Accounting

Accounting is the interpreting, measuring and describing of economic activity. Accountants often specialize and may work independently or work for private business, nonprofit organizations or for government agencies.

The study of accounting also provides decision-making skills and patterns of thought valuable to people in occupations not directly related to accounting.

**Career Opportunities**

Employment opportunities at all levels in the accounting field are expected to remain strong, and areas of specialization will continue to grow. Opportunities are especially good for those with both accounting and computer knowledge.

Since employers expect that applicants for accounting positions will have strong computer abilities, students preparing for accounting positions should have excellent keyboarding skills, and know word processing, spreadsheet, data base, and accounting software. An knowledge of operating systems software is also useful.

**Accounting Paraprofessional**

Preparation for entry-level and promotional accounting paraprofessional positions (i.e. bookkeeper, account clerk) with private industry and government and non-profit agencies. An intensive program requiring a considerable focus on transaction analysis and entry.

**Requirements for Degree Major:** 36-37 units

<table>
<thead>
<tr>
<th>Business Core Requirements:</th>
<th>15-16 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting 60</td>
<td>3</td>
</tr>
<tr>
<td>Business 1 or keyboarding competency</td>
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<tr>
<td>Business 18A</td>
<td>3</td>
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<tr>
<td>Business 20</td>
<td>3</td>
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<tr>
<td>Business 59 or Economics 1A</td>
<td>3</td>
</tr>
<tr>
<td>Computer Information Science*</td>
<td>3</td>
</tr>
</tbody>
</table>

*Three units selected from CIS classes, Business 9, 11.

**Concentration Requirements:** 21 Units

| Accounting 1A                | 4           |
| Accounting 1B                | 4           |
| Accounting 5                 | 2           |
| Accounting 6                 | 2           |
| Accounting 70                | 3           |
| Accounting 77 or 95          | 3           |
| Business 8                   | 3           |

**Recommended Electives**

Accounting 91A, 91B, Business 14, 15, 60, Computer Information Science 12B, 13B, Management 21

**Requirements for Certificate:** 27 units

**Courses Required**

| Accounting 60                | 3           |
| Accounting 1A                | 4           |
| Accounting 1B                | 4           |
| Accounting 5                 | 2           |
| Accounting 6                 | 2           |
| Accounting 70                | 3           |
| Accounting 77 or 95          | 3           |
| Business 18A                 | 3           |
| Computer Information Science* | 3           |

*Three units selected from CIS classes, Business 9, 11.

**Financial Accounting**

Preparation for accounting positions with business firms and government agencies with emphasis upon advanced courses in financial accounting. An intensive program emphasizing analytical aptitude in addition to computational skills.

**Requirements for Degree Major:** 36-37 units

**Business Core Requirements:** 16-17 Units

| Accounting 1A                | 4           |
| Business 1 or keyboarding competency | 1-0         |
| Business 18A                 | 3           |
| Business 20                  | 3           |
| Business 59 or Economics 1A  | 3           |
| Computer Information Science* | 3           |

*Three units selected from CIS classes, Accounting 5, 6, Business 9, 11.
5  Accounting on the Microcomputer  

Prerequisite: None
Advisory: Accounting 60 or 1A with a grade of “C” or better; ability to keyboard 20 WAM; Computer Information Science 1
Transfer Credit: Accepted for credit: CSU
Hours: 27 hours lecture; 27 hours laboratory

Emphasizes the major areas of a computerized accounting system—general ledger, depreciation, accounts payable, accounts receivable, and payroll. The course will show how the computer stores its master files and transactions, maintains them, processes transactions against them, and prints the reports. Recommended for all accounting majors.

6  Computer Spreadsheet Applications for Accounting  

Prerequisite: None
Advisory: Accounting 1A with a grade of “C” or better; ability to keyboard 20 WAM; Computer Information Science 1 or 12A
Transfer Credit: Accepted for credit: CSU
Hours: 27 hours lecture; 27 hours laboratory

In the course, the student will use current spreadsheet software for payroll, bank reconciliation, purchases, receivables and payables, worksheets, depreciation, financial statements including the Statement of Cash Flows, distribution of earnings, statement and ratio analysis, and supplemental schedules.

60  Fundamentals of College Accounting  

Prerequisite: None
Advisory: Business 60 or Mathematics 51; English 58 or 60 and 7 or ESL 2R and 2W
Hours: 54 hours lecture

This is a beginning accounting course that emphasizes small business applications. It covers the accounting cycle for a service business and for a merchandising business. The general journal, special journals, the general ledger, and subsidiary ledgers are covered: the preparation of adjustments and worksheet, closing entries, correcting entries, financial statements, bank statement reconciliation, and payroll; and calculations for interest, sales discounts, purchases discounts, sales taxes, and payroll taxes.

61  Quick Books (R) for Small Business  

(same as Business 71M)

Prerequisite: None
Advisory: English 58 or 60 or ESL 2R and 2W; Business 25
Hours: 18 hours lecture

This class will emphasize the use of Quick Books (R) to aid the small business operator in creating financial statements and other financial reports. Not open to students who have taken Business 71M.

70  Payroll Accounting  

Prerequisite: None
Advisory: Accounting 60 or 1A with a grade of “C” or better and Computer Information Science 1
Hours: 54 hours lecture

This course covers current practices in payroll accounting and tax reporting, including federal and state laws that affect payroll records and reports. The course covers both manual and computer payroll systems with hands-on computer applications.
Federal and State Taxation (4)

Prerequisite: None
Advisory: Accounting 1A and 1B
Hours: 72 hours lecture

Federal and State tax regulations pertaining to individual partnership, and corporate returns are covered. The course includes filing of returns, income and adjustments, itemized deductions, capital and other gains and losses. Recommended for accounting majors.

Intermediate Accounting (3)

Prerequisite: None
Advisory: Accounting 1A and 1B with a grade of “C” or better
Hours: 54 hours lecture

This course continues the study of the valuation of financial statements with emphasis on cash flows, receivables, current liabilities, inventory, and plant equipment.

Intermediate Accounting (3)

Prerequisite: None
Advisory: Accounting 91A with a grade of “C” or better
Hours: 54 hours lecture

This course continues the study of valuation of financial statements with special emphasis on intangible assets, stock, long-term liabilities, retained earnings and dividends, income tax and analysis of financial statements.

Cost Accounting (3)

Prerequisite: None
Advisory: Accounting 1B with a grade of “C” or better
Hours: 54 hours lecture

This course is an introduction to cost accounting methods, including job order, process and standard cost systems. Special attention will be given to managerial uses of cost accounting. Offered Spring semester only.

Auditing (3)

Prerequisite: None
Advisory: Accounting 91B with a grade of “C” or better
Hours: 54 hours lecture

Procedures and practices used in the verification of accounting records and financial statements are studied. Internal auditing functions will be stressed. Course offered Fall semester only.

Governmental Accounting (3)

Prerequisite: None
Advisory: Accounting 1A with a grade of “C” or better
Hours: 54 hours lecture

This course introduces the student to accounting for governmental and non-profit entities. The course emphasizes financial reporting for governmental units, accounting for funds, accounting aspects of budgeting and budgetary controls. Course offered Spring semester only.
American River College offers the basic lower division courses in anthropology. Anthropology serves as an excellent background to many other behavioral sciences. It also helps students better understand people and the world around them.

**Career Options**

Anthropology is a basic component for careers as an anthropologist, anthropology instructor, museum curator, population analyst, urban planner, transcultural nurse, health researcher, and environmental impact analyst.

Some career options may require more than two years of college study.

### General Science

**Requirements for Degree Major**

- 18 units of transfer level course work in science in addition to other graduation requirements
- Two laboratory courses must be included, one in a physical science and one in a biological. Courses may be selected from anatomy, astronomy, bacteriology, biology, botany, chemistry, geology, physical anthropology, physical geography, physical science, physiology, physics and zoology. See ARC graduation requirements.

### Social Science

**Requirements for Degree Major**

- 18 units of transfer-level work in addition to other graduation requirements.

Courses taken must be in at least four of the following areas: Anthropology, Economics, Geography, History, Philosophy, Political Science, Psychology (except Psychology 4), and Sociology.

### Physical Anthropology (3)

**Prerequisite:** None

**Advisory:** English 58, or 60, 78 or ESL 2R, 2W, or placement through assessment

**Transfer Credit:** Accepted for credit: UC (unit limitation), CSU

**Hours:** 54 hours lecture

An introduction to the science of physical anthropology; topics covered are: the scientific method; principles and mechanics of evolution; evidence of evolution; geologic dating; living primates; the fossil evidence for human evolution; evolution in modern populations. (CAN ANTH 2) AA/AS area 3A; CSU area B2; IGETC area 5B

### Honors Physical Anthropology (3)

**Prerequisite:** 3.0 or better cumulative GPA, English 1A with a grade of "B" or better, or English 1A Honors with a grade of "C" or better

**Transfer Credit:** Accepted for credit: UC (unit limitation), CSU

**Hours:** 54 hours lecture

This course is an in depth introduction to the science of physical anthropology. This seminar style honors course approaches the topical material through class discussion which encourages problem solving techniques focusing on current anthropological issues. Weekly topical issues will be presented in a case study format. Critical thinking skills are emphasized in responding to these issues. The following topics are included in the course: evolutionary theory, heredity, human variation, taxonomy and behavior of the living primates and the fossil evidence of human evolution. AA/AS area 3A; CSU area B3; IGETC area 5B

### Cultural Anthropology (3)

**Prerequisite:** None

**Advisory:** English 58, or 60, 78 or ESL 2R, 2W, or placement through assessment process

**Transfer Credit:** Accepted for credit: UC, CSU

**Hours:** 54 hours lecture

This course is an introduction to the varieties of customs, traditions and forms of social organizations in both western and non-western societies. The main focus of the course is to examine non-western cultures and the social experiences of development. This course provides valuable background to students interested in multicultural perspectives and/or anticipating involvement in global business opportunities or travel. (CAN ANTH 4) AA/AS area C2 & F; CSU area D3; IGETC area 4
3 Introduction to Archeology and World Prehistory (3)

Prerequisite: None
Advisory: English 58, or 60, 78 or ESL 2R, 2W, or placement through assessment
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture

The course introduces students to the theories, concepts, and methods employed by the archaeologist in the study of human pre-history. The course emphasizes the development and diverse evolution of social and cultural systems. It explores the problems and achievements of non-literate and traditional cultures, diverse communities, and social classes over time based on a comparison of a wide range of archaeological examples from all over the world. (CAN ANTH 6) AA/AS area C2; CSU area D3; IGETC area 4

11 Physical Anthropology Laboratory (1)

Prerequisite: None
Corequisite: Anthropology 1
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours laboratory

This course is an introductory laboratory course designed to provide students with an opportunity to become familiar with the methods of the science of biological anthropology while investigating topics in laboratory and field situations. Topics covered in the course are: the scientific method, sources of biological variation and forces of evolution, human osteology, human variation, taxonomy and comparative osteology of the primates, and fossil evidence for human evolution. AA/AS area A; CSU area B2; IGETC area 5B

12 Magic, Witchcraft and Religion (3)

Prerequisite: None
Advisory: English 58, or 60, 78 or ESL 2R, 2W, or placement through assessment
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture

A cross-cultural study of the forms and functions of supernatural beliefs and associated rituals in various societies of Africa, Asia, aboriginal Australia, Oceania, South America, native North America and elsewhere. Emphasis is on understanding beliefs and rituals within their given social contexts, but also on broad comparison to derive insight into the general functions of beliefs and rituals in human life. AA/AS area C2; CSU area D3

13 Cultures in Focus (3)

Prerequisite: None
Advisory: English 58, or 60, 78 or ESL 2R, 2W, or placement through assessment
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture

An examination of the cultures of the “Third World” with special emphasis on development problems. The course examines the historical and cultural context of development. Technological changes are examined as they impact ideological aspects of culture. Problems of overpopulation, underemployment, famine, etc., are discussed in their cultural context. AA/AS area C2; CSU area D3; IGETC area 4

14 American Indians of California (3)

Prerequisite: None
Advisory: English 58 or 60, 78, or ESL 2R, 2W, or placement through assessment process
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture

This course surveys the sociocultural systems of California Indians from the prehistoric period to present. In addition to offering an overview of the diversity and complexity of aboriginal California, it includes environmental adaptations, material culture, social structure, ideology, and response to change. AA/AS area C2 & F; CSU area D3; IGETC area 4

40 Sampler: Current Issues in Anthropology (1-3)

Prerequisite: None
Advisory: English 58 or 60, 78, or ESL 2R, 2W
Transfer Credit: Accepted for credit: CSU
Hours: 18-54 hours lecture

Concentrated study of current anthropological issues. Topics will reflect contemporary issues and problems in the areas of cultural and physical anthropology, as well as in archaeology. Issues in the area of physical anthropology will be approached from a biological and ecological perspective; issues in cultural anthropology and archaeology will be approached from a multi-cultural and international platform. Course may be repeated for a maximum of 6 units.
American River College conducts, in cooperation with the local construction unions, a number of apprenticeship programs (most of which can lead to an Associates of Arts degree). An apprenticeship program is a formal system of occupational training from two to five years that combines paid employment, on-the-job training and job related college level instruction in order to develop highly skilled workers.

