M., University of Washington
Affleck Stephen B (1981)
Professor, Construction Management & Engineering Technology; Ph.D., Iowa State University
Allen John W (1971)
Professor, Physics; Ph.D., Harvard University
Allen Robert L (1976)
Program Head; Senior Instructor, Industrial Mechanics/Automation; B.A., Boise State University
Allen Leslie (1991)
Assistant Professor, Political Science; Ph.D., Colorado State University
Anderson Calvin Kent (1990)
Assistant Professor, English; M.F.A., University of Montana
Anderson Holly L (1989)
Assistant Professor, Teacher Education; Ph.D., Utah State University
Anderson Jeffrey M (1986)
Director, Clinical Education, Respiratory Therapy; Assistant Professor, Respiratory Therapy; B.S., University of Wisconsin Madison
Anderson Michael R (1990)
Assistant Professor, Mathematics; Ph.D., University of Michigan
Anderson Robert (1970)
Professor, Mathematics; Ph.D., Michigan State University
Anooshian Linda James (1988)
Chairperson & Professor, Psychology; Ph.D., University of California, Riverside
Anson Robert (1990)
Assistant Professor, Computer Information Systems & Production Management; Ph.D., Indiana University
Aramburri Cary (1976)
Manager, Industrial/Mechanical Division; Senior Instructor, Welding; B.S. Education, University of Idaho
Ashworth Lonny J (1977)
Associate Professor, Respiratory Therapy; M.Ed., College of Idaho
Atakson Philip (1985)
Associate Professor, Theatre Arts; M.A., State University of New York, Binghamton
Ayers Kathleen L (1983)
Associate Professor, Mathematics; Ph.D., University of Idaho

B
Bahrs Robert (1988)
Associate Professor, Teacher Education; Ph.D., University of Texas, Austin
Baker Charles W (1968)
Professor, Biology; Ph.D., Oregon State University
Baker Richard P (1973)
Professor, Sociology; Ph.D., Washington State University
Baldassarre Joseph A (1975)
Associate Professor, Music; D.M.A., Case Western Reserve University
Balder Ronald (1978)
Program Head; Senior Instructor, Welding; M.Ed., University of Idaho
Baldwin John B (1971)
Professor, Music; Ph.D., Michigan State University
Bammel Brad P (1988)
Assistant Professor, Chemistry; Ph.D., University of New Orleans
Banks Richard C (1966)
Chairperson and Professor, Chemistry; Ph.D., Oregon State University
Barney Lloyd Dwayne (1986)
Associate Professor, Marketing & Finance; Ph.D., Texas A & M
Barr Robert (1991)
Dean and Professor, College of Education; Ph.D., Purdue University
Bartoszynski Tomasz (1990)
Assistant Professor, Mathematics; Ph.D., Warsaw University, Poland
Bauer-Simon Elizabeth (1991)
Assistant Professor, Art; M.F.A., Rochester Institute of Technology
Bauwens Jeannie (1984)
Associate Professor, Teacher Education; Ed.D., University of Idaho
Bechard Marc Joseph (1983)
Graduate Program Coordinator, Raptor Biology; Professor, Biology; Ph.D., Washington State University
Beckman Terrie L (1990)
Instructor, Dental Assisting; Certificate, Boise State University
Belfy Jeannie Marie (1983)
Associate Professor, Music; Ph.D., University of Kentucky
Benson Elmo B (1975)
Associate Professor, Art; Ed.D., University of Idaho
Bentley Elton B (1980)
Professor, Geosciences; Ph.D., University of Oregon
Benton Diane (1983)
Standard Instructor, Drafting Technology; B.S., La Salle Extension University
Associate Professor, Music; D.M.A., University of Wisconsin, Madison
Bernstein Louis (1989)
Assistant Professor, History; Ph.D., University of Kansas
Bient J Patrick (1969)
Professor, Teacher Education; Ed.D., University of Idaho
Bigelow John D (1982)
Professor, Management; Ph.D., Case Western Reserve University
Bixby Michael B (1981)
Professor, Management; J.D., University of Michigan
Blain Michael (1983)
Associate Professor, Sociology; Ph.D., University of Illinois
Blankenship Jim (1977)
Chairperson, Art; M.F.A., Otis Art Institute
Boren Robert R (1971)
Chairperson & Professor, Communication; Ph.D., Purdue University
Borman LeAnne (1987)
Chairperson & Professor, Practical Nursing; B.S., Idaho State University
Bouds Karen J (1973)
Professor, Business and Office Education; Ed.D., North Texas State University
Boyce Dale K (1968)
Professor, English; Ph.D., University of Missouri, Columbia
Bratt J Wallis (1970)
Associate Professor, Music; M.M., University of Utah
Breder Susan I (1969)
Chairperson & Professor, Computer Information Systems & Production Management; Ph.D., University of Iowa
Britton Alan P (1975)
Chairperson & Professor, Philosophy; Ph.D., University of Minnesota, Minneapolis
Brown Marcellus (1989)
Associate Professor, Music; M.M., University of Michigan
Brown Timothy (1977)
University Librarian; Associate Professor, Library Science; M.S., University of Illinois
Brownfield Theodore E (1979)
Advanced Instructor, Heavy-Duty Mechanics (Diesel)
Buffenbarger James (1991)
Assistant Professor, Mathematics; Ph.D., University of California-Davis
Buhler Peter (1980)
Professor, History; Ph.D., University of California, San Diego
Burkey Rolf (1973)
Program Head; Senior Instructor, Drafting Technology
Burmaster Orvis (1968)
Assistant Professor, English; M.A., University of Montana
Buss Stephen K (1979)
Chairperson & Associate Professor, Theatre Arts; Ph.D., Washington State University
Butler Doris A (1981)
Advanced Instructor, Business & Office Education; Diploma, Boise State University
Button Sherman G (1976)
Professor, Health, Physical Education and Recreation; Ph.D., University of Utah