Apprenticeship programs are a cooperative effort between the Joint Apprenticeship Training Committee (JATC) and the college. The JATC is composed of representatives from both labor and management from each apprenticeship area and their purpose is to oversee apprenticeship training. All American River College apprenticeship programs are approved by the Division of Apprenticeship Standards of the California Department of Industrial Relations.

Enrollment in an apprenticeship course is limited to registered apprentices, however anyone meeting the apprenticeship requirements can apply for acceptance (Apprenticeship 100 is open to everyone without prerequisites). Information on admission to apprenticeship programs can be obtained from the local JATC having jurisdiction over the trade in which you are interested. Listed below are the program types and contact persons.

### Carpenters Apprentice
- **A.A. Degree:** Carpenters Apprenticeship
- **Program Director:** Program Director
  - 8000 Chadbourne Rd, Suite A
  - Fairfield, CA 95485
  - (707) 399-2880

### Drywall/Lathing Apprentice
- **Program:** Carpenters Apprenticeship 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167.
- **Contact Person:**

### Electrical Apprentice
- **Program:** Electrical Apprenticeship

### Electrical Sound and Communications Apprentice*
- **Program:** Electrical Sound and Communications Apprenticeship*

### Ironworker Apprentice
- **Program:** Ironworker Apprenticeship

### Sheet Metal Apprentice
- **Program:** Sheet Metal Apprenticeship
- **Program:** Sheet Metal Service Technician Apprenticeship

### Sheet Metal Residential Apprentice
- **Program:** Sheet Metal Residential Apprentice

### Certificates:
- **Carpenters Apprenticeship**
- **Drywall/Lathing Apprenticeship**
- **Electrical Apprenticeship**
- **Electrical Sound and Communications Apprenticeship***
- **Ironworker Apprenticeship**
- **Sheet Metal Apprenticeship**
- **Sheet Metal Service Technician Apprenticeship**

*Pending approval from the State Chancellor's office

### Requirements for Certificate/Degree Major: 20.4 units
For More Information Contact:
Program Director
4421 Pell Drive #B
Sacramento, CA 95838
1-888-315-3098

**Electrical Apprenticeship**

This is a five-year construction trade program. Electrical technicians typically install wiring, conduit, breaker boxes and components, motors and controls, lighting, switches, and all wiring, components, and controls associated with the interior and exterior of commercial buildings and sites.

**Requirements for Certificate/Degree Major:**


**Electrical Sound and Communications Apprenticeship**

This is a three-year construction trade program. Sound and Communications technicians typically install telephone, television, security, and data transmission components and systems in residential and commercial buildings and sites.

For More Information Contact:
Program Director
2836 El Centro Rd.
Sacramento, CA 95833
(916) 646-6688

**Requirements for Certificate/Degree Major:**


**Ironworker Apprenticeship**

This is a three-year construction trade program. Ironworkers are employed in four segments of the trade: Rigging, Structural Ironwork, Reinforcing and Ornamental Ironwork.

For More Information Contact:
Program Director
3524 51st Ave.
Sacramento, CA 95823
(916) 428-7420

**Sheet Metal Apprenticeship**

This is a five-year construction trade program. Sheet Metal Workers typically construct and install heating and air-conditioning ducting, venting systems, hoods, metal roofing, and food service kitchen components in commercial buildings.

**Requirements for Certificate/Degree Major:**

- Sheet Metal Apprenticeship 140A, 140B, 141A, 141B.

**Sheet Metal Service Technician Apprenticeship**

This is a five-year construction trade program. Sheet Metal Service Technicians typically install, service, diagnose, and repair heating, air-conditioning, heating, and venting system components and controls in commercial buildings.

**Requirements for Certificate/Degree Major:**


**Sheet Metal Residential Apprenticeship**

This is a two-year construction trade program. Sheet Metal Residential Workers typically construct and install heating and air-conditioning ducting and venting systems in residential buildings.

For More Information Contact:
Program Director
1624 Silica Ave.
Sacramento, CA 95815
(916) 922-9381

**Requirements for Certificate:**

- Sheet Metal Residential Apprenticeship 140A, 140B, 141A, 141B.

**100 Introduction to Apprenticeship: Electrical, Sheetmetal, and Carpenter**

**Prerequisite:** None

**Hours:** 54 hours lecture

This course provides an introduction to apprenticeship in the electrical, carpenter and sheetmetal trades. Topics include labor history, workers’ rights, construction computations, safety, traditional and non-traditional worker originations.
American River College's art curriculum offers introductory and intermediate-level courses in a variety of art media as well as courses in art appreciation and art history.

To earn an A.A. degree in art, all students are required to complete the core requirements, the concentration requirements of the particular major, and the college's graduation requirements.

### ART MAJOR - A.A. DEGREE

No Certificate program.

#### Requirements for Degree Major: 30 units

<table>
<thead>
<tr>
<th>Art Core Requirements</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 3</td>
<td>3</td>
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<tr>
<td>Art 4 or 5</td>
<td>3</td>
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<tr>
<td>Art 11A</td>
<td>3</td>
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<tr>
<td>Art 14</td>
<td>3</td>
</tr>
<tr>
<td>Art 16</td>
<td>3</td>
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</tbody>
</table>

**General Education Graduation Requirements:**
Students must also complete the general education graduation requirements for an A.A. degree. See Graduation requirements.

#### Concentration Required 15 units from the following:

| Art 3A                 | 3     |
| Art 3B                 | 1     |
| Art 5A                 | 3     |
| Art 10                 | 3     |
| Art 11B                | 3     |
| Art 12A                | 3     |
| Art 12B                | 3     |
| Art 15A                | 3     |
| Art 15B                | 3     |
| Art 17A                | 3     |
| Art 17B                | 3     |
| Art 17C                | 3     |
| Art 20A                | 3     |
| Art 20B                | 3     |
| Art 21A                | 3     |
| Art 21B                | 3     |
| Art 25A                | 3     |
| Art 25B                | 3     |
| Art 26A                | 3     |
| Art 26B                | 3     |
| Art 27C                | 2-4   |
| Art 27D                | 3     |
| Art 27E                | 3     |
| Art 29A                | 2     |
| Art 29B                | 3     |
| Art 33A                | 2     |
| Art 33B                | 2     |
| Art 39A                | 3     |

**Recommended Electives**

Additional Art;
MUFHL 6, 10, 11; Philosophy 6; Theatre Arts 1, 2, 3, 7, 30A.
Art New Media 24, 22, 26A.

### 3 Art: Stone Age Through Middle Ages (3)

**Prerequisite:** None

**Advisory:** English 58 or 60 and 78 or ESL 2R, 2L, 2W, or placement through assessment process

**Transfer Credit:** Accepted for credit: UC (unit limitation), CSU

**Hours:** 54 hours lecture

This course is a study of the architecture, sculpture and painting of the Ancient Near East and Europe from the Stone Age through the Middle Ages. Art works of each period are discussed and related to respective cultures. Field trips and/or individual visitation to art galleries and museums are required. (CAN ART SEQ A - Art 3+4+5) AA/AS area 3B; CSU area C1; IGETC area 3

### 3A Art History of the Non-Western World (3)

**Prerequisite:** None

**Advisory:** English 58 or 60 and 78 or ESL 2R, 2L, 2W, or placement through assessment process

**Transfer Credit:** Accepted for credit: UC (unit limitation), CSU

**Hours:** 54 hours lecture

This course is a survey of art history in cultures throughout the non-western world. It is an introduction to the study of the architecture, sculpture and painting of the peoples of India, Africa, Asia, the Americas, the Arctic, Australia and Oceania. The time period covered is from the stone age to This course is a study and discussion of the factors determining the historical evolvement of the fine arts from Impressionism to the present. Examples illustrating the relationships between various schools and styles in Modern Art are shown. Field trips and/or individual visitations to art galleries and museums are required. AA/AS area 3B; CSU area C1; IGETC area 3
3B  Honors Art History of the Non-Western World  (1)
Prerequisite: English 1A and cumulative GPA of 3.0 or above
Corequisite: Art 3A
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours lecture
This honors course, a supplement to Art 3A, will directly address specific items of art cultures of the non-western world. It is an intensely focused study of the art of the peoples on India, Africa, Asia, the Americas, the Arctic, Australia and Oceania. The time period covered is from the stone age to the eighteenth century. CSU area C1

3H  Stone Age Through the Middle Ages, Honors  (1)
Prerequisite: 3.0 cumulative GPA or better; English 1A with a grade of "B" or better or English Honors 1A with a grade of "C" or better
Corequisite: Art 3
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 18 hours lecture
This honors course will more directly address specific styles of art from the Stone Age through the Middle Ages. It is an in-depth study of the art of the peoples of European and Mediterranean civilizations and cultures. Field trips and/or individual visitations to private collections, art galleries and museums are required. Weekly writing assignments.