C
Cadle Tom J (1987)
Director, Raptor Research; Professor, Raptor Biology; Ph.D., University of California, Los Angeles
Cadwell Dan E (1988)
Senior Instructor, Business Systems & Computer Repair; A.A.S., Boise State University
Callaghan Kathleen (1988)
Assistant Professor, Nursing; M.S., University of Wyoming
Gannett V. Luman ............................................. (1977)
Assistant Professor, Computer Information Systems & Production Management; Ph.D., University of Oregon
Gehrke Pamela ............................................ (1988)
Associate Professor, Counseling; M.S., University of Portland
Giangomerry Thomas ..................................... (1981)
Assistant Professor, Psychology; B.S., A&M University of Texas; M.S., University of Houston
Gill Karen S .............................................. (1985)
Assistant Professor, Catalog Librarian, Library; A.M.L.S., University of Michigan
Glasson Gustav H ......................................... (1979)
Standard Instructor, Machine Shop; Certificate, Mergenthaler Linotype Co
Glen Roy .................................................. (1982)
Associate Professor, Management; Ph.D., Case Western Reserve University
Gollick Sharon ............................................ (1990)
Standard Instructor, Health & Service Division, Diploma, Toledo Hospital
Gough Newell "Sandy" ..................................... (1989)
Assistant Professor, Management; Ph.D., University of Utah
Grantham Stephen B ....................................... (1982)
Chairperson & Associate Professor, Mathematics; Ph.D., University of Colorado
Green Gary I ............................................... (1988)
Professor, Computer Information Systems & Production Management; Ph.D., University of Washington
Griswold Dennis .......................................... (1989)
Manager and Instructor, Canyon County Division; M.Ed., College of Idaho
Griffin John ............................................... (1983)
Associate Professor, Mathematics; Ph.D., Washington State University
Gruber David .............................................. (1973)
Director, Graduate Studies—MBA; Professor, Computer Information Systems & Production Management; Ph.D., University of Utah
Guion Donald ............................................. (1990)
Associate Professor, Construction Management and Engineering Technologies; Ph.D., University of Idaho
Guerin Michael ........................................... (1986)
Assistant Professor, Teacher Education; Ph.D., University of Idaho
Guilford Charles .......................................... (1981)
Associate Professor, English; Ph.D., Northwestern University
Hadden James ............................................. (1972)
Assistant Professor, English; M.A., University of Washington
Hafer James A ............................................ (1982)
Associate Professor, Construction Management and Engineering Technologies; M.S.E.E., Montana State University
Hall Lee Edward .......................................... (1979)
Advanced Instructor, Auto Mechanics
Hambleton Benjamin E ................................... (1975)
Assistant Executive Vice President; Director, Simplot/Micron Instructional Technology Center; Assistant Professor, Teacher Education; M.Ed., Utah State University
Hanlon Heather ........................................... (1991)
Professor, Art; Ph.D., University of Oregon
Harbison Warren ........................................ (1977)
Associate Professor, Philosophy; Ph.D., Syracuse University
Hausmann Alan R ......................................... (1977)
Professor, Mathematics; Ph.D., Brown University
Heal Felix A ............................................... (1978)
Professor, Art; Ph.D., University of Minnesota
Heise Frank K ............................................ (1971)
Executive Director, Morrison Center; Associate Professor, Theatre Arts; M.A., University of South Dakota
Hepler Juanita ............................................ (1991)
Associate Professor, Social Work; Ph.D., University of Wisconsin-Madison
Hickman Vernon L ........................................ (1987)
Standard Instructor, Culinary Arts
Hoekstra W. K ............................................ (1986)
Director, Human Performance Laboratory; Professor, Health, Physical Education and Recreation; Ed.D., Brigham Young University
Hogue Kenneth D ......................................... (1985)
Program Head; Instructor, Heavy-Duty Mechanics (Diesel)
Hollendenken Ken ......................................... (1968)
Dean, Graduate College; Professor, Geosciences; Ph.D., University of Idaho
Holmes Randall ............................................ (1991)
Assistant Professor, Mathematics, Ph.D., SUNY Binghamton
Hoopes Gaye ............................................. (1978)
Associate Professor, Art; M.A., Boise State University
Hopfenbeck Ted H ....................................... (1967)
Associate Professor, Criminal Justice Administration; M.Ed., University of Arizona
Hoste Ann ................................................ (1990)
Assistant Professor, Theatre Arts; M.F.A., University of Texas at Austin
Hourcade Jack Joseph .................................. (1987)
Professor, Teacher Education; Ph.D., University of Missouri, Columbia
Hoyt Kathleen A .......................................... (1990)
Assistant Professor, Psychology; Ph.D., University of California, Davis
Hsu Madeleine ............................................. (1971)
Professor, Music; Ph.D., New York University
Huff Daniel D ............................................ (1970)
Professor, Social Work; M.S.W., University of Kansas
Huff Howard L ............................................ (1965)
Professor, Art; M.F.A., University of Idaho
Hughes Robert B ......................................... (1971)
Professor, Mathematics; Ph.D., University of California, Riverside
Huskey Darryl ............................................ (1968)
Head Librarian, Library; Associate Professor, Library Science; M.L., Emporia State University
Hyde Kenneth A .......................................... (1979)
Instruction Product Development Specialist, Simplot/Micron Instructional Technology Center; Assistant Professor, Education; M.Ed., Utah State University
Imbs Bonnie J ............................................. (1976)
Program Head; Senior Instructor, Dental Assisting; Certificate, State University of New York
Jansson Paul R ............................................ (1981)
Senior Instructor, Business Systems & Computer Repair; B.S.Ed., University of Idaho
Jarratt Mary K ........................................... (1987)
Associate Professor, Mathematics; Ph.D., Montana State University
Jensen John H ............................................ (1969)
Director of HEP/CAMP, Trio Coordinator; Professor, Teacher Education; Ph.D., University of Oregon
Jensen Margaret G ....................................... (1982)
Associate Professor, Teacher Education; Ed.D., Texas A & M University
Jocums George A ......................................... (1973)
Professor, Modern Languages; Ph.D., University of Michigan
Johnson David ............................................ (1980)
Chairperson & Associate Professor, Social Work; M.S.W., Rutgers State University
Jones Daryl E ............................................. (1986)
Interim Executive Vice-President; Professor, English; Ph.D., Michigan State University
Jones Donald S ........................................... (1970)
Program Head; Senior Instructor, Business Systems & Computer Repair
Jones Errol D ............................................. (1982)
Chairperson & Professor, History; Ph.D., Texas Christian University
Jull Robert C ................................................ (1989)
Instructor, College of Technology; A.S.E.T., Madison Area Technical College
Juola Robert C ............................................ (1970)
Professor, Mathematics; Ph.D., Michigan State University
Jorden Frank H ............................................ (1992)
Assistant Professor, Psychology; Ph.D., West Virginia University
Kaufman该项内容被删除了。
Assistant Professor, English; M.A., New York University
Kinney Richard ........................................ (1976)
Professor, Political Science; Ph.D., U.S.F. of Notre Dame
Kirtland William ........................................ (1969)
Professor, Teacher Education; Ed.D., Arizona State University
Kjelland Paul ........................................... (1989)
Assistant Professor, Industrial Technology, Special Projects Unit Director,
KBSU Radio; M.A., Idaho State University
Klausch Richard ........................................ (1992)
Assistant Professor, Theatre Arts; Ph.D., Wayne State University
Kober J Alfred ........................................... (1968)
Professor, Art; M.S., Fort Hays State University
Koeppe, David R ......................................... (1986)
Associate Professor, Accounting; Ph.D., University of Wisconsin, Madison
Kozar Bill ................................................... (1989)
Associate Professor, Health, Physical Education and Recreation; Ph.D.,
University of Iowa
Kraker Thomas L .......................................... (1977)
Chairperson & Associate Professor, Radiologic Sciences; Ed.M., College of
Idaho
Kuhns Hans ................................................ (1991)
Assistant Professor, Construction Management and Engineering Technologies; M.S., Penn State
Kulm Julia Hosman ........................................ (1987)
Advanced Instructor, Culinary Arts; A.A.S., Boise State University
L
La Cava Gerald ........................................... (1982)
Professor, Computer Information Systems & Production Management;
Ph.D., University of Kansas
Lagerstrom Dessa L .................................... (1989)
Instructor, Practical Nursing; M.P.A., Boise State University
Lambert Carroll .......................................... (1976)
Professor, Teacher Education; Ed.D., Utah State University
Lamet Daniel G ........................................... (1970)
Professor, Mathematics; Ph.D., University of Oregon
Landrum R Eric ........................................... (1992)
Assistant Professor, Psychology; Ph.D., Southern Illinois University
Lane Richard C ........................................... (1969)
Associate Professor, Marketing; M.S., Kansas State University
LaRiviere Sara ............................................ (1990)
Assistant Professor, Community and Environmental Health; Ed.D.,
University of LaVerne
Chairperson & Professor, Accounting; M.S.A., Arizona State University
Lauterbach Charles E .................................... (1971)
Professor, Theatre Arts; Ph.D., Michigan State University
Leahy Margaret K ........................................ (1982)
Assistant Professor, Nursing; M.S.N., Idaho State University
Leahy Richard ............................................ (1971)
Professor, English; Ed.D., University of Iowa
LeMaster Clifford ........................................ (1990)
Assistant Professor, Chemistry; Ph.D., University of California, Davis
Leon Manuel .............................................. (1985)
Assistant Professor, Psychology; Ph.D., University of California, San Diego
Lester Daniel .............................................. (1990)
Associate University Librarian and Professor; M.A., Northern Illinois
University
Lester Jody ................................................. (1983)
Associate Professor, Respiratory Therapy; M.A., Boise State University
Lewis Ray .................................................. (1956)
Associate Professor, Health, Physical Education and Recreation; M.S.,
University of Idaho
Lichtenstein Peter M .................................... (1975)
Chairperson & Professor, Economics; Ph.D., University of Colorado
Lincoln, Douglas J ......................................... (1980)
Associate Dean and Professor, College of Business; Ph.D., Virginia Polytechnic Institute & State University
Lindsey Melinda .......................................... (1987)
Assistant Professor, Teacher Education; Ph.D., University of Oregon
Lojek Helen ............................................ (1983)
Professor, English; Ph.D., University of Denver
Long Elaine M ............................................. (1975)
Chairperson and Associate Professor, Community & Environmental Health;
Ph.D., University of Idaho
Loreman R ............................................... (1974)
Chairperson & Associate Professor, Biology; Ph.D., Iowa State University
Lonsdale Edward A ....................................... (1990)
Standard Instructor, Manufacturing Technology; B.S., Boise State University
Loucks Christine ......................................... (1989)
Associate Professor, Economics; Ph.D., Washington State University
Loughrin-Sacco Steven .................................. (1992)
Chairperson & Associate Professor, Modern Languages; Ph.D., Ohio State University
Lovin Hugh T ............................................... (1965)
Professor, History; Ph.D., University of Washington
Luker Robert A ........................................... (1968)
Chairperson & Professor, Physics; Ph.D., Utah State University
Lundy Phoebe J ............................................ (1966)
Associate Professor, History; M.S., Drake University
Lutze Peter C .............................................. (1990)
Associate Professor, Communication; Ph.D., University of Wisconsin
Lykken Briathra .......................................... (1972)
Associate Professor, English; D.A., Idaho State University
Lyons Lamont S ........................................... (1977)
Professor, Teacher Education; Ed.D., University of Massachusetts

M
MacDonald Patricia ...................................... (1988)
Associate Professor, Nursing; M.S., University of Virginia
Madden Terry Jo ......................................... (1983)
Reference Librarian, Library; Assistant Professor, Library Science; M.L.,
University of Washington
Maguire James H ......................................... (1970)
Professor, English; Ph.D., Indiana University
Maher Matthew ........................................... (1989)
Assistant Professor, Marketing & Finance; Ph.D., University of Illinois
Malcolm Gill ................................................ (1968)
Professor, Mathematics; Ph.D., Oregon State University
Mankel Michael .......................................... (1990)
Professor and Director of Technical Communication, English; Ph.D.,
Pennsylvania State University
Marsh Robert L ............................................ (1974)
Chairperson & Associate Professor, Criminal Justice Administration Ph.D.,
Sam Houston State University
Martin Carol A ............................................. (1972)
Chairperson & Professor, English; Ph.D., Catholic University of America
Mason Jon L ................................................ (1983)
Professor, Construction Management and Engineering Technologies; M.S.,
University of Santa Clara
Matjeka Anne L .......................................... (1981)
Head Librarian, Library; Associate Professor, Library Science; M.L.S., State
University of New York, Albany
Matjeka Edward R ....................................... (1976)
Professor, Chemistry; Ph.D., State University of New York
Maxson Emerson C ....................................... (1968)
Associate Professor, Computer Information Systems & Production Management; D.B.A., Texas Tech University
Maynard Richard ......................................... (1990)
Assistant Professor, History; M.A., University of Iowa
McCain Gary .............................................. (1979)
Professor, Marketing; Ph.D., University of Oregon
McCloskey Richard ....................................... (1976)
Professor, Biology; Ph.D., Iowa State University
McCorkle Suzanne ......................................... (1978)
Professor, Communication; Ph.D., University of Colorado
McCrink Vera .............................................. (1991)
Instructor/Clinical Director, Health and Service Division; B.S., Park
College
McCroskie Duane R ..................................... (1985)
Assistant Professor, Radiologic Sciences; M.S., Whitworth College
McCulloch Donna ......................................... (1985)
Standard Instructor, Practical Nursing; B.S., Montana State University
McGuire Sherry .......................................... (1967)
Assistant Professor, English; M.A., Washington State University
Mckie Gerald .............................................. (1983)
Program Head and Standard Instructor, Electrical Lineworker; Certificate,
Idaho Power Company
Professor, Communication; Ph.D., University of Iowa
Mech William P ........................................... (1970)
Director, Honors Program; Professor, Mathematics; Ph.D., University of
Illinois
Medlin John J ............................................ (1970)
Associate Professor, Accounting; M.B.A., University of Denver
Mercer Gary D ............................................ (1975)
Professor, Chemistry; Ph.D., Cornell University
Merritt C Mike ........................................... (1974)
Professor, Accounting; D.B.A., University of Southern California

Faculty 205
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oakes Donald R</td>
<td>Associate Professor, Music; M.M., Northwestern University</td>
<td></td>
</tr>
<tr>
<td>Miller Beverly A</td>
<td>Reference Librarian, Library; Associate Professor, Library Science; M.A., University of Denver</td>
<td></td>
</tr>
<tr>
<td>Miller Merlín</td>
<td>Associate Professor, Art; M.F.A., Brigham Young University</td>
<td></td>
</tr>
<tr>
<td>Miller Wayne R</td>
<td>Director, Outdoor Adventure Program; Assistant Professor, Health, Physical Education and Recreation; M.S.Ed., University of Southern California</td>
<td></td>
</tr>
<tr>
<td>Mills Janet Lee</td>
<td>Professor, Communication; Ph.D., University of Kansas</td>
<td></td>
</tr>
<tr>
<td>Minch Robert P</td>
<td>Associate Professor, Information Systems &amp; Production Management; Ph.D., Texas Tech University</td>
<td></td>
</tr>
<tr>
<td>Moen Gary D</td>
<td>Advanced Instructor, Horticulture; B.S., Mayville State College</td>
<td></td>
</tr>
<tr>
<td>Moncrief Gary F</td>
<td>Professor, Political Science; Ph.D., University of Kentucky</td>
<td></td>
</tr>
<tr>
<td>Morris Daniel N</td>
<td>Assistant Professor, Communication; Ph.D., University of Missouri</td>
<td></td>
</tr>
<tr>
<td>Morrison Timothy Glen</td>
<td>Associate Professor, Teacher Education; Ph.D., University of Illinois, Urbana-Champaign</td>
<td></td>
</tr>
<tr>
<td>Marshall</td>
<td>Assistant Professor, Communication; M.A., Boise State University</td>
<td></td>
</tr>
<tr>
<td>Munger James C</td>
<td>Assistant Professor, Biology; Ph.D., University of Arizona</td>
<td></td>
</tr>
<tr>
<td>Murray Judy</td>
<td>Associate Professor, Nursing; Ph.D., University of Iowa</td>
<td></td>
</tr>
<tr>
<td>Murray Thomas</td>
<td>Manager and Assistant Professor, Industrial Technologies, Standard Instructor; M.B.A., John F. Kennedy University</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Napier Nancy K</td>
<td>Chairperson &amp; Professor, Management; Ph.D., Ohio State University</td>
<td></td>
</tr>
<tr>
<td>Neumann E Ronald</td>
<td>Professor, Marketing; Ph.D., Arizona State University</td>
<td></td>
</tr>
<tr>
<td>Nelson Anne M</td>
<td>Counseling Psychologist, Counseling &amp; Testing Center; Associate Professor, Education; Ph.D., University of Oregon</td>
<td></td>
</tr>
<tr>
<td>Nelson Karen</td>
<td>Assistant Professor, Indiana University</td>
<td></td>
</tr>
<tr>
<td>Nelson Mardell</td>
<td>Assistant Professor, Social Work; M.S.W., Eastern Washington University</td>
<td></td>
</tr>
<tr>
<td>Newby Gary R</td>
<td>Professor, Physics; Ph.D., Arizona State University</td>
<td></td>
</tr>
<tr>
<td>Nicholson James A</td>
<td>Director, Counseling &amp; Testing Center; Counseling Psychologist; Professor, Psychology; Ph.D., University of Missouri, Columbia</td>
<td></td>
</tr>
<tr>
<td>Nickerson Ross S</td>
<td>Assistant Professor, English; M.A., University of Utah</td>
<td></td>
</tr>
<tr>
<td>Nix David E</td>
<td>Associate Professor, Accounting; Ph.D., Oklahoma State University</td>
<td></td>
</tr>
<tr>
<td>Nielsen Elizabeth</td>
<td>Interim Program Head, Instructor, Child Care &amp; Development; M.S., Bank Street College of Education</td>
<td></td>
</tr>
<tr>
<td>Noreen Mary</td>
<td>Standard Instructor, Health and Service Division; B.S.N., University of Maryland</td>
<td></td>
</tr>
<tr>
<td>Norman Frederick J</td>
<td>Director Community Relations; Professor, Theatre Arts; M.A., University of Northern Colorado</td>
<td></td>
</tr>
<tr>
<td>Nuernberg David V</td>
<td>Program Head; Instructor, Respiratory Therapy Technician; B.S., National College</td>
<td></td>
</tr>
<tr>
<td>O</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odahl Charles M</td>
<td>Professor, History; Ph.D., University of California, San Diego</td>
<td></td>
</tr>
<tr>
<td>Orazew David L</td>
<td>Chairperson &amp; Associate Professor, Art; M.S., University of Wisconsin, Madison</td>
<td></td>
</tr>
<tr>
<td>Ostrander Gloria J</td>
<td>Acquisitions Librarian, Library; Associate Professor, Library Science; M.L.S., University of Washington</td>
<td></td>
</tr>
<tr>
<td>Ott Russell</td>
<td>Assistant Professor, Biology; Ph.D., Stanford University</td>
<td></td>
</tr>
<tr>
<td>Otterness Nancy</td>
<td>Assistant Professor, Nursing; M.S. Idaho State University</td>
<td></td>
</tr>
<tr>
<td>Overgaard Willard</td>
<td>Professor, Political Science; Ph.D., University of Minnesota</td>
<td></td>
</tr>
<tr>
<td>P</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paluzzi James V</td>
<td>General Manager, KBSU, Associate Professor, Industrial Technology; Ph.D., Kent State University</td>
<td></td>
</tr>
<tr>
<td>Panitch Arnold</td>
<td>Professor, Social Work; M.S.W., Wayne State University</td>
<td></td>
</tr>
<tr>
<td>Parke Charles R</td>
<td>Program Head; Advanced Instructor, Auto Body; Certificate, Idaho State University</td>
<td></td>
</tr>
<tr>
<td>Parker Ben L</td>
<td>Professor, Communication; Ph.D., University of Colorado, Boulder</td>
<td></td>
</tr>
<tr>
<td>Parks Donald J</td>
<td>Professor, Construction Management and Engineering Technologies; Ph.D., University of Minnesota</td>
<td></td>
</tr>
<tr>
<td>Patrick Steven</td>
<td>Assistant Professor, Sociology; Ph.D., University of California-Riverside</td>
<td></td>
</tr>
<tr>
<td>Patton, Dan</td>
<td>Applied Research Director, Assistant Professor, Political Science; Ph.D., University of Utah</td>
<td></td>
</tr>
<tr>
<td>Pavics Max G</td>
<td>Professor, Anthropology; Ph.D., University of Colorado, Boulder</td>
<td></td>
</tr>
<tr>
<td>Payne Anne</td>
<td>Associate Dean, Chairperson &amp; Associate Professor, Nursing; Ed.D., University of Tulsa</td>
<td></td>
</tr>
<tr>
<td>Payne Richard D</td>
<td>Professor, Economics; Ph.D., University of Southern California</td>
<td></td>
</tr>
<tr>
<td>Pearson Thel</td>
<td>Associate Professor, Teacher Education; Ph.D., University of California, San Francisco</td>
<td></td>
</tr>
<tr>
<td>Pelton John R</td>
<td>Professor, Geosciences; Ph.D., University of Utah</td>
<td></td>
</tr>
<tr>
<td>Petchickoff Linda M</td>
<td>Professor, Health, Physical Education and Recreation; Ph.D., University of Illinois</td>
<td></td>
</tr>
<tr>
<td>Pfieffer Ronald</td>
<td>Associate Professor, Health, Physical Education and Recreation; Ed.D., Brigham Young University</td>
<td></td>
</tr>
<tr>
<td>Pirrung Gordon D</td>
<td>Professor, Accounting; D.B.A., Arizona State University</td>
<td></td>
</tr>
<tr>
<td>Pitman C Harvey</td>
<td>Associate Professor, Communication; M.Ed., Washington State University</td>
<td></td>
</tr>
<tr>
<td>Plew Mark G</td>
<td>Chairperson &amp; Associate Professor, Anthropology; Ph.D., Indiana University, Bloomington</td>
<td></td>
</tr>
<tr>
<td>Pomared Andreas Lynn</td>
<td>Instructor, Nursing; M.S., University of Minnesota</td>
<td></td>
</tr>
<tr>
<td>Purdy Craig A</td>
<td>Chairperson and Professor, Health, Physical Education and Recreation; Ed.D., Brigham Young University</td>
<td></td>
</tr>
<tr>
<td>R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Raha Arun</td>
<td>Assistant Professor, Economics; Ph.D., Washington State University</td>
<td></td>
</tr>
<tr>
<td>Ramo Keetje</td>
<td>Associate Professor, Social Work; Ph.D., Ohio State University</td>
<td></td>
</tr>
<tr>
<td>Ray Nima Marie</td>
<td>Associate Professor, Marketing &amp; Finance; Ph.D., Texas Tech University</td>
<td></td>
</tr>
<tr>
<td>Rayburn David W</td>
<td>Associate Professor, Communication; M.S., Southern Illinois University</td>
<td></td>
</tr>
</tbody>
</table>
Raymond Gregory A .......................................................... (1974)
Chairperson & Professor, Political Science; Ph.D., University of South Carolina.