4  Renaissance Tradition in Art  (3)
Prerequisite: None
Advisory: English 58 or 60 and 78 or ESL 2R, 2L, 2W, or placement through assessment process
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours lecture
This course is a study of the architecture, graphic art, painting and sculpture of European cultures from the Proto-Renaissance to the Post-Impressionist period. Art works of each major period will be discussed and analyzed and placed within an historical context. AA/AS area B; CSU area C1; IGETC area 3

4H  Renaissance Tradition in Art, Honors  (1)
Prerequisite: 3.0 cumulative GPA or better; English 1A with a grade of "B" or English Honors 1A with a grade of "C" or better
Corequisite: Art 4
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 18 hours lecture
This honors course, a supplement to Art 4, will directly address the painting, sculpture and architecture of the Renaissance through the time of The Enlightenment. CSU area C1

5  Modern Art  (3)
Prerequisite: None
Advisory: English 58 or 60 and 78 or ESL 2R, 2L, 2W, or placement through assessment process
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This course is a study and discussion of the factors determining the historical involvement of the fine arts from impressionism to the present. Examples illustrating the relationships between various schools and styles in Modern Art are shown. Field trips and/or individual visitations to art galleries and museums are required. AA/AS area 3B; CSU area C1; IGETC area 3

5A  International Contemporary Art  (3)
Prerequisite: Art 5, or Art 10, or Humanities 2
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours lecture
This course is a worldwide survey of trends in art and architecture since 1980, with an emphasis on the diversity of contemporary global cultures. New art mediums, such as video, computer, and performance art are highlighted. Social and political concerns in art are another primary focus. A field trip to a local art exhibition is required. AA/AS area 3B, CSU area C1, IGETC area 3

10  Introduction to Art  (3)
Prerequisite: None
Advisory: English 58 or 60 and 78 or ESL 2R, 2L, 2W, or placement through assessment process
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours lecture
This course is a survey of the visual arts including: drawing, sculpture, architecture, painting and printmaking. It is recommended for all students seeking a basis for understanding art. Field trips and/or individual visitation to art galleries and museums are required. AA/AS area 3B; CSU area C1; IGETC area 3

10H  Honors Introduction to Art  (3)
Prerequisite: GPA of 3.0 or above; English 1A or 1A Honors with a grade of "C" or better
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
This course is an honors level introduction to the visual arts. Critical thinking skills will be used to analyze drawings, sculptures, paintings, architecture, and printmaking. Using a seminar style, the focus will be on developing evaluation skills and achieving a thorough understanding of the visual arts. Required field trips and/or individual visits to art galleries and museum will create a synthesis between class discussions and actual works of art. CSU area C1; AA/AS area B

11A  Elementary Drawing and Composition  (3)
Prerequisite: None
Advisory: English 58 or 60 and 78 or ESL 2R, 2L, 2W, or placement through assessment process
Transfer Credit: Accepted for credit: UC, CSU
Hours: 36 hours lecture; 54 hours laboratory
This course is a studio class in drawing and composition. Lectures and discussions stress the fundamental discipline related to the visualization of concrete or abstract concepts. Practice in drawing and development of content will be emphasized. (CAN ART 8) CSU area C1; AA/AS area B

11B  Elementary Drawing and Composition  (3)
Prerequisite: Art 11A
Transfer Credit: Accepted for credit: UC, CSU
Hours: 36 hours lecture; 54 hours laboratory
This course will further develop the skills and concepts of drawing as introduced in Art 11A. Students will continue to develop the relationship of the formal elements of line, shape, value, texture, spatial relations and color through the creative exploration of materials. Students will critically evaluate their own and others' art work.

12A  Figure Drawing and Composition  (3)
Prerequisite: Art 11A with a grade of "C" or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 36 hours lecture; 54 hours laboratory
This is a studio class where the understanding of human form and structure is based upon drawing from the nude figure. Topics include analysis of proportion, anatomy and the relationship of the figure to space. Projects developing compositions in which the figure is the subject for a study of line, shape, value, texture and space will be emphasized. This course may be taken twice for credit.
12B Figure Drawing and Composition
Prerequisite: Art 12A with a grade of "C" or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 36 hours lecture; 54 hours laboratory
This is a combined lecture and lab class where the human figure is studied directly and in historical context. Students will study the structure, proportion, and relationship of the nude figure to compositional space and color. Students will study great works of figurative based art and will practice subjective responses to a multitude of aesthetic theories. This course may be taken twice for credit.

14 Design: Fundamentals
Prerequisite: None
Advisory: English 58 or 60 and 78 or ESL 2R, 2L, 2W, or placement through assessment process
Transfer Credit: Accepted for credit: UC, CSU
Hours: 36 hours lecture; 54 hours laboratory
This course focuses on the fundamentals of design for beginning students, establishing a foundation for intermediate and advanced art courses as well as developing a visual and verbal vocabulary essential to understanding and appreciating art and design aesthetics. The fundamentals of line, shape and form, spatial relationships, value and color will be analyzed. These principles will be applied through a series of studio projects, developing skills with a wide range of tools, media, and presentation techniques. AA/AS area B; CSU area C1

15A Design: Image and Content
Prerequisite: Art 14
Transfer Credit: Accepted for credit: UC, CSU
Hours: 36 hours lecture; 54 hours laboratory
This course will present problems in organizing the elements of design (line, shape, form, color, texture) into creative visual expressions. Emphasis is placed on the relationship between design (image) and content (ideas and feelings). Discussion and criticism of problems utilizing a variety of media will be included. AA/AS area B

15B Design: Color Theory
Prerequisite: Art 14
Transfer Credit: Accepted for credit: UC, CSU
Hours: 36 hours lecture; 54 hours laboratory
This course covers studio problems in the use and understanding of color and its application to works of art, interior design and graphics; basics of color theory and color interchange. It also includes image and composition as related to the use of color both functionally and creatively.

16 Three Dimensional Design
Prerequisite: None
Advisory: English 58 or 60 and 78 or ESL 2R, 2L, 2W, or placement through assessment
Transfer Credit: Accepted for credit: UC, CSU
Hours: 36 hours lecture; 54 hours laboratory
This foundation course covers an analysis of historical and contemporary designs, primarily concerned with the visual dialogue between form and space, with focus on visual sensitivity for three-dimensional composition. Line, plane, and volume are utilized to construct 3-D forms using a variety of materials; wire, plaster, cardboard and paper. May be taken twice for credit. (CAN ART 16) CSU area C1

17A Painting
Prerequisite: Art 11A or 14
Transfer Credit: Accepted for credit: UC, CSU
Hours: 36 hours lecture; 54 hours laboratory
This course covers the techniques and materials of oil painting. Projects are based on twentieth century painting contributions and the use of formal values as they relate to expression. This course is designed to encourage creative expression. May be taken twice for credit.

17B Painting
Prerequisite: Art 17A with a grade of "C" or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 36 hours lecture; 72 hours laboratory
This course is a continuation of Art 17A. Students will continue to explore artistic style, style development and general and specific criticism in painting. This course may be taken twice for credit.

17C Painting
Prerequisite: Art 17A with a grade of "C" or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 36 hours lecture, 54 hours laboratory
This course will survey the creative strategies of contemporary painting. Topics include post modern ideas such as: image/text, the blending of 2D and 3D form, and combining multiple styles and techniques within a single artwork. This course may be taken twice.

20A Watercolor Painting
Prerequisite: Art 20A
Transfer Credit: Accepted for credit: UC, CSU
Hours: 36 hours lecture; 54 hours laboratory
This course is an introduction to the medium of transparent watercolor. The class covers media methods of brush painting, traditional and modern composition, color relationships and creative resolutions to watercolor. This course may be taken twice.

20B Watercolor Painting
Prerequisite: Art 20A
Transfer Credit: Accepted for credit: UC, CSU
Hours: 36 hours lecture; 54 hours laboratory
This course is an intermediate watercolor class. It includes an in-depth study of contemporary methods and concepts in transparent watercolor. Emphasis is given to different approaches to watercolor, as well as composition, technical approaches and individual style development. This course may be taken twice for credit.

21A Sculpture
Prerequisite: None
Advisory: English 58 or 60 and 78 or ESL 2R, 2L, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 36 hours lecture; 54 hours laboratory
This course provides basic practice in the expressive use of form and color in three-dimensional space using traditional additive and subtractive media such as clay and plaster, as well as constructive media such as wood, found objects, and other materials. The course utilizes a problem-solving format in order to develop knowledge of technical process, formal vocabulary, and individual expression. Both historical and contemporary approaches in developing form and content are included. CSU area C1
21B Sculpture
Prerequisite: Art 21A
Advisory: English 58 or 60 and 78, or ESL 2R, 2L, 2W; or placement through assessment
Transfer Credit: Accepted for credit: UC, CSU
Hours: 36 hours lecture; 54 hours laboratory
This is an intermediate course in the practice of the expressive use of form and color in three-dimensional space. It utilizes traditional additive and subtractive media such as clay and plaster, as well as constructive media such as wood, found objects, and other materials. It utilizes a problem-solving format in order to develop knowledge of technical process, formal vocabulary, and individual expression. It examines both historical and contemporary approaches in developing form and content. It develops the ability to process visual information and create expressive objects in three dimensions.

21L Sculpture Lab
Corequisite: None
Transfer Credit: Accepted for credit: UC, CSU
Corequisite: Current enrollment in Art 21A or 21B or 43A
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54-108 hours laboratory
This course offers laboratory experience to assist in completing complex sculpture projects. The course focuses on the development of a personal creative vision furthering technical skills, and complex problem-solving. May be taken three times.

25A Ceramics
Prerequisite: None
Transfer Credit: Accepted for credit: UC, CSU
Hours: 36 hours lecture; 54 hours laboratory
This course includes techniques of elementary clay construction including pinch pot, coil, slab and simple one-piece molds. An introduction to the potter’s wheel, different types of clays and methods of design, glazing and firing will be studied. (CAN ART 6) CSU area C1

25B Intermediate Ceramics
Prerequisite: Art 25A with a grade of “C” or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 36 hour lecture; 54 hours laboratory
This course is an intermediate class in ceramic sculpture techniques and methods. It includes glazing, surface treatment and various firing processes used in clay sculpture. Focus will be on in-depth examination of contemporary ceramic sculpture. This course may be taken twice for credit.

25L Ceramic Lab
Corequisite: None
Transfer Credit: Accepted for credit: UC, CSU
Corequisite: Current enrollment in Art 25A or Art 25B
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54-108 hours laboratory
This course offers laboratory experience to assist in completing complex ceramic projects. The course focuses on the development of a personal creative vision, furthering technical skills, and complex problem solving. May be taken twice for credit.

26A Art and Children
Prerequisite: None
Advisory: English 58 or 60 and 78 or ESL 2R, 2L, 2W; or placement through assessment process
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory
This course introduces the use of tools, media and process for studio activity in the classroom. It includes the study of basic appreciation of art history, movements and concepts. The course combines the activity of a beginning college art class with the method and approach to teaching children, seniors, etc., the methods and appreciation of visual art. AA/AS area 3B; CSU area C1

26B Art for Children Practicum
Prerequisite: Art 26A or 14, Art 11A and one Art History course
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture; 54 hours laboratory
This practicum class provides students with the opportunity to participate in preschools, elementary or junior high schools and to work with credential lead teachers as “art tutors.”

27C Metal Design: Emphasis in Mixed Media
Prerequisite: None
Advisory: English 58 or 60 and 78, or ESL 2R, 2L, 2W; or placement through assessment process
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory
This course covers contemporary approaches to mixed media in small metal sculpture and jewelry. Basic small glass work, enameling, plastics, etching, reticulation and granulation will be studied. May be taken twice for credit.

27D Metal Design: Emphasis in Fabrication
Prerequisite: None
Advisory: English 58 or 60 and 78 or ESL 2R, 2L, 2W; or placement through assessment process
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory
This course covers historical and contemporary approaches to fabrication design. Sculptural forms will be made utilizing processes of fabricating, surfacing, soldering, forming and forging of metals. Basic methods and techniques for use with silver and base metals will be covered. May be taken twice for credit.

27E Metal Design: Emphasis in Casting
(formerly Art 27B)
Prerequisite: None
Advisory: English 58 or 60 and 78 or ESL 2R, 2L, 2W; or placement through assessment process
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory
This course covers historical and contemporary approaches to centrifugal casting, mold making, wax patterns, and the aesthetic aspects of metal casting for small scale sculpture and jewelry will be studied. Basic methods and techniques for wax working, kiln burnout, centrifugal casting, vulcanized rubber molds and metal finishing will be emphasized. May be taken twice for credit.

27L Metal Art Labs
Prerequisite: None
Corequisite: Current enrollment in Art 27C or 27D or 27E
Transfer Credit: Accepted for credit: CSU
Hours: 54-108 hours laboratory
This course offers laboratory experience to assist in completing complex metal art projects. The course focuses on the development of a personal creative vision furthering technical skills, and complex problem-solving. May be taken three times.
29A  Film Making  

Prerequisite: None 
Transfer Credit: Accepted for credit: UC (unit limitation), CSU 
Hours: 36 hours lecture; 54 hours laboratory 

This course involves discussion and studio participation relating to the structural, technical and intellectual aspects of film-making. Work by contemporary film makers will be used to supplement class lectures and criticism. The student choosing to make an individual film must furnish camera, film and processing. Equipment and materials are supplied for students participating in a group film. CSU area C1

29B  Film Making  

Prerequisite: Art 29A with a grade of “C” or better 
Transfer Credit: Accepted for credit: UC (unit limitation), CSU 
Hours: 36 hours lecture; 72 hours laboratory 

This course is a continuation of Art 29A. It is designed for the more serious film-making student who will be given the opportunity to explore the motion picture medium more extensively. The student choosing to make an individual film must furnish camera, film and processing. Equipment and materials are supplied for students participating in a group film.