Reimann Richard J .......................................................... (1975)
Professor, Physics; Ph.D., University of Washington

Reynolds R Larry ............................................................. (1979)
Professor, Economics; Ph.D., Washington State University

Robbins Bruce ................................................................. (1990)
Assistant Professor, English; Ph.D., Indiana University

Roberts George F ............................................................. (1970)
Professor, Art; M.F.A., University of Iowa

Robertson John B ............................................................. (1974)
Associate Professor, Modern Languages; Ph.D., University of Arizona

Rohlfing Mary E ............................................................... (1992)
Instructor, Communication; M.A., University of Iowa

Ross David Frank ............................................................. (1990)
Assistant Professor, Psychology; Ph.D., Cornell University

Rossmanjil Michon ............................................................. (1986)
Professor, Music; Ph.D., University of Michigan

Rudd Robert A ................................................................. (1985)
Associate Professor, Communication; Ph.D., University of Oregon

Russell James K ............................................................... (1969)
Professor, Art; M.F.A., University of Iowa

Ruyse Asa M ................................................................. (1976)
Vice President, Finance and Administration; Bursar; Professor, Education, Ed.D., University of Missouri

Rycbert Robert C .............................................................. (1975)
Professor, Biology; Ph.D., Utah State University

Ryder Mary Ellen ............................................................. (1988)
Assistant Professor, English; M.A., University of California, San Diego

Sadler Norma J ................................................................. (1973)
Professor, Teacher Education; Ph.D., University of Wisconsin, Madison

Sahni Chaman L ............................................................... (1975)
Professor, English; Ph.D., Wayne State University

Sallie Steven S ................................................................. (1981)
Associate Professor, Political Science; Ph.D., University of Nebraska

Sambal Michael ............................................................... (1976)
Associate Professor, Music; D.M.A., North Texas State University

Sanderson Richard K .......................................................... (1971)
Associate Professor, English; Ph.D., New York University

Saltwater Janet ................................................................. (1991)
Instructor, Nursing; M.S., University of Maryland

Sauer Douglas G ............................................................... (1992)
Assistant Professor, Economics; Ph.D., Florida State University

Schackel Sandra K ............................................................ (1989)
Assistant Professor, History; Ph.D., University of New Mexico

Scheepers Marion ............................................................ (1988)
Assistant Professor, Mathematics; Ph.D., University of Kansas

Scheffer Martin .............................................................. (1964)
Chairperson & Professor, Sociology; Ph.D., University of Utah

Schimpf Martin E ............................................................. (1990)
Assistant Professor, Chemistry; Ph.D., University of Utah

Schroedinger Andrew ......................................................... (1972)
Associate Professor, Philosophy; Ph.D., Brown University

Schooley Diane ............................................................... (1989)
Assistant Professor, Finance; Ph.D., University of Colorado, Boulder

Schreffler, Joseph S .......................................................... (1989)
Standard Instructor, Electronics; B.S., California Polytechnic State University

Schroeder Gerald H ........................................................... (1978)
Associate Professor, Music; D.M.A., University of Colorado

Schroeder Jeff D ............................................................... (1981)
Program Head; Senior Instructor, Small Engine Repair; A.A.S., Boise State University

Seddon Carol ................................................................. (1978)
Associate Professor, Medical Records; M.S., Oregon State University

Seibert Pennie S .............................................................. (1990)
Assistant Professor, Psychology; Ph.D., University of New Mexico

Selander Glenn E .............................................................. (1966)
Assistant Professor, Education; Ph.D., State University

Seland Larry G ................................................................. (1986)
Interim President, Boise State University; Professor, Vocational Technical Education; Ph.D., Colorado State University

Shaffat Todd A ................................................................. (1985)
Associate Professor, History; Ph.D., Carnegie-Mellon University

Shankweiler William E ......................................................... (1956)
Professor, Theatre Arts; Ph.D., University of Denver

Shannon Patrick .............................................................. (1985)
Professor, Computer Information Systems & Production Management; Ph.D., University of Oregon

Shelly Vicki ................................................................. (1988)
Assistant Professor, Nursing; M.S., University of Washington