33A  Art Gallery Operations  

Prerequisite: Two college art courses 
Transfer Credit: Accepted for credit: CSU 
Hours: 18 hours lecture; 54 hours laboratory 

This course covers gallery preparation and maintenance for students grounded in fundamentals of the visual arts. It involves experience in planning and installing exhibitions.

33B  Art Gallery Operations  

Prerequisite: Art 33A 
Transfer Credit: Accepted for credit: CSU 
Hours: 18 hours lecture; 54 hours laboratory 

This course is a further study in gallery management. Emphasis will be on selection of exhibitions, news releases, announcements and receptions. Field trips and/or individual visitations to art galleries and museums are required.

39A  Printmaking Survey  

Prerequisite: None 
Transfer Credit: Accepted for credit: UC, CSU 
Hours: 36 hours lecture; 54 hours laboratory 

This course covers various printmaking techniques which may include relief printing, monotype, silk screen, lithography and intaglio. This course may be taken twice for credit.

40A  Photography  

Prerequisite: None 
Advisory: English 58 or 60 and 78 or ESL 2R, 2L, 2W or placement through assessment 
Transfer Credit: Accepted for credit: UC (unit limitation), CSU 
Hours: 36 hours lecture; 54 hours laboratory 

This course consists of a structured examination of the formal and technical aspects of 35mm photography. A problem-solving approach is utilized to explore compositional ideas. Camera operation, black and white film developing, and printmaking are covered. Student must furnish 35mm camera, film and photographic paper. Processing chemicals will be supplied. (CAN ART 18) CSU area C1

40B  Photography  

Prerequisite: Art 40A 
Transfer Credit: Accepted for credit: CSU 
Hours: 18 hours lecture; 54 hours laboratory 

This course covers the aesthetic aspects of color photography involving camera and darkroom techniques emphasizing uniqueness of expression. It includes a continuing exploration of form and composition, lighting and exposure, film development and enlarging with emphasis on color photography as an art form. Student must furnish camera, film, enlarging paper and printing filters. Processing chemicals will be supplied.

40C  Intermediate Photography  

Prerequisite: Art 40A with a grade of “C” or better. 
Advisory: English 58 or 60 and 78 or ESL 2R, 2L, 2W or placement through assessment 
Transfer Credit: Accepted for credit: CSU 
Hours: 36 hours lecture; 54 hours laboratory 

This course covers the technical control of black and white photographic materials and equipment. Professional camera techniques and the creative aspects of photography will be emphasized. A 35mm SLR camera and related instructional materials will be required. This course may be taken twice for credit.

40D  Documentary Photography  

Prerequisite: Art 40A with a grade of “C” or better. 
Advisory: English 58 or 60 and 78 or ESL 2R, 2L, 2W or placement through assessment 
Transfer Credit: Accepted for credit: CSU 
Hours: 36 hours lecture; 54 hours laboratory 

This course provides instruction in advanced documentary and photojournalism techniques in a black and white format. Various processes of film developing and printing are emphasized. A portfolio including an extensive documentary project is required. A 35mm SLR camera and various other materials and supplies related to darkroom production are required.

40E  Studio Lighting  

Prerequisite: Art 40A with a grade of “C” or better 
Advisory: English 58 or 60 and 78 or ESL 2R, 2L, 2W or placement through assessment 
Transfer Credit: Accepted for credit: CSU 
Hours: 36 hours lecture; 54 hours laboratory 

This course is a study in studio lighting techniques used in commercial photography. Topics include lighting ratios, correct exposure using an electronic flash, basic portraiture, advertising, appropriate choice of camera formats/film, and also studies of commercial photography. Black and white as well as color transparency processes are included.

40L  Photography Lab  

Prerequisite: None 
Corequisite: Art 40A, or 40B, or 40C 
Transfer Credit: Accepted for credit: UC (unit limitation), CSU 
Hours: 54-108 hours laboratory 

This class offers students the additional lab hours to more fully develop their creative vision, technical skills and other photography class assignments. May be taken four times for credit up to a maximum of six units.
42 **Special Topics** (0.5-3)

*Prerequisite: None*

*Transfer Credit: Accepted for credit: CSU*

*Hours: 6-36 hours lecture; 9-54 hours laboratory*

This course is designed to offer an opportunity to study topics not included in current course offerings. Practicing artisans will present hands-on workshops demonstrating their craft. Topics may include bronze casting, glass blowing, air brush painting. This course may be taken 4 times for a maximum of 6 units.

43A **Figure Sculpture** (3)

*Prerequisite: None*

*Advisory: Art 12A*

*Transfer Credit: Accepted for credit: UC, CSU*

*Hours: 36 hours lecture; 54 hours laboratory*

This course introduces figure sculpture, using the live nude model as a reference. It will develop an understanding of the human form as it relates to both modern and traditional sculpture. These concepts will be developed by making studio projects using a variety of sculptural material. The projects will combine new understanding of human form with imagination, for a more complete expression of technique and creativity. May be taken twice for credit.

44 **Portfolio Preparation** (1)

*Prerequisite: None*

*Transfer Credit: Accepted for credit: CSU*

*Hours: 9 hours lecture; 27 hours laboratory*

This course provides the fundamentals of designing and assembling a portfolio of your own art and/or graphic works. Techniques for presenting and photo-documenting the work, and for developing a resume and artist's background are included.

46 **Teacher Aide In Art** (1-4)

*Prerequisite: A grade of “C” or better in the course in which the student will tutor*

*Transfer Credit: Accepted for credit: CSU*

*Hours: 18 hours lecture; 54-162 hours laboratory*

This course provides opportunities to develop an in-depth understanding of some facet of visual art such as two dimensional or three dimensional design, painting, drawing, ceramics, and to learn to work with individual and small groups of students on the development ideas and execution of art projects. May be taken four times for credit up to a maximum of six units.

47A **Introduction to Illustration** (3)

*Prerequisite: Art 11A*

*Transfer Credit: Accepted for credit: CSU*

*Hours: 36 hours lecture; 54 hours laboratory*

This course will survey the history of the art of illustration. The course defines areas of specialization and the illustrator's role in visual communication. Students will evaluate the appropriate use of materials, tools and methods. Illustration will be analyzed as a method of visual problem solving through a series of projects with varied applications.

67 **Introduction to Metal Fabrication and Sculpture** (3)

*Prerequisite: Welding 51 with a grade of “C” or better*

*Hours: 36 hours lecture; 54 hours laboratory*

This course will cover metal sculpture techniques, design principles and materials used for sculpture, and functional and nonfunctional art forms, on ferrous and non-ferrous metals. Techniques on the major welding processes - gas welding, SMAW, MIG and TIG - will be an integral part of the course as well as related safety issues. This course may be taken twice for credit.

68 **Introduction to Ornamental Iron** (Same as Welding 68) (3)

*Prerequisite: Welding 51 with a grade of “C” or better*

*Hours: 36 hours lecture; 54 hours laboratory*

This course will cover the hands-on basics of metal forming and welding techniques, design principles and materials used for sculpture, and functional art forms with emphasis on the use of the anvil and the gas forge. Techniques on the major welding processes - gas welding, SMAW, MIG and TIG - will be an integral part of the course as well as related safety issues. This course may be taken twice for credit.
Art New Media

Art New Media at American River College is a course of study that emphasizes the visual arts produced in a digital environment. Besides a degree, the program also offers certificates in graphic design, illustration, multimedia, and web graphics.

Career Opportunities

People trained in digital graphics have a number of career options, including custom multimedia software development, computer-based training, entertainment and computer games, website design, and animation. Businesses need designers to build marketing presentations and electronic catalogs on CD-ROM and the Internet. Corporations with large-scale training needs, publishing companies, and educational institutions need courseware designers and qualified training specialists. The development of computer games will continue to be a growing field of employment. So will website design, which is much in demand as a skill. Finally, computer animation serves many markets, including all the areas above, plus film and television production. Each area of specialization has somewhat different qualifications, but all demand a solid foundation of design skills and a good working knowledge of important graphic software applications.

The graphic designer has the responsibility for communicating a message primarily through visual means (posters, signs, packaging, corporate symbols, advertisements). Illustrators may work from their original designs or take a concept from another person and bring it to life. Graphic designers and illustrators work for themselves, or for design, advertising, or marketing firms, or in design offices in large corporations.

Art New Media

Requirements for Degree Major: 42 Units

Core Requirements Units

Art 5 3
Art 11A 3
Art 14 3
Art 15A 3

Area: Fine & Applied Arts
Dean: TBA
Phone: (916) 484-8433
Counseling: (916) 484-8572

*Pending approval from the State Chancellor’s Office

Art 15B 3
Art New Media 3 3

Concentration Requirements Units

24 units from the following:

Repeatable courses may be taken no more than twice in order to apply toward AA degree or certificate.

Art New Media 5 1
Art New Media 6 1
Art New Media 15 3
Art New Media 16 3
Art New Media 18 3
Art New Media 20 3
Art New Media 22 3
Art New Media 24A 3
Art New Media 24B 3
Art New Media 25 3
Art New Media 26A 5
Art New Media 26B 3
Art New Media 32 3
Art New Media 40 1
Art New Media 42 3
Art New Media 43 1-4
Art New Media 44 3
CIS 1 1
CIS 22/Interdisciplinary Studies 22 3
Art 47A 3

Recommended Electives

Art 40A, MTHL 6, 10, 11, Philosophy 6, Theatre Arts 1, 2A, 2B, 7, 7A, 7B, CIS 23.

General Education Graduation Requirements:

Students must also complete the general education graduation requirements for an A.A. degree. See Graduation requirements.

Graphic Design Certificate

Requirements for Certificate: 32-36 units

Courses Required Units

Art 14 3
Art 15B 3
Art New Media 3 3
Art New Media 15 3
Art New Media 16 3
Art New Media 18 3
Art New Media 20 3
Art New Media 24A 3
Art New Media 24B 3
Art New Media 25 3
Art New Media 43 1-4
Art New Media 44 1
**Illustration Certificate**

**Requirements for Certificate:** 28 Units

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<tr>
<td>Art 5</td>
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<td>Art 11A</td>
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<td>Art 12A</td>
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<td>Art 15B</td>
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<td>Art 17A</td>
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<td>Art 20A</td>
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<td>Art 47A</td>
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<td>Art New Media 20</td>
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<td>Art New Media 22</td>
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<td>Art New Media 44</td>
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**Multimedia Certificate**

**Requirements for Certificate:** 31–34 Units

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<td>Art 14</td>
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**Web Graphics Certificate**

**Requirements for Certificate:** 35–38 Units

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<td>English 13A</td>
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<td>CIS 21A</td>
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**Technical Communication Certificate**

**Requirements for Certificate:** 18–19.5 Units

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<td>Computer Information Science 11A*</td>
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<td>Art New Media 16 or</td>
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<td>English 13D</td>
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<td>English 13J</td>
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<td>Interdisciplinary 22/CIS22</td>
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Three units selected from:

- English 13D
- English 13E
- English 13F
- English 13G
- English 13H
- English 13I
- English 13J

Six units selected from:

- Art New Media 20
3 History of Graphic Design

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture
This course is a history of graphics and the graphic object from ancient Egypt to contemporary times, with an emphasis on commercial graphics from the 1880s to current multi-media design. An analysis of graphics from a wide range of cultures will also be a primary focus. CSU area C1; AA/AS area B

5 Overview of Multi Media

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture
This course introduces interactive multimedia through the historical and technical development of new media. Multimedia products will be demonstrated and analyzed in terms of design process, research, production requirements and distribution.

6 Careers in Multimedia

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture
This course presents the trends in the current market of multimedia and areas in which multimedia titles are developed. Topics included production roles, technical skills, assessing, the job search.

15 Fundamentals of Graphic Design
(formerly Art 30A)

Prerequisite: None
Corequisite: Art 14
Advisory: English 58 or 60 and 78, or ESL 2R, 2L, 2W, or placement through assessment
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory
This course introduces visual communication through the historical development of graphic design and typography. The design process will be applied to a series of non-computer based individual projects with an emphasis on clear communication and portfolio quality presentation. The terminology and visual language of graphic design will be applied through the creation and evaluation of individual projects.

16 Design for Publication

Prerequisite: None
Advisory: Art New Media 15, Art 14 and Computer Information Science 1 (Macintosh)
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory
This course introduces the basic operating principles of the digital page layout software Quark Express interfacing with related software. The principles of typography and page design will be applied to individual portfolio quality projects. Areas of focus include promtionals such as fliers, posters, and brochures and publications such as newsletters, journals, and catalogues. This course may be taken four times on different software versions.

18 Digital Prepress
(formerly Art 30B)

Prerequisite: None
Advisory: Art New Media 15 and Computer Information Science 1 (Macintosh)
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory
This course introduces digital prepress for graphic design. Areas of focus will include desktop production for one-color and multi-color printing as well as the language necessary to properly communicate with service bureaus and commercial printers. Field trips are required.

20 Digital Design

Prerequisite: None
Advisory: Art 11A or 14 and Computer Information Science 1 (Macintosh) and English 58 or 60 and 78, ESL 2R, 2L, 2W, or placement through assessment
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory
This course is an introduction to computer based design using the basic operating principals of Adobe Illustrator. Design skills and the tools of the software application will be applied to produce individual portfolio quality projects. A field trip is required. This course may be taken four times on different versions.

22 Digital Painting

Prerequisite: None
Advisory: Computer Information Science 1 (Macintosh), Art 11A
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory
This course introduces the basic operating principles of MetaCreation Painter to create and manipulate images. The fundamental skills of drawing and painting will be applied to individual portfolio quality projects. This course may be taken four times for credit on a different version.

24A Digital Photo Imagery - PhotoShop Basics

Prerequisite: None
Advisory: Art 14, Computer Information Science 1 (Macintosh), English 58 or 60 and 78, ESL 2R, 2L, 2W, or placement through assessment
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory
This course is an introduction to computer-based photographic imaging using the basic operating principles of Adobe Photoshop. Topics of color field variation, retouching, and the integration of graphics and photographs will be included. The tools of the software application will be applied to produce individual portfolio quality projects. This course may be taken four times for credit on a different version.

24B Intermediate Digital Imaging

Prerequisite: Art New Media 24A
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory
This course addresses the intermediate techniques of Adobe Photoshop. Topics include features of the action and history palettes, threshold selections,
mask channels, and combining filters with layers and blend modes. Personal photos will be required for creative projects. This course may be taken four times for credit on a different software package or version.

25 Advanced Projects in Graphic Design (3)

Prerequisite: None
Advisory: Art New Media 16, 20, and 24A
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory
This course covers project development and multiple software applications. Emphasis will be placed on project analysis, research, production, and presentation. Projects will be produced through the integration of major graphics applications in page layout, vector based graphics and digital imaging. A portfolio of professional level projects will be developed and presented.

26A Introduction to Digital 3-D Modeling (3)

Prerequisite: None
Advisory: Computer Information Science 1 (Macintosh), Art 11A or 14
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory
This course introduces computer based three-dimensional rendering and animation, using the basic operating principles of Lightwave. Areas of focus include the construction of three dimensional forms, surface textures, lighting effects and animation of completed forms. The tools of the software application will be applied to produce images for use in fine art, design, multimedia, and World Wide Web environments. This course may be taken four times for credit on different software versions.

26B Intermediate Digital Modeling (3)

Prerequisite: Art New Media 26A
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory
This course builds from the foundation laid by Art New Media 26A. More complex modeling, lighting and mapping techniques will be explored. Creation of 3D characters using inverse kinematics will be included as well as QuickTime editing issues relating to animation. May be taken four times on different software packages or versions.

31 Imaging for the Web (same as CS 21G) (1)

Prerequisite: None
Advisory: CIS 21B or 22
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture; 18 hours laboratory
This course covers the creation of vector-based graphics, animation and interactivity within the Web environment. Emphasis will be placed on applying design principles to the elements of motion and interactivity. The basic operating principles of Macromedia Flash will be applied in order to create Web sites with animation, interactive buttons and sound. Issues of optimal delivery will be covered. A portfolio of professional level projects will be developed and presented. This course may be taken four times on different software versions.

40 PhotoShop for the Web (1)

Prerequisite: Art New Media 24A with a grade of “C” or better
Advisory: Computer Information Science 1, Interdisciplinary 22/CIS 22
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture; 27 hours laboratory
This course is an introduction to digital photographic imaging, applying the basic operating principles of Adobe PhotoShop to the World Wide Web. Topics of composing, layers, masks, type and color mode will be used to design and adapt content for Web Publishing projects. This course may be taken four times for credit on a different software package or version.

42 Graphic Design for the Web (3)

Prerequisite: Art New Media 24A with a grade of “C” or better
Advisory: CIS 1, and Interdisciplinary 22 or CIS 22
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory
This course applies the principles of graphic design to publishing on the World Wide Web. Adobe GoLive, a Web authoring software package, will be employed to design and adapt content for this medium. Projects include producing fully functional web pages and sites including text, graphics and multimedia content. Web delivery methods for sound, video animation, and interactive content will also be presented. This course may be taken four times on a different software package or version.

43 Internship for Art New Media (1-4)

Prerequisite: 12 units of Art New Media courses with a “C” or better
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture; 60-240 hours laboratory
This course provides supervised internship in the field of Art New Media. Students work in co-operating businesses utilizing graphic design, multimedia and web graphics. Essential aspects of project development and management are covered.

44 Digital Portfolio (1)

Prerequisite: CIS 1 for the Macintosh
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture; 27 hours laboratory
This course provides the fundamentals of designing and assembling a digital portfolio of art and/or graphic works. Digital techniques for presenting and photo-documenting the work, and for developing a resume are included.

45 Web Team Projects (same as CIS 28) (3)

Prerequisite: CIS 22, or CIS 23, or Art New Media 42 with a grade of “C” or better
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory
This course focuses on web development in a team setting. Emphasis will be placed on the project development cycle including design specification, research, production, modification, and presentation. Web projects assigned in the class will be multifaceted, approaching the complexity that individuals would be expected to encounter in the web development industry. Not open to students who have completed Computer Information Science 28.
**Astronomy**

Degree:  A.S. - Mathematics & Physical Science  
         A.S. - General Science

Area:  Science

Dean:  Dr. Pam Walker

Phone:  (916) 484-8107

Counseling:  (916) 484-8572

Astronomy is part of the general education program at American River College. The astronomy sequence includes a laboratory and complies with general education transfer requirements.

**Mathematics - Physical Science**

Requirements for Degree Major

Students must complete 18 units of transfer-level course work in addition to other graduation requirements. Courses may be selected from astronomy, chemistry, engineering, geology, mathematics, physical geography, physical science, physics and statistics. See graduation requirements.

**General Science**

Requirements for Degree Major

18 units of transfer level course work in science in addition to other graduation requirements

Two laboratory courses must be included, one in a physical science and one in a biological. Courses may be selected from anatomy, astronomy, bacteriology, biology, botany, chemistry, geology, physical anthropology, physical geography, physical science, physiology, physics and zoology. See ARC graduation requirements.

1  **Introduction to Astronomy**  (3)

Prerequisite:  None

Advisory:  Mathematics 51 and 52

Transfer Credit:  Accepted for credit:  UC, CSU

Hours:  54 hours lecture

This course covers an evaluation of common astronomical events, utilizing history, observations, reading and discussion. It is intended primarily for students with a limited background in science. AA/AS area 3A; CSU area B1; IGETC area 5A.

1H  **Honors Introduction to Astronomy**  (1)

Prerequisite:  Cumulative GPA of 3.0 or above; English 1A or 1A Honors with a grade of "C" or better

Corequisite:  Astronomy 1

Transfer Credit:  Accepted for credit:  UC, CSU

Hours:  18 hours lecture

This course covers an evaluation of common astronomical events, utilizing history, observations, reading and discussion. It is an introduction to Astronomy for students with a serious interest in science and requires the ability to understand mathematical and physical concepts, but previous high school algebra and trigonometry classes provide sufficient qualification. Students will attend the Astronomy 1 lectures (3 hrs/week) plus an additional hour of discussion each week to examine the topics from lecture at a more rigorous level.

2  **Astronomy Laboratory**  (1)

Prerequisite:  None

Corequisite:  Astronomy 1

Transfer Credit:  Accepted for credit:  UC, CSU

Hours:  54 hours laboratory

This course covers the practical use of a telescope for both visual observation and astro-photography; identification of constellations; collecting and interpreting scientific data; telescope optics; and the use of sky charts and handbooks to plan observation. Students are not required to have a telescope. Two or three night field trips are required. AA/AS area A; CSU area B1; IGETC area 5A.
The automotive technology program is a combination of classroom and hands-on shop experiences that prepare students for careers in all phases of automotive service and repair work on all types of cars. Instruction and practice is provided in diagnosis of malfunctions, disassembly of units, parts inspection and repair or replacement of parts involving engine repair, ignition systems, fuel systems, brakes, transmissions, air conditioning, heating systems, emissions controls, front-end alignment, body and fender repair and the installation of a variety of accessories. Students are trained on the use of workshop manuals in traditional and computerized formats, hand held meters and scanners, and special shop tools including power and hand tools.

Highlights:
- Chosen as a T-TEN and TSEP facility
- ASE certified instructors and programs
- Students may begin 6-week courses 3 times during the semester.
- 6-week courses allow completion of some certificate programs in one semester
- Small class size ensures individual attention and access to specialized equipment
- Preparation for ASE and State Smog Certification exams.

The ARC Program

T-TEN Program
American River College (in partnership with Toyota Motor Sales) offers a dealership technician training program known as the Toyota Technical Education Network (T-TEN). Toyota technology is folded into automotive classes as students learn on state of the art Toyota vehicles. Students work in a dealership while attending school, receive tool scholarships, and earn advanced standing in Toyota's Master Technician Certification. For more information contact the T-TEN coordinator at (916) 484-8616 or visit our websites [www.arc.losrios.cc.ca.us/~autotech or www.patc.biz].

TSEP Program
American River College (in partnership with AC Delco) offers a program for technicians who wish to work at independent shops. It is called the Technician Service Education Program (TSEP). Students work in independent shops while attending school and may receive tools, books and tuition scholarships during their training. For more information contact the TSEP coordinator at (916) 484-8356 or visit our website.

Career Opportunities
Automotive technicians are in great demand in California and Sacramento specifically. Independent shops and dealerships constantly seek well-trained technicians. There is a strong demand for automotive technicians with the high-tech skills taught at ARC.
**Air Conditioning Service Certificate**

Prepares the student for entry level employment as an Air Conditioning Service Technician.

**Requirements for Certificate:** 13 Units

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<td>Automotive Tech 75</td>
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</table>

**Undercar Service Certificate**

Prepares the student for entry level employment as an Undercar Service Technician.

**Requirements for Certificate:** 24 Units

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<tr>
<td>Automotive Tech 92</td>
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</table>

**Transmission Service Certificate**

Prepares the student for entry level employment as a Transmission Service Technician.