Shim Won-Shul ............................................................... (1991)
Assistant Professor, Management; Ph.D., University of Oregon

Shin Bong ................................................................. (1979)
Dean, College of Business; Professor, Management; Ph.D., University of Georgia

Shirk Henrietta W ............................................................ (1991)
Associate Professor, English; Ph.D., Bryn Mawr College

Shurtleff-Young Cheryl .................................................. (1978)
Associate Professor; M.A., University of Oregon

Sims Robert C ................................................................. (1970)
Dean, College of Social Sciences & Public Affairs; Professor, History; Ph.D., University of Colorado

Singh Ramlaykha ............................................................... (1975)
Coordinator, Field Services, Teacher Education; Professor, Teacher Education; Ed.D., University of Northern Colorado

Assistant Professor, Teacher Education; Ph.D., University of Illinois, Urbana-Champaign

Skillern William G ............................................................ (1971)
Professor, Political Science; Ph.D., University of Idaho

Skoro Charlene ............................................................... (1982)
Professor, Economics; Ph.D., Columbia University

Skov Arny R ................................................................. (1967)
Professor; Arts; M.F.A., University of Idaho

Slemian Vickie L .............................................................. (1990)
Assistant Professor, Teacher Education; Ph.D., San Diego State University and Claremont Graduate School

Slough Manly Ed ............................................................. (1987)
Program Head; Standard Instructor, Culinary Arts

Sluder Stanley ............................................................... (1983)
Senior Instructor, Electronics; B.A.S., Boise State University

Smith Brent ................................................................. (1981)
Assistant Professor, Art; M.F.A., Utah State University

Smith James B ............................................................... (1992)
Assistant Professor, Biology; Ph.D., University of Wisconsin

Smith William S .............................................................. (1973)
Professor, Physics; Ph.D., University of Wisconsin, Madison

Snow Mark E ................................................................. (1971)
Professor, Psychology; Ph.D., University of Utah

Snyder Walter S .............................................................. (1984)
Associate Professor, Geosciences; Ph.D., Stanford University

Soran Patricia ............................................................... (1991)
Instructor, Nursing; B.S.N., Boise State University

Spafford Joanne W ............................................................ (1988)
Director, A.S. Nursing & Assistant Professor, Nursing; M.S.N., Yale University

Sparenberg Pamela ........................................................... (1989)
Assistant Professor, Nursing; M.S., California State University, Fresno

Stack James D ............................................................... (1984)
Advanced Instructor, Electronics Service Technology; M.S., New Jersey Institute of Technology

Staley Orland Scott .......................................................... (1989)
Dean of Admissions; Instructor, Psychology; M.A., University of Oregon

Spinosa Claude ............................................................... (1970)
Professor, Geosciences; Ph.D., University of Iowa

Springer JoAnne W .......................................................... (1988)
Assistant Professor, Nursing & Assistant Professor, Nursing; M.S.N., Yale University

Stark Frank W ............................................................... (1957)
Professor, Chemistry; M.S., Trinity College

Stephens James ............................................................ (1992)
Assistant Professor, Marketing and Finance; M.B.A., Miami University of Ohio

Stitzel Thomas E ............................................................. (1975)
Professor, Marketing & Finance; Ph.D., University of Oregon

Stokes Lee W ............................................................... (1987)
Assistant Professor, Radiologic Sciences; M.A., Boise State University

Stenley Linda ................................................................. (1989)
Associate Executive Vice-President and Professor; M.A.Ed., Idaho State University

Stark Frank W ............................................................... (1957)
Professor, Chemistry; M.S., Trinity College

Stephens James ............................................................ (1992)
Assistant Professor, Marketing and Finance; M.B.A., Miami University of Ohio

Stitzel Thomas E ............................................................. (1975)
Professor, Marketing & Finance; Ph.D., University of Oregon

Stokes Lee W ............................................................... (1987)
Assistant Professor, Radiologic Sciences; M.A., Boise State University

Stenley Linda ................................................................. (1989)
Associate Executive Vice-President and Professor; M.A.Ed., Idaho State University
Associate Professor, Teacher Education; Ed.D., Syracuse University
Sulanke Robert .................................................. (1970)
Professor, Mathematics; Ph.D., University of Kansas
Sumter Bonnie J .................................................. (1978)
Manager and Advanced Instructor, Health & Services Division; B.S.Ed., University of Idaho

T
Takeda Yozo ....................................................... (1969)
Professor, Mathematics; Ph.D., University of Idaho
Takeharu John S .................................................. (1968)
Professor, Art; M.A., Los Angeles State College
Taye John A ....................................................... (1975)
Professor, Art; M.F.A., Otis Art Institute
Taylor Adrien P Jr ................................................. (1977)
Head Librarian, Library; Professor, Library Science; M.A., University of Denver
Taylor David S ..................................................... (1972)
Vice President, Student Affairs; Professor, Psychology; Ph.D., Michigan State University
Taylor Patricia A ................................................... (1975)
Associate Professor, Nursing; M.Ed., College of Idaho
Taylor Ronald S .................................................... (1975)
Associate Professor, Art; M.F.A., Utah State University
Tennyson Theresa .................................................. (1990)
Standard Instructor, Business & Office Education; B.B.A., Boise State University
Thatcher Larry ..................................................... (1991)
Interim Instructor, Technical Division, B.S., Purdue University
Thomason George .................................................. (1975)
Associate Professor, Music; M.A., Boise State University
Thorning Cosme M .................................................. (1970)
Associate Professor, Health, Physical Education and Recreation; M.Ed., Central Washington University
Thorsen Carolyn ................................................... (1991)
Associate Professor, Teacher Education, M.S., Boise State University
Tilmann Charles .................................................... (1977)
Senior Instructor, Heavy Duty Mechanics-Diesel; Diploma, University of Idaho
Tisdale Janet ....................................................... (1989)
Instructor, Practical Nursing; B.S., Montana State University
Towel Mary Ann .................................................... (1976)
Senior Instructor, Practical Nursing; M.Ed., University of Idaho
Travis Darlene K ................................................... (1989)
Instructor, Radiologic Sciences; B.S., Idaho State University
Trusky Tom .......................................................... (1970)
Professor, English; M.A., Northwestern University
Twight Charlotte .................................................... (1986)
Professor, Economics; Ph.D., University of Washington

U
Uehling Karen S .................................................... (1981)
Assistant Professor, English; M.A., University of California, Irvine

V
Vahey JoAnn T ...................................................... (1973)
Professor, Nursing; Ed.D., Columbia University
Vaughn Ross E ...................................................... (1973)
Associate Professor, Health, Physical Education and Recreation; Ph.D., Washington State University
Vinz Ruth ............................................................ (1989)
Assistant Professor, Teacher Education; Ph.D., New York University
Vinz Warren L ....................................................... (1968)
Professor, History; Ph.D., University of Utah
Virta Alan ............................................................ (1988)
Head of Special Collections, Library; Assistant Professor, Library Science; M.L.S., University of Maryland

W
Waag Charles J ..................................................... (1981)
Professor, Geosciences; Ph.D., University of Arizona
Waite Wenden W ................................................... (1976)
Professor, Teacher Education; Ph.D., Utah State University
Waldorf Larry L ..................................................... (1970)
Associate Professor, Management; Ph.D., Colorado State University
Wallace Steve R .................................................... (1984)
Assistant Professor, Health, Physical Education and Recreation; M.S., University of Utah
Walsh Anthony ...................................................... (1984)
Professor, Criminal Justice Administration; Ph.D., Bowling Green State University

Warberg William B ................................................. (1977)
Director, Internships/Cooperative Education; Associate Professor, Computer Information Systems & Production Management; Ed.D., Oregon State University
Ward Frederick R ................................................... (1969)
Professor, Mathematics; Ed.D., Virginia Polytechnic State University
Warner Kathleen C .................................................. (1966)
Assistant Professor, English; Ph.D., Indiana University, Bloomington
Watts Donald J ...................................................... (1971)
Senior Instructor, Drafting Technology; B.S., University of Idaho
Weatherby James B ................................................. (1989)
Director, Public Affairs Program; Associate Professor, Political Science; Ph.D., University of Idaho
Weber James ...................................................... (1990)
Coordinator of Institutional Assessment; Professor, Psychology; Ph.D., University of California-Berkeley
Wells David A ...................................................... (1986)
Associate Professor, Music; M.M.E., VanderCook College of Music
Wertman Donald L .................................................. (1979)
Program Head; Senior Instructor, Machine Shop; A.A.S., Pennsylvania State University
White Craig ......................................................... (1980)
Associate Professor, Geosciences; Ph.D., University of Oregon
White Harry ....................................................... (1988)
Assistant Professor, Finance; Ph.D., Texas A & M
Wicklow-Howard Marcia ............................................ (1975)
Professor, Biology; Ph.D., Oregon State University
Widmayer Jayne A .................................................. (1981)
Professor, English; Ph.D., University of Michigan
Williamson Margaret .............................................. (1967)
Secretary, Faculty Senate; Associate Professor, Business & Office Education; M.B.Ed., University of Idaho
Willis Lonnie L ...................................................... (1970)
Professor, English; Ph.D., University of Colorado, Boulder
Wilson Monte D ..................................................... (1969)
Professor, Geosciences; Ph.D., University of Idaho
Wilterding Jim ...................................................... (1976)
Professor, Management; D.B.A., Texas Tech University
Wines William A ...................................................... (1984)
Professor, Management; J.D., University of Michigan
Witt Stephanie L ..................................................... (1989)
Assistant Professor, Political Science; Ph.D., Washington State University
Witte Mary ........................................................... (1989)
Professor, Art; Ph.D., University of Wisconsin
Wojtkowski W Gregory ............................................ (1982)
Associate Professor, Computer Information Systems & Production Management; Ph.D., Case Western Reserve University
Wojtkowski Wita .................................................... (1983)
Associate Professor, Computer Information Systems & Production Management; Ph.D., Case Western Reserve University
Wollheim Peter ...................................................... (1989)
Assistant Professor, Communication; Ph.D., McGill University
Wood Spencer H ..................................................... (1977)
Professor, Geosciences; Ph.D., California Institute Of Technology
Wyllie Gilbert A ...................................................... (1965)
Associate Professor, Biology; Ph.D., Purdue University

Y
Yarbrough Douglas W ................................................. (1990)
Assistant Professor, Teacher Education; Ed.D., Texas Tech University
Young Jerry L ....................................................... (1964)
Professor, Mathematics; Ed.D., University of Northern Colorado
Young Katherine ..................................................... (1988)
Associate Professor, Teacher Education; Ed.D., Utah State University
Young Virgil M ...................................................... (1967)
Chairperson & Professor, Teacher Education; Ed.D., University of Idaho
Yunker Douglas ..................................................... (1976)
Associate Professor, Social Work; M.S.W., Indiana University

Z
Zaerr Linda M ....................................................... (1987)
Associate Professor, English; Ph.D., Washington State University
Professor, English; Ph.D., University of North Carolina Chapel Hill
Zirinsky Michael P .................................................. (1973)
Professor, History; Ph.D., University of North Carolina Chapel Hill
Boise State University Emeriti

Faculty

Dorothy Albertson, Professor, Office Administration (1953-1977)
Thelma F. Allison, Associate Professor, Home Economics (1946-1973)
John B. Barnes, President, Boise State University (1967-1977)
Gwynn W. Barrett, Professor, History (1968-1992)
Wylla D. Barnes, Professor, Psychology (1968-1992)
John Belitsa, Professor, Teacher Education (1970-1985)
John H. Best, Professor, Music (1947-1983)
Bill Bowman, Department Chair & Professor, Physical Education (1969-1985)
Phyllis Bowman, Assistant Professor, Physical Education (1969-1985)
Jean C. Boyles, Assistant Professor, Physical Education (1949-1957, 1962-1984)
C. Griffith Bratt, Professor, Music (1946-1976)
James R. Buchanan, Assistant Professor, Welding (1959-1978)
Richard E. Bullington, Vice President for Information Extension, Professor, Teacher Education (1968-1989)
Clara Burth, Associate Professor, Teacher Education, Library Science (1969-1978)
Erma M. Callies, Dept Head & Counselor, Vocational Student Services (1969-1985)
William Carson, Associate Professor, Accounting (1963-1982)
Acel H. Chatburn, Professor, Education (1944-1977)
R. Wayne Chatterton, Professor, English (1968-1983)
Doran L. Connor, Assistant Professor, Physical Education (1966-1989)
David Crane, Head Catalog Librarian (1969-1991)
E. John Dahlberg, Professor, Teacher Education (1970-1989)
Norman Dahm, Department Chair & Professor, Construction Management & Pre-Engineering (1953-1990)
Mary Dallas, Program Head, Senior Instructor, Practical Nursing (1976-1989)
James D. Doss, Associate Dean, College of Business Associate Professor, Management (1970-1984)
Clisby Edlefsen, Professor, Business (1939-1969)
J. Calvin Emerson, Associate Professor, Chemistry (1933-1940, 1960-1973)
Evelyn C. Everts, Associate Professor, Library Science (1957-1977)
Marjorie Fairchild, Associate Professor, Library Science (1966-1975)
Milton Fleshman, Assistant Professor, Auto Mechanics Technology (1959-1974)
E. Coston Frederick, Professor, Teacher Education (1971-1992)
H. K. Fritchman II, Professor, Biology (1954-1989)
Albert Fuehner, Instructor, Auto Mechanics Technology (1965-1978)
Margaret Gourley, Advanced Instructor, Child Care and Development (1977-1992)
John F. Hager, Associate Professor, Machine Shop (1954-1969)
Clayton Hahn, Associate Professor, Engineering (1963-1981)
Ralph W. Hansen, Associate University Librarian, Professor, Library Science (1979-1989)
Richard L. Hart, Dean, College of Education and Professor of Teacher Education (1977-1991)
Alice H. Hatton, Registrar (1959-1974)
Robert A. Hibbs, Professor, Chemistry (1965-1990)
Ken L. Hill, Associate Dean, College of Education, Professor of Teacher Education (1968-1991)
James W. Hopper, Associate Professor, Music (1970-1986)
Gail Ison, Professor, Psychology (1970-1990)
Robert D. Jameson, Special Lecturer, Management (1979-1988)
Helen R. Johnson, Associate Professor, Business Education (1955-1978)
Fenton C. Kelley, Associate Professor, Biology (1969-1989)
Leo L. Knowlton, Professor, Marketing (1965-1985)
Ellis W. Lamborn, Professor, Economics (1968-1989)
Max Lamborn, Instructor, Parts Counterperson (1972-1981)
John Leigh, Jr., Instructor, Drafting Technology (1971-1983)
Joan Lingenfelter, Program Head and Instructor, Child Care Services (1973-1988)
D. Jean MacInnis, Program Head and Senior Instructor, Dental Assisting (1962-1990)
Constance Matson, Associate Professor, Nursing (1968-1992)
Carroll Meyer, Professor, Music (1948-1985)
Florence M. Miles, Professor, Nursing (1955-1980)
Kathryn Eckhardt Mitchell, Assistant Professor, Violin (1932-1938)
Donald J. Obee, Professor, Botany (1946-1977)
Thomas E. Olson, Standard Instructor, Drafting (1975-1990)

Neldon D. Oyler, Program Head and Standard Instructor, Horticulture (1966-1992)
Herbert D. Papenfuss, Professor, Botany (1967-1992)
Louis A. Peck, Chairperson & Professor, Art (1955-1989)
Margaret Peek, Associate Dean, College of Arts & Sciences, Professor, English (1967-1987)
Elaine C. Rockne, Director & Instructor, Medical Record Science (1968-1986)
Hazel M. Roe, Associate Professor, Office Administration (1942-1944, 1947-1969)
Duston R. Scudder, Professor, Marketing (1964-1987)
Melvin Shelton, Professor, Music (1968-1992)
Frank Smartt, Assistant Professor, Mathematics (1958-1981)
Donald D. Smith, Professor, Psychology (1967-1984)
Lyke H. Smith, Director, Intercollegiate Athletics, Professor, Physical Education (1946-1981)
Harry L. Steger, Professor, Psychology (1972-1990)
Robert Sylvestre, Associate Professor, History (1963-1982)
Albert Tennyson, Instructor, Industrial Communications (1966-1977)
Carl W. Tipton, Associate Professor, Management (1965-1980)
James Tomkins, Assistant Professor, Industrial Communications (1963-1985)
David Torbet, Director, Counseling & Testing Center, Professor, Psychology (1966-1983)
G. W. Underkofler, Associate Professor, Accounting (1952-1974)
Luis J. Valverde Z., Professor, Languages (1965-1982)
Eunice Wallace, Associate Professor, English (1968-1978)
Gerald Wallace, Dean, Professor, College of Education (1968-1978)
Mont M. Warner, Professor, Geosciences (1967-1984)
John E. Warwick, Associate Professor, Communication (1963-1977)
Allen Weston, Senior Instructor, Drafting Technology (1964-1985)
Wayne E. White, Professor, Management (1965-1987)
Marguerite Wilcox, Associate Professor, Nursing (1972-1991)
Edwin E. Wilkinson, Dean, Student Special Services, Professor, Psychology (1958-1992)
Peter K. Wilson, Professor, Business Administration (1966-1977)
Ella Mae Winans, Associate Professor, Mathematics (1958-1983)