**Requirements for Certificate:** 21 Units

<table>
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<td>Automotive Tech 78 (A or B)</td>
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**Automotive Service Technician Certificate**

Prepares the student for entry level employment as an Automotive Service Technician.

**Requirements for Certificate:** 33 Units

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</table>

**Automotive Component Service Technician**

Prepares the student for employment in the repair of various automobile components including those requiring computerized technology.

**Requirements for Degree Major:** 41 units

**Core Requirements:**

<table>
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**Requirements for Certificate:** 33 units

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<td>Automotive Tech 62C</td>
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<td>Automotive Tech 64</td>
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<td>Computer Information Science I</td>
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</table>

**Automotive Collision Technology**

Students are prepared for positions in the field of auto body repair. Students develop skill in metalworking and auto body rebuilding and in using a wide range of repair techniques on unit body and body frame construction.

**Requirements for Degree Major:** 33 units

**Core Requirements:**

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<tr>
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<td>Automotive Tech 62C</td>
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**Requirements for Certificate:** 33 units

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<td>Computer Information Science I</td>
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</table>
**Diesel Mechanics**

Prepares the student for entry-level employment in the diesel truck service and repair industry. Program covers diesel truck engines, power trains and electrical systems.

**Requirements for Degree Major:** 54 units

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**Requirements for Certificate:** 54 units

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General Education Graduation Requirements: Students must also complete the general education graduation requirements for an A.A. degree. See graduation requirements. Degree requires a minimum of 5 semesters.

**Automotive Technology**

Students are prepared for entry-level positions in the automotive mechanics trade. This program is ASE certified as a master educational program.

**Requirements for Degree Major:** 61 units

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**Requirements for Certificate:** 61 units

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**Electronics Engine Management Systems Technician**

**Requirements for Degree Major:** 48 units

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**Automotive Claims Estimator Certificate**

**Requirements for Certificate:** 22-23 units

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American River College 2002-2003
52 Keep Your Wheels Rolling

Prerequisite: None  
Hours: 27 hours lecture; 27 hours laboratory
This course is designed to provide skills necessary for basic automotive upkeep. Additionally, it covers the selection of repair technicians and the purchase of vehicles. It is not designed for the automotive technician program.

53 Technical Basics for the Automotive Professional

Prerequisite: None  
Hours: 18 hours lecture; 54 hours laboratory
This course presents theoretical and practical training for entry-level technicians. It is a guide through basic automotive diagnosis and service procedures used in automotive shops. Lab projects performed in an automotive shop environment provide hands-on experience with industry shop tools. Shop service operations which meet Automotive Service Excellence (ASE) standards including safety, electrical, and other general automotive procedures are covered.

54 Heating and Air Conditioning Systems

Prerequisite: None  
Corequisite: Automotive Technology 53  
Transfer Credit: Accepted for credit: CSU  
Hours: 36 hours lecture; 108 hours laboratory
This course is an introduction to automotive heating and air conditioning theory. This course meets ASE standards (Automotive Service Excellence) and will allow the student to combine performance testing and repair practices of A/C systems as utilized in the industry.

55 Automotive Exhaust System

Prerequisite: Automotive Technology 53  
Hours: 36 hours lecture; 108 hours laboratory
This course is an introduction to the principles and service of exhaust systems including: pipe bending, cutting, welding, installation, repair and inspection. This course prepares students for the ASE (Automotive Service Excellence) exhaust systems test which is required for the ASE Under-Car Specialist Certificate.

56 Suspension and Steering Systems

Prerequisite: None  
Corequisite: Automotive Technology 53  
Transfer Credit: Accepted for credit: CSU  
Hours: 36 hours lecture; 108 hours laboratory
This course is an introduction to advanced principles and service of suspension and steering systems, including: alignment of equipment; alignment procedures; diagnosis and repair of suspension components. It meets ASE (Automotive Service Excellence) certification standards.

57 Automotive Brakes

Prerequisite: None  
Corequisite: Automotive Technology 53  
Hours: 36 hours lecture; 108 hours laboratory
This course covers theory, design, adjustment and repair or overhaul of brake systems and components. Operation of power and hand devices used in the servicing of brake systems and components is covered. This course meets ASE (Automotive Service Excellence) standards.

58 Electrical Systems

Prerequisite: None  
Corequisite: Automotive Technology 53 and 75  
Transfer Credit: Accepted for credit: CSU  
Hours: 36 hours lecture; 108 hours laboratory
This course covers the principles, operation, and diagnosis of automotive electrical systems including: basic engine operation; fundamentals of electricity (DC); electrical circuits; battery operation; fundamentals of magnetism; charging systems; starting systems; schematics. It meets ASE (Automotive Service Excellence) certification standards with completion of Automotive Technology 80A or 81. It is required of all automotive, autobody, and heavy equipment majors.

60 Automatic Transmission and Transaxles

Prerequisite: None  
Corequisite: Automotive Technology 53  
Transfer Credit: Accepted for credit: CSU  
Hours: 36 hours lecture; 108 hours laboratory
This course covers the basics of automatic transmission and transaxles principles and services. Instruction areas include: hydraulic principles and applications; power conversion and torque conversion; and automatic transmission operation. This course meets ASE standards.

62A Automotive Collision - Removal and Replacement of Non-Structural Components and Damage Analysis

Prerequisite: None  
Corequisite: Automotive Technology 98  
Hours: 72 hours lecture
This course covers the principles and theory of automobile construction and energy management. It provides a fundamental knowledge of vehicle construction to correctly and safely remove, inspect, replace, and align cosmetic bolt-on body components and assemblies on today’s vehicles. Provides information necessary for the technician to protect mechanical and electrical systems during tear down and reassembly, anchoring theory and techniques applicable to collision-damaged vehicles. Interpretation of damage analysis reports and types of collision damage will be covered.

62B Automotive Collision - Non-Structural Repairs

Prerequisite: None  
Corequisite: Automotive Technology 98  
Hours: 72 hours lecture
This course is designed to provide the technical information necessary to perform limited and supervised repairs to collision-damaged vehicles. Principles and theory of automobile collision repair including procedures for replacement of door skins and quarter panels, metal straightening theory and techniques for both steel and aluminum, and making repair vs. replacement decisions will be covered. Measuring systems and techniques and their use in diagnosing and correcting collision damage are covered.

62C Automotive Collision - Structural Panel & Component Repairs

Prerequisite: None  
Corequisite: Automotive Technology 98  
Hours: 72 hours lecture
This course covers the advanced principles and theory of automobile collision repair: component alignment, component replacement, structural panel repair and replacement, and chassis/frame alignment. Sectioning and full-panel replacement techniques and procedures will be covered.
63 Automotive Refinishing Technology (formerly AT 63A and AT 63B) (3)

Prerequisite: None
Corequisite: Automotive Technology 98
Hours: 54 hours lecture
This course covers the principles and theory of paint finish application, tinting and blending, color evaluation, and color adjustment and evaluating color mismatch problems. OSHA, EPA, Clean Air Act, and VOC regulations and compliance for each of these rules or regulations will be covered. Paint application techniques, restoration of corrosion protection, and blending procedures will be discussed. New and emerging paint technologies will be discussed. Color identification and interpreting vehicle color codes will be covered.

64 Automotive Collision Estimating (2)

Prerequisite: None
Hours: 18 hours lecture; 54 hours laboratory
This course is designed to provide the student with both technical and practical skills necessary to properly diagnose collision damaged vehicles and to document the costs and times necessary to repair collision damaged vehicles. Using state-of-the-art computer-generated estimating programs and video imaging, the student will analyze collision-damaged vehicles and then prepare itemized estimates detailing the required procedures and parts necessary to correctly repair the vehicle.

70 Automotive Engine Repair (4)

Prerequisite: None
Corequisite: Automotive Technology 53 and 75
Transfer Credit: Accepted for credit: CSU.
Hours: 36 hours lecture; 108 hours laboratory
This course covers the principles, operation, and diagnosis of automotive engines including: basic engine operation and construction; parts identification and location; engine disassembly procedures; engine diagnosis using metric and English measurement systems; engine repair and rebuilding procedures; engine reassembly procedures. Meets industry standards. Required of all automotive majors.

71 Manual Drive Trains and Axles (4)

Prerequisite: None
Corequisite: Automotive Technology 53
Hours: 36 hours lecture; 108 hours laboratory
This course covers the basics of manual transmissions and transaxles principles and service. Areas of instruction include: clutches; manual transmissions and transaxles; drive lines and shafts; differentials/limited slip differentials; and four-wheel drive/all-wheel drive. This course meets ASE (Automotive Service Excellence) standards.

73A Diesel Technology (10)

Prerequisite: Automotive Technology 58; Welding 51
Corequisite: Automotive Technology 53
Hours: 90 hours lecture; 270 hours laboratory
Covers diesel truck engines, power trains and air brakes. Prepares the student for entry level employment in the diesel truck service and repair industry.

73B Diesel Technology (10)

Prerequisite: Automotive Technology 73A
Hours: 90 hours lecture; 270 hours laboratory
Covers diesel truck engines, power trains and air brakes. Prepares the student for entry level employment in the diesel truck service and repair industry.

75 Mathematics for Automotive Technology (3)

Prerequisite: None
Hours: 54 hours lecture
This course covers mathematics as it relates to the automotive trades. Metric system, fractions, decimal equivalents, basic equations, ratio and proportion, gear and pulley ratios, power, efficiency, torque and thrust are covered. AA/AS area D2

78 Advanced Automotive Skill and Speed Development (4)

Prerequisite: None
Corequisite: Automotive Technology 56, 57, 58, 70, 71
Hours: 36 hours lecture, 108 hours laboratory
This course covers automotive heavy component diagnosis and repair including engine and transmission removal and replacement, as well as in-car engine repairs, adjustments, and service.

80A Engine Performance Technology (12)

Prerequisite: Automotive Technology 57, 58, 70
Transfer Credit: Accepted for credit: CSU
Hours: 108 hours lecture; 324 hours laboratory
This course covers the principles of diagnosis of chassis electrical, engine electrical, and conventional, electronic and computer controlled ignition system. It includes extensive troubleshooting, use of hand-held test equipment, lab oscilloscopes, scanners, DSO's, and 4 & 5 gas analyzers.

80B Engine Performance Technology (12)

Prerequisite: Automotive Technology 80A
Transfer Credit: Accepted for credit: CSU
Hours: 108 hours lecture; 324 hours laboratory
This course covers theory, operation, and diagnosis of fuel delivery and emission control systems including fuel supply, electronic feedback carburetors, mechanical and electronic fuel injection, and emission components operation and diagnosis. It meets industry ASE and BAR 90 standards.

81 Electronic Engine Controls/Engine Performance

Prerequisite: Automotive Technology 53, 58, 70, and 75
Hours: 36 hours lecture, 162 hours laboratory
This course covers the principles of diagnosis of electronic engine controls including fuel injection, engine electrical systems, and conventional/electronic/computer controlled ignition systems. It includes extensive troubleshooting, use of hand-held equipment, lab oscilloscopes, computers, and emission components diagnosis. Meets industry ASE standards.

82 Advanced Engine Performance - Clean Air Course (4)

Prerequisite: Automotive Technology 81 or one year experience or education (180 hours) in automotive engine performance
Hours: 36 hours lecture, 108 hours laboratory
This is a two-part course. Part one includes service, testing, and diagnosis of advanced engine performance systems technology. Part two includes automotive emission controls in accordance with BAR certified Basic Clean Air Course. Students who successfully complete this course along with
Automotive Technology 81 are eligible for the BAR Intern License. With the addition of Automotive Technology 84, students may also be eligible for the Basic, or Advanced Emissions Test and Repair Examinations.

83 Advanced Student Projects (2)

Prerequisite: Must have a grade of "C" or better in the Automotive Technology major

Hours: 108 hours laboratory

Opportunity for students to pursue advanced projects which are selected by the department. May be taken twice for credit.