Professional Staff

G. M. (Don) Miller, Coordinator, Business & Industry Relations (1969-1985)
Herbert W. Runner, Director, Institutional Research (1947-1984)

Classified Staff

Evelyn R. Bobo, Admissions Unit Supervisor (1968-1985)
Leona Brook, Custodian, (1971-1989)
Ruth Ann Caylor, Monographs Assistant, Library (1967-1987)
Mary Cozine, Secretary-Office Coordinator, Counseling Center (1972-1984)
Martin Dennis, Carpenter, Physical Plant (1968-1990)
Elaine Durbin, Administrative Assistant, College of Health Science (1972-1986)
Patricia J. Durie, Secretary/Coordinator, Political Science (1970-1988)
Homer Erickson, Grounds Maintenance, Physical Plant (1973-1992)
Patricia J. Durie, Secretary/Coordinator, Political Science (1970-1988)
Dorothea Haskins, Clerical Specialist, Curriculum Resource Center, Library (1972-1988)
Inez Keen, Postal Service Supervisor (1969-1984)
Mary Cozine, Secretary-Office Coordinator, Counseling Center (1972-1984)
Martin Dennis, Carpenter, Physical Plant (1968-1990)
Elaine Durbin, Administrative Assistant, College of Health Science (1972-1986)
Patricia J. Durie, Secretary/Coordinator, Political Science (1970-1988)
Homer Erickson, Grounds Maintenance, Physical Plant (1973-1992)
Patricia J. Durie, Secretary/Coordinator, Political Science (1970-1988)
Dorothea Haskins, Clerical Specialist, Curriculum Resource Center, Library (1972-1988)
Inez Keen, Postal Service Supervisor (1969-1984)
Mary Cozine, Secretary-Office Coordinator, Counseling Center (1972-1984)
INDEX

A
Absence, Attendance from Class 22
Academic Advising Center 17
Academic Calendar 3-4
Academic Enrichment and Special Programs 30-40
Academic Information 20-29
Academic Probation and Dismissal Policy 22-23
Accounting Courses 80
Accounting, Department of 79-80
Accounting, Department of 79-80
Accounting Minor 78, 80
Accreditation and Affiliation of Boise State University 6
Adding and Dropping Courses 21
Address or Name Changes 21
Addresses of University Contacts 2
ACE 36
Administration 1
Administrative Services Courses 89, 182
Administrative Hold and Withdrawals 21-22
Admission Notification Procedures 8-9
Admission to Teacher Education 99
Admission to Upper Division Courses 23
Admissions Information 8-11
International Students 11
Graduate Students 11, 176-179
Special Undergraduate Students 10
Transfer of Vocational Technical/Academic Credits 10
Transfer Students 8-9
Vocational Technical Students 10-11, 159
Admissions, Graduate 11, 182
Adult Basic Education 38
Adult Learning Center 160
Advanced Placement (AP) Exams 35
Advanced Placement and Credit 35-36
Advanced Technical Communication Minor 33
Advising Center, Academic 17
Advising 21
Agricultural Equipment Courses 161
Agricultural Equipment Technology Program 161
Air Conditioning, Refrigeration, Heating Courses 174
Air Conditioning, Refrigeration, Heating Program 174
Alcohol/Drug Studies Minor 109, 111
Alumni Association 19
Anthropology Courses 128
Anthropology, Department of 127-128
Anthropology Program 127-128
Anthropology Minor 126,

French 64
French, Secondary Education 64
General Business Management 86-87
Geology 57
Geophysics 57
German 64
German, Secondary Education 64
Health Data Management 148
Health Science Studies 110-111
History 134
History, Secondary Education 134
History-Social Science, Secondary Education 134
Management, Entrepreneurial 87
Management, Human Resource Management 87
Manufacturing Engineering Technology 149
Marketing 89
Mathematics Program 60-61
Mathematics, Secondary Education 61
Medical Technology 119
Multi-Ethnic Studies 144
Music 67-68
Music, Secondary Education 67
Nursing Program 115
Philosophy 72
Physical Education, Non-Teaching 92-94
Physical Education, Secondary Education 92-93
Physics 72-73
Physics, Secondary Education 73
Political Science 138
Political Science-Social Science, Secondary Education 138
Pre-Dentistry—Biology Option 118
Pre-Dentistry—Chemistry Option 118
Pre-Medicine—Biology Option 118
Pre-Medicine—Chemistry Option 118
Pre-Veterinary Medicine 118-119
Production & Operations Management 81
Psychology 370
Psychology, SS, Secondary Education 141
Radiologic Technology 121-122
Respiratory Therapy 124
Social Science 144
Social Work 142-143
Sociology 144
Spanish 64
Spanish, Secondary Education 64
Theatre Arts 74
Theatre Arts, Secondary Education 75
Baccalaureate Degree Requirements 25-28
Bachelor of Applied Science Degree 28, 148
Bachelor of Arts Degree 26
Bachelor of Business Administration Degree 26-27
Bachelor of Fine Arts Degree 27
Bachelor of Interdisciplinary Studies 27
Bachelor of Music Degree 27
Bachelor of Science Degree 26
Basque Courses 64
Bilingual, Elementary Teacher Training Program 38, 101
Biology Courses 48-50, 199
Biology, Department of 48-50
Biology Minor 42, 48.
Board and Room Charges 15
Botany Courses 50
Broadcast Technology 155
Business and Office Education Courses 163-164
Business and Office Education Program 162-164
Business Development Center, Idaho 39
Business, MBA 181-182
Business Minor 78
Business Systems and Computer Repair Courses 165
Business Systems and Computer Repair Program 164-165

C
Cable Television Channel-27 39
Calendar, Academic 3-4
Canadian Studies Courses 31
Canadian Studies Minor 31
Candidacy, Masters 180
Canyon County Center 37
Career Planning and Placement 18
Catalog Contents, Policy Statement concerning Inside front cover Center for Data Processing 38-39
Certificate of Completion, School of Applied Technology Programs 160
Certification Endorsements for minor teaching areas 101-103
Certification Requirements & Endorsements for Secondary Education 103-106
Certification Requirements for Elementary Education 103
Challenges 36-37, 180
Charges, Board and Room 15
Chemistry Courses 52-53, 201
Chemistry, Department of 50-53
Chemistry Minor 42, 51
Child Care Courses 165-166
Child Care & Development Program 165-166
Child Care Service 18
Classical Language Program 134
Classification of Students 20
CLEP Exams 35
College Admission Core 9
College Assistance Migrant Program 38
College of Business Graduate Program 181-182
Colleges and Schools
Arts and Sciences 41
Business 77
Education 91
Health Science 109
Social Sciences & Public Affairs 126
Technology 147
School of Engineering Technology 148
School of Applied Technology 160
Graduate 178
Communication Courses 130-132, 181-182
Communication, Department of 128-132

Baccalaureate Degree Programs
Accounting 79-80
Advertising Design 43
Anthropology 127
Anthropology-Social Science, Secondary Education 127-128
Art 42-43
Art, Secondary Education 43
Athletic Training 94-95
Bachelor of Applied Science Degree 28, 148
Bachelor of Interdisciplinary Studies 27, 31
Biology 48
Biological, Secondary Education 48
Chemistry 48
Chemistry, Secondary Education 51
Communication 129
Communication—English Combined Major 130
Communication, Secondary Education 129
Computer Information Systems 81
Computer Science-Math 60
Construction Management 148-149
Criminal Justice Administration 132-133
Earth Science Education 57
Economics 83-85
Economics-Social Science, Secondary Education 84-85
Elementary Education 100
Elementary Education Bilingual/Multicultural 101
English 53-54
English, Secondary Education 53
Environmental Health 110
Finance 88-89