84 Emission Control Update Training (2)

Prerequisite: Automotive Technology 82 or a Basic Technician Smog Check License

Hours: 36 hours lecture

This course covers advanced emission testing, service, and repairs for "Enhanced Areas" of the state of California. Instruction will include the latest in automotive technologies that may affect emissions testing, diagnosis, or repair such as NOX, DSO usage, sensor waveforms, diagnostic flowcharts and catalytic converters. Also included are the eight hours of training required by BAR for transition to loaded mode testing for enhanced emission control areas (BAR 97 EIS and NOX). All smog check technicians who wish to obtain the Advanced Emission Specialist license must complete this training.

92 Automotive Data Acquisition (3)

Prerequisite: None

Advisory: Computer Information Science 1

Hours: 54 hours lecture

This course covers all aspects of automotive data retrieval and usage including locating and using on-line technical manuals, CDROM-based technical manuals, and text-based technical manuals. Computer-based repair order generation, usage, and technical writing skills as well as computerized automotive shop management systems will also be included.

93 Topics in Automotive Technology - New and Emerging Occupations (.5-5)

Prerequisite: To be determined with each topic; 9-90 hours of lecture, 27-270 hours of laboratory and/or combination of lecture/lab hours equating to 1/2-5 units.

Individualized course developed in cooperation with industry to meet specialized training needs.

98 Work Experience in Automotive Technology (1-4)

Prerequisite: None

Hours: See Work Experience

This course is designed for students to earn college credit by combining volunteer or paid work experience and classroom training. Using their jobs as learning situations, the students join with their employers and the college in establishing learning objectives to be accomplished during the semester.

101 ASE A-1 Engine Repair Test Preparation (0.5)

Prerequisite: None

Hours: 9 hours lecture

This nine-hour course will help prepare for the ASE (Automotive Service Excellence) A-1 Engine Repair examination by reviewing ASE-style test questions and engine repair information. Credit/No Credit only. This course may be taken four times.

102 ASE A-2 Automotive Transmission & Transaxles Test Preparation (0.5)

Prerequisite: None

Hours: 9 hours lecture

This nine-hour course will help prepare students for the ASE (Automotive Service Excellence) A-2 Transmission/Transaxle examination by reviewing ASE-style test questions and transmission/transaxle information. Credit/No Credit only. This course may be taken four times.

103 ASE A-3 Manual Drive Trains & Axles Test Preparation (0.5)

Prerequisite: None

Hours: 9 hours lecture

This nine-hour course will help prepare students for the ASE (Automotive Service Excellence) A-3 manual drive trains and axles examination by reviewing ASE-style test questions and drive trains information. Credit/No Credit only. This course may be taken four times.

104 ASE A-4 Suspension and Steering Test Preparation (0.5)

Prerequisite: None

Hours: 9 hours lecture

This nine-hour course will help prepare students for the ASE (Automotive Service Excellence) A-4 Suspension and Steering examination by reviewing ASE-style questions and suspension and steering information. Credit/No Credit only. This course may be taken four times.

105 ASE A-5 Brakes Test Preparation (0.5)

Prerequisite: None

Hours: 9 hours lecture

This nine-hour course will help prepare students for the ASE (Automotive Service Excellence) A-5 Brakes examination by reviewing ASE-style test questions and brakes information. Credit/No Credit only. This course may be taken four times.

106 ASE A-6 Electrical/Electronic Systems Test Preparation (0.5)

Prerequisite: None

Hours: 9 hours lecture

This nine-hour course will help prepare students for the ASE (Automotive Service Excellence) A-6 Electrical/Electronic Systems examination by reviewing ASE-style test questions and electrical/electronic systems information. Credit/No Credit only. This course may be taken four times.

107 ASE A-7 Heating & Air Conditioning Test Preparation (0.5)

Prerequisite: None

Hours: 0.5

This nine-hour course will help prepare students for the ASE (Automotive Service Excellence) A-7 Heating & Air Conditioning examination by reviewing ASE-style test questions and heating & air conditioning information. Credit/No Credit only. This course may be taken four times.
108  **ASE A-8 Engine Performance Test Preparation** (0.5)

*Prerequisite: None

*Hours: 9 hours lecture

This nine-hour course will help prepare students for the ASE (Automotive Service Excellence) A-8 Engine Performance examination by reviewing ASE-style test questions and engine performance information. Credit/No Credit only. This course may be taken four times.

109  **ASE L-1 Advanced Engine Performance Specialist Test Preparation** (0.5)

*Prerequisite: None

*Hours: 9 hours lecture

This nine-hour course will help prepare students for the ASE (Automotive Service Excellence) L-1 Advanced Engine Performance Specialist examination by reviewing ASE-style test questions and engine repair information. Credit/No Credit only. This course may be taken four times.

110  **BAR A-6 Alternative - Electrical and Electronic Systems Training** (1)

*Prerequisite: None

*Hours: 18 hours lecture

This course is an intensive Bureau of Automotive Repair (BAR) approved review of automotive electrical/electronic systems. It partially satisfies ASE certification requirements when applying for a Smog Check Technician license.

111  **BAR A-8 Alternative - Engine Performance Systems** (1.5)

*Prerequisite: None

*Hours: 27 hours lecture

This course is an intensive Bureau of Automotive Repair (BAR) approved review of automotive engine performance offered as an alternative to the ASE A-8 certification. It partially qualifies auto technicians for a Smog Check Technician license exam.

112  **Bar Approved L1 Alternative -Advanced Engine Performance/Emissions Systems** (1.5)

*Prerequisite: None

*Advisory: Automotive Technology 58 and 80B or 81, or engine performance experience in the automotive field

*Hours: 27 hours lecture; 4 hours laboratory

This course is preparation for the Bureau of Automotive Repair (BAR) - approved Advanced Engine Performance Exam. Topics covered include Power Train Diagnosis, Computer Control Diagnostics, Ignition System Diagnostics, Fuel and Air Induction Diagnostics, Emission Control System Diagnostics, and I/M Failure Diagnosis. Credit/No Credit only. The BAR L1 Alternative test is administered at the end of the class. This course may be taken four times.

114  **BAR OBD (On Board Diagnostics) II Update Course** (1.5)

*Prerequisite: None

*Hours: 27 hours lecture

This course presents an overview of automotive On-Board Diagnostic (OBD) systems. Instruction will include a history of OBD systems, computer diagnostics, government and Society of Automotive Engineers (SAE) regulations, OBDII diagnostics, monitors and reference information. This is a Bureau of Automotive Repair approved course.

115  **Automotive Parts and Service Advising** (3)

*Prerequisite: None

*Hours: 36 hours lecture; 54 hours laboratory

This course covers the duties and responsibilities of automotive parts and service advisors. Course content includes service and parts merchandising and communication skills, integrated computer management software, cost estimation enhancing customer satisfaction, scheduling, inventory control, hazardous materials, warranties, lemon laws and documentation requirements.

116  **Bureau of Automotive Repair (BAR) 2003/04 Update**

*Prerequisite: current California state smog license

*Hours: 18 hours lecture

This course is designed for automotive technicians required to meet current California smog check license renewal requirements. This course is required for all licensed smog check technicians who are renewing their license after January 1, 2003. Successful completion will renew the technician's basic or advanced smog license.

118  **Employability Skills for Technical Careers** (2)

(same as Electronic Technology 118 and Welding 118)

*Prerequisite: None

*Hours: 36 hours lecture

This course provides the opportunity of exploring technical careers while developing valuable work and life skills. It is an introduction to a variety of technically-related occupations. Emphasis is placed on exploring technical careers in the Sacramento area. Activities are designed to enhance personal development, employability skills, and self esteem through leadership, citizenship, and character development.

119  **Advanced DSO/Scanner Operations** (1.5)

*Prerequisite: Completion of Automotive Technology 81, 82, 84 and 114; or hold a current smog license

*Hours: 27 hours lecture

This advanced course covers the use of various lab scopes and hand-held computer scanners with heavy emphasis on wave form analysis and data stream diagnostics. In addition, this course will provide a hands-on approach to evaluating system readiness monitors including mode 6 and 7 validation.

200  **General Automotive Maintenance** (2)

*Prerequisite: None

*Hours: 18 hours lecture; 54 hours laboratory

Familiarization with hand tools, safety and the proper maintenance procedures for today's high tech automobiles. Topics covered are oil changing, belt replacement and tension, hose replacement, fluid level checks, brake inspection, tire changing, jump starting, minor tune-up, and emergency road repair operations.
American River College’s biology program offers courses that satisfy general requirements in natural sciences, and prepares students for transfer opportunities to four-year programs.

**General Science**

Requirements for Degree Major

18 units of transfer level course work in science in addition to other graduation requirements

Two laboratory courses must be included, one in a physical science and one in a biological. Courses may be selected from anatomy, astronomy, bacteriology, biology, botany, chemistry, geology, physical biology, and science electives with approval.

**Biology**

- Biology 1A or 16
- Biology 6
- Biology 40
- Biology 43
- Chemistry 1A or 2A
- Computer Information Science 1
- English 1A
- Math 53

Choose one of the following:

- Biology 41
- Biology 42
- Biology 44
- Biology 48

**Core Requirements**

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**Concentration**

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<td>Biology 44</td>
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Choose one of the following options:

- Biology 48

OR

- Biology 48
- Biology 41 or 42

**Recommended Electives**

- Computer Information Science 11A, 12A, 13A, 21A, Philosophy 5, Physics 5A, 5B, Speech 1

**General Education Graduation Requirements:**

Students must also complete the general education graduation requirements for an A.A. degree. See Graduation requirements.

**Requirements for Certificate: 30-32 units**

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<th>Courses Required</th>
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<td>Computer Information Science 1</td>
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<td>English 1A</td>
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<td>Math 53</td>
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</tbody>
</table>

Choose one of the following:

- Biology 41
- Biology 42
- Biology 44
- Biology 48

**Biotechnology**

Requirements for Degree Major: 41-42 units

**Prerequisites:**
- Transfer level chemistry course with a grade of “C” or better
- English 78, and 58 or 60, or ESL 63 and 2R with a grade of “C” or better

**Transfer Credit:** Accepted for credit: UC, CSU

**Hours:** 54 hours lecture; 108 hours laboratory

This is an introductory course covering biological concepts important to a general understanding and background for biology majors and pre-professional students. The emphasis is on the basic principles common to all forms of life and the philosophy of science. These include cell structure and function, cell physiology, reproduction, Mendelian and molecular genetics, evolution and ecology. (CAN BIOL 2 and SEQ A, BIOL 1A+2+3) AA/AS area 3A; CSU area B2; IGETC area 5B

**2 Principles of Botany**

Prerequisite: Biology 1A with a grade of “C” or better

Transfer Credit: Accepted for credit: UC, CSU

Hours: 54 hours lecture; 108 hours laboratory

This course covers the general principles of botany for science majors. The emphasis is on anatomy, morphology, life cycles, embryology and physiology of plants and on a plant kingdom survey. All laboratory work includes instructor-directed lecture-discussion consisting of an introduction and analysis of the data and ideas covered. One field trip is required. (CAN BIOL 6) CSU area B2; IGETC area 5B

**3 Principles of Zoology**

Prerequisite: Biology 1A with a grade of “C” or better

Transfer Credit: Accepted for credit: UC, CSU

Hours: 54 hours lecture; 108 hours laboratory
This course covers general principles of zoology. The course is designed to give students a broad understanding of the development, individual characteristics, and relationships of the various phyla. Topics covered include: a survey of the animal kingdom, embryology, evolution, systematics, and comparative anatomy and physiology. One or two field trips per semester are required. (CAN BIOL 4) CSU area B2, IGETC area 5B

4 General Bacteriology

Prerequisite: Chemistry 1A or 2A with a grade of "C" or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture; 108 hours laboratory
This course provides a survey of bacteria and viruses, examining bacterial structure, physiology, metabolism, and genetics and viral structure and replication. Laboratory work introduces methods for culturing and characterizing microorganisms and explores the properties of microorganisms in various habitats. CSU area B2; IGETC area 5B

5 Survey of Biology

Prerequisite: None
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours lecture; 54 hours laboratory
This course covers biological principles with special emphasis on the major groups of organisms structure and function of organ systems of the major groups. Ecology, genetics, and evolution will be included. Plant and animal dissection may be an integral part of the laboratory sessions. Field trips required. Appropriate for Liberal Studies, Elementary Education, Environmental Studies, Recreation and other majors requiring Biology 5. Not appropriate for science majors and those having completed ARC's Biology 16 or 17, without counselor's approval. AA/AS area 3A; CSU area B2

6 General Microbiology

Prerequisite: Chemistry 1A or 2A with a grade of "C" or better
Transfer Credit: Accepted for credit UC, CSU
Hours: 54 hours lecture; 72 hours laboratory
This course introduces microorganisms and their effects on human health. The course examines the structure, physiology, metabolism, and genetics of microorganisms. Laboratory work includes aseptic technique, morphological and biochemical properties of microorganisms, and medically relevant issues regarding microorganisms. (CAN BIOL 14) CSU area B2; IGETC area 5B

8 Natural History of Insects

Prerequisite: None
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This course provides an introduction to the science of Entomology. Approximately 75% of all known species of animals are insects; therefore, they often have a profound effect on human civilization. This class details their great variety, structures and functions, habits, and their significance to plants and animals, including humans.