INDEX

A
Absence, Attendance from Class 22
Academic Advising Center 17
Academic Calendar 3-4
Academic Enrichment and Special Programs 30-40
Academic Information 20-29
Academic Probation and Dismissal Policy 22-23
Accounting Courses 80
Accounting, Department of 79-80
Accounting, Department of 79-80
Accounting Minor 78, 80
Accreditation and Affiliation of Boise State University 6
Adding and Dropping Courses 21
Address or Name Changes 21
Addresses of University Contacts 2
ACE 36
Administration 1
Administrative Services Courses 89, 182
Administrative Hold and Withdrawals 21-22
Admission Notification Procedures 8-9
Admission to Teacher Education 99
Admission to Upper Division Courses 23
Admissions Information 8-11
International Students 11
Graduate Students 11, 176-179
Special Undergraduate Students 10
Transfer of Vocational Technical/Academic Credits 10
Transfer Students 8-9
Vocational Technical Students 10-11, 159
Admissions, Graduate 11, 182
Adult Basic Education 38
Adult Learning Center 160
Advanced Placement (AP) Exams 35
Advanced Placement and Credit 35-36
Advanced Technical Communication Minor 33
Advising Center, Academic 17
Advising 21
Agricultural Equipment Courses 161
Agricultural Equipment Technology Program 161
Air Conditioning, Refrigeration, Heating Courses 174
Air Conditioning, Refrigeration, Heating Program 174
Alcohol/Drug Studies Minor 109, 111
Alumni Association 19
Anthropology Courses 128
Anthropology, Department of 127-128
Anthropology Program 127-128
Anthropology Minor 126,
Index

Residential Carpenter 174-175
Respiratory Therapy 123-125
Respiratory Therapy Technician 175-176
Small Engine Repair 176
Social Work 142-143
Sociology 143-146
Surgical Technology 176
Teacher Education 99-108
Theatre Arts 74-76
Water/Wastewater Technology 176-177
Welding & Metal Fabrications 177
Diploma, School of Applied Technology Programs 160
Disabled Student Program 18
Dismissal and Academic Probation Policy 22-23
Double Major 26
DRAFT TECHNOLOGY PROGRAMS 155-156
DRAFTING TECHNOLOGY PROGRAM 156-157
DROPPING AND ADDING COURSES 21
E
Early Childhood, Master's Program 184
Earth Science, Master's Program 187
Economics Courses 85-86
Economics, Department of 82-86
Economics Minor 78, 85
Education, Department of 99-108
Special Education 102
Education, Graduate Programs 183-188
Educational Media Services 38
Educational Placement 100
Educational Talent Search 38
Electrical Lineworker Courses 168
Electrical Lineworker Program 168
Elementary Bilingual Teacher Training Program 38
Electronics Service Technology Courses 156-157
Electronics Service Technology Program 156
Electronics Technology Courses 157-158
Electronics Technology Program 157
Elementary Education Bilingual/Multicultural 101
Elementary Education, Certification Requirements for 103
Emeriti 198
Engineering Courses 151-152
Engineering, Program 149-151
Engineering Technologies, Construction Management, Department of 148-152
Engineering, Uol 152-155
English as a Second Language 54-55
English Courses 54-56, 189
English, Department of 53-56
English, Master's Program 188-205
English Minor 42, 54
English Minor for Theatre Arts 75
Enrollment Verification 20-21
Environmental Health Courses 112
Environmental Health, Department of Community and 110-113
Evaluation of Military Experience 36
Evaluation of Transfer Credits 36
Examinations, Final 22
Exercise & Sport Studies, Masters 189-190
Extension, Correspondence and Religion Courses 26
F
Facilities of the campus 6-7
Facilities, Use of 38
Faculty 6
Faculty Initiated Withdrawal 21-22
Faculty List 191
Fees and Tuition 11-13
Fees, Board and Room 15
Fees, Other 12
Fees, Special Workshops 13
Fifth Year, Masters in Education 185
Final Examinations Requirements, Masters 180
Final Examinations 22
Finance Courses 89-90
Finance Degree 88-89
Finance, Department of Marketing & 88-90
Financial Aid 13-15
Financial Aid for General Education Courses 112-113
Non-Resident Waivers 14
Pell Grants 13
Perkins National Direct Student Loan 14
Scholarships 14
SSOC, SSIG 13-14
Short Term Loans 14
Stafford Guaranteed Student Loan 14
Student Employment 14
Study (CWSP) 14
Financial Aid Time Limits 15
Fire Service Technology Courses 168-169
Fire Service Technology Program 168
Fitness Activity Courses 97-99
Foreign Language Courses 64-66
Foreign Language Requirements, Masters 180
Foreign Student Financial Aid 15
Forestry Courses 30
Fraternities 19
French Courses 65
French Minor 42, 64
G
GED Preparation 160
GED Training 38, 160
General Business Courses 87-88
General Business Management Program 86
General Course Information 23-24
General Education Courses 106
General Information 5-7
General Science Courses 60, 187
General University Requirements (Core) 24-25
Geography Courses 58-59
Geology Courses 59-60, 187
Geology, Graduate Program 187
Geophysics Courses 60, 191-192
Geophysics, Masters program 191-192
Geosciences, Department of 56-60
German Courses 65
German Minor 42, 64
Gerontology, Minor 31-32
Gowan Field Program 37
Grade Point Average, Computation of the 22
Grading System 22
Graduate 500-level Courses, Undergraduate Enrollment in 23, 180
Graduate Classifications 179
Graduate College 178-201
Graduate Courses for 179
Graduate Credit for Seniors 21, 179
Graduate Credit Requirements 179
Graduate Degree Application for 180-181
Graduate Faculty 179
Graduate Programs 178-179
Graduate Repeat, Retakes 179
Graduate Scholarship Requirements 179
Graduate Studies in Bilingual Education Scholarships 36
Graduation, Honors 26
Graduation Requirements 24-28
Graduation, Application for 25
Graduation, Masters, Application for 180-181
Greek Courses 136
H
Health Science Courses 112-113
Health, PE & Recreation 136
Department 92-99
Heavy Duty Mechanics—Diesel Courses 170
Heavy Duty Mechanics—Diesel Program 170
High School Equivalency Program (HEP) 38
History of Boise State University 5-6
History Degree Program 134
History, Department of 134-136
History, Master's Program 192-193
Honors Courses 30-31
Honors, Graduation 26
Honors Program 30-31
Honors Program Scholarships 31
Horticulture Courses 170-171
Horticulture Program 170
Housing, Off Campus 16
Housing, Student 15-16
Humanities Courses 56
I
Idaho Business & Economic Development Center 39
Idaho Residency Requirements for Fee Purposes 12
Incomplete Grades 22
Independent Study 34
Independently Sponsored Programs 38
Industrial Environmental Technician Program 171
Industrial Mechanics Courses 171-172
Industrial Mechanics/Automation Program 171
Instructional & Performance Technology Courses 195
Instructional & Performance Technology, Masters Program 194-195
Instructional Television for Students 39
Insurance Coverage 13
Interdisciplinary Humanities 33-34
Interdisciplinary Humanities Courses 34
Interdisciplinary Studies in Aging 31-32
International Business Minor 79
International Programs/Studies Abroad 37
International Students 18
Internships/Cooperative Education 39-40
ITFS (Instructional Television Fixed Service) 37
Japanese Courses 65
KAID 39
KBSU 39
K
Language Resource Center 64
Late Registration 21
Latin Courses 82
Legal Assistant Courses 32-33
Legal Assistant Minor Program 32-33
Library 7
Library Science Courses 106
Linguistics Courses 56
M
Machine Shop Courses 172
Machine Shop Program 172
Majors and Degrees Offered 29
Management Courses 88
Management, Department of 86-88
Management, Entrepreneurial Program 87
Management, Human Resource Management Program 87
Manufacturing Engineering Technology 4 year Courses 152
Manufacturing Engineering Technology 4 year Program 149
Manufacturing Technology 2 year Courses 159
Manufacturing Technology 2 year Program 158-159
Marching Band 39
Marketing, Finance, Department of 86-89
Marketing Courses 90
Marketing Program 89
Master’s Degree in Education (MA/MS) 39
Art Emphasis 186-187
Curriculum and Instruction 183
Early Childhood 183
Earth Science Emphasis 187
Educational Technology 184
Mathematics Emphasis 188