9H Biology/Chemistry Honors Seminar

Prerequisite: Chemistry 1A with a grade of "B" or better; Biology 1A with a grade of "B" or better; English 1A with a grade of "B" or better or English 1A Honors with a grade of "C" or better; 3.0 cumulative GPA
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture
This honors section will provide a seminar approach for advanced students of general chemistry and biology to discuss and analyze in-depth recent scientific articles in terms of the chemical and biological principles introduced in these curricula. Not open to students who have taken Chemistry 9H. May be taken twice.

10 Natural History

Prerequisite: None
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture; 54 hours laboratory
In this course, students will learn basic ecological and biological principles in order to understand the origin and diversity of living organisms. Students will explore landscape formation, habitats, and the adaptations organisms have evolved to live in their environment. Although this is a broad survey course, emphasis will be placed on the animal kingdom and on local environments. A variety of field trip opportunities allow students to study the diversity of life around them. Dissection is not part of this course. Designed as a non-major, introductory course and for those who enjoy the outdoors. AA/AS area 3A; CSU area B2; IGETC area 5B

12 The Foundations of Biology

Prerequisite: None
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This non-majors course covers basic biological principles and how they relate to humans. Concepts included are introduction and philosophy of science, cell chemistry, structure, and physiology; genetics (transmission and molecular); biotechnology; human body systems; evolution; reproduction and development; ecology; and human impacts on the environment. Filed trips may be required. AA/AS area 3A; CSU area B2; IGETC area 5B

14 Environmental Conservation

Prerequisite: None
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This course is an introduction to the science of environmental science. It includes the study of the natural environment, with emphasis on understanding the ecosystem; the processes that maintain the ecosystem; and the interactions between the ecosystem and humans. Field trips may be required. AA/AS area 3A; CSU area B2; IGETC area 5B

15 Introduction to Marine Environment

Prerequisite: None
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture; 54 hours laboratory
This course is an introduction to oceanography and marine biology. It includes the study of sea water, tides, currents, marine geology, coastal processes, marine vertebrates and invertebrates, and tidepool ecology. Instruction includes both lecture and mandatory in-water experiences with intertidal plants and animals. Field trips focus on Central California Coast. AA/AS area 3A; CSU area B2; IGETC area 5B

15H Honors Introduction to Marine Environment

Prerequisite: Cumulative GPA of 3.0 or above; English 1A or English 1A Honors with a grade of "C" or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture; 54 hours laboratory
This course presents an honors level introduction to marine biology. Using a seminar style, selected topics in marine zoology, botany and ecology will be explored. In addition to the topics presented in Marine Biology 15, this honors course will include additional studies in cell biology, experimental design,
the developmental planning of marine conservation, journal critiques, and applied research based on independent or collaborative field experiments. Field trips focusing on inter-tidal organisms of the Central California Coast are required.

16 General Biology

Prerequisite: None
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours lecture; 54 hours laboratory
This non-majors laboratory course covers basic biological principles and how they relate to humans. Concepts included are cell chemistry, structure, and physiology; genetics (transmission and molecular); biotechnology; human body systems; evolution; reproduction and development; ecology; and human impacts on the environment. Field trips may be required. No dissection is required. AA/AS area 3A; CSU area B2; IGETC area 5B

18 Conservation Biology

Prerequisite: None
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This introductory course covers biological and ecological principles involved in understanding and analyzing environmental problems and exploring scientifically sound conservation techniques. Major topics include the nature of science, population dynamics and distributions, evolution and species extinctions, biodiversity, ecosystem functions, and the interdependence between humans and our environment. This course places emphasis on the scientific processes and methodology. Statewide and local environments will be highlighted. Field trips and a semester project may be required. AA/AS area 3A; CSU area B2; IGETC area 5B

20 Introduction to Ornithology

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture; 54 hours laboratory
This course covers the structure, physiology, ecology, behavior, reproduction and classification of birds. Field trips are required during class time to study bird identification, behavior and ecology.

21 Field Botany

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory
This course covers identification, sight recognition and ecological relationships of native vascular plants of California. Plant keys and principles of taxonomy are stressed to develop proficiency in identification of plant species. This course covers some of society’s historical uses of native plants. Frequent field trips and a student plant collection are required.

23 Ethnobotany

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory
The focus of this introductory course is the multicultural use of plants. Emphasis is on the identification and use of plants from several cultures including the American Indians, Europeans, South Americans, and Chinese. Topics include the use of plants for food, medicine, basketry, technology, shelter, and music. Site recognition and plant use will be emphasized. An analysis of ethnicity and ethnocentrism is included. AA/AS area 3F

24 Natural History Field Study

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture and a minimum of 18 hours field experience per 0.5 unit of credit
This course covers ecology and natural history of specific areas (mountains, deserts, tidepools, etc.). Plants, animals and geology of the area will be studied with special emphasis on interrelationships. Students will be responsible for providing their own lodging (or camping equipment) and meals. Campsites will be available. Ideal for future teachers, parents, resource management majors and those interested in the biological sciences. Field trips required.

25 Anatomy and Physiology

Prerequisite: Chemistry 2A or 1A with a grade of “C” or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture; 108 hours laboratory
This course provides instruction on the principles of human anatomy and physiology emphasizing the integration of structure and function. The topics covered are anatomical terminology, chemistry, cells, histology, articulations and the integumentary, skeletal, muscular and nervous systems. Both Biology 25 and 26 must be taken to study all of the major body systems. (BIOL 25+26 - CAN BIOL SEQ B) AA/AS area 3A

26 Anatomy and Physiology

Prerequisite: Biology 25 with a grade of “C” or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture; 108 hours laboratory
This course covers the principles of human anatomy and physiology emphasizing the integration of structure and function. It includes the following systems: cardiovascular, lymphatic, respiratory, digestive, urinary, endocrine and reproductive. Both Biology 25 and 26 must be taken to study all of the major body systems. (BIOL 25+26 - CAN BIOL SEQ B) AA/AS area 3A

27 Biology of Cancer

Prerequisite: None
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
A biological introduction to cancer covering topics such as what cancer is, the types of cancer, causes of cancer due to natural or environmental causes, methods of identifying cancer and the psychosocial impact of cancer on its victims, their families, and the society.

31 The New Plagues: New and Ancient Infectious Diseases Threatening World Health

Prerequisite: None
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This course will explore the biology, epidemiology, and pathology of selected pathogens such as prions, viruses, bacteria, protozoa, and helminthes threatening public health on a global scale. It explores the influence of human behavior and activities on the emergence of new infectious agents and the re-emergence of ancient plagues.

38 Mammals of Africa

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture
This course covers the evolutionary adaptation of African mammals to their environment. Topics include some of the unique types of biological traits that mammals have to survive in the Serengeti ecosystem. The physiology, behavior, and physiques of various mammalian groups such as primates, antelopes, elephants, and large cats will be covered. Conservation issues of the Serengeti ecosystem will be an integral part of this course.

39 Science Skills and Applications

Corequisite: Current enrollment in a Biology course
Transfer Credit: Accepted for credit: CSU
Hours: 27 hours laboratory
This course offers individualized instructional modules designed to acquire or improve reading skills in the various science classes. A partial list of skills may include the following: textbook comprehension, principle of learning and retention, note taking, annotating, discipline-based vocabulary, paraphrasing, reading graphics, test taking, and problem solving. Credit/No Credit. Registration is open through the twelfth week of the semester. May be taken four times for a maximum of two units.

40 Introduction to Biotechnology

Prerequisite: Biology 16 or 1A, Chemistry 2A with a grade of “C” or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture, 54 hours laboratory
This course provides the necessary biochemistry, genetics and molecular biology principles that constitute the foundation for the field of biotechnology. Topics covered will include recombinant DNA technology; DNA production, characterization and analysis; PCR methodologies. Emphasis in lab and theory skills.

41 Introduction to Bioinformatics

Prerequisite: Biology 1A or 16
Advisory: Biology 40 and GIS 21A
Transfer Credit: Accepted for credit: CSU
Hours: 14 hours lecture, 14 hours laboratory
This course includes topics on biology databases, search and retrieval programs, structure/function analysis of biological molecules, DNA sequence alignment and analysis, and applications of these technologies.

42 Polymerase Chain Reaction (PCR) Methods

Prerequisite: Biology 40
Transfer Credit: Accepted for credit: CSU
Hours: 14 hours lecture, 14 hours laboratory
This course provides training in techniques involving the polymerase chain reaction (PCR). Topics include PCR protocols, troubleshooting, and applications to medicine, forensics, and agriculture.

43 Methods in Biotechnology

Prerequisite: Biology 40
Transfer Credit: Accepted for Credit: CSU
Hours: 54 hours lecture, 108 hours laboratory
This course provides specialized laboratory skills and theory in biotechnology. Topics include aseptic technique, preparation of media and solutions, methods in bacteria and plant tissue culture, isolation and analysis of nucleic acids and proteins, good laboratory practice and quality control.

44 Biotechnology and Society

Prerequisite: None
Transfer Credit: Accepted for credit: UC, CSU
Hours: 36 hours lecture
This course focuses on the emerging impact of biotechnology on society. Basic concepts in biotechnology are introduced in a non-technical manner to explore advances in medicine, agriculture, and other fields. Public perception and ethical issues in biotechnology are also emphasized.

48 Biotechnology Work Experience

Prerequisite: Biology 40
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture; 60-150 hours laboratory
This course provides directed work experience in the biotechnology industry with the purpose of applying classroom instruction to the biotechnology workplace. Class enrollment is dependent upon availability of paid or volunteer work experience in a biotechnology-related environment.

50 Basic Anatomy and Physiology

Prerequisite: None
Hours: 54 hours lecture
This course provides instruction involving basic human anatomy and physiology of the skin, skeletal, muscular, nervous, circulatory and lymphatic systems. It is designed for medical assisting majors, medical secretaries and other health-related technologies. Together Biology 50 and 51 compose a complete study of the basic anatomy and physiology of the human body. AA/AS area 3A

50L Basic Anatomy and Physiology Laboratory

Prerequisite: None
Corequisite: Biology 50
Hours: 54 hours laboratory
This course is an optional introductory laboratory course in basic human anatomy and physiology designed to complement the lecture course, Biology 50. It is designed for medical assisting, medical records, and hazardous materials technician majors, and other health-related technologies. This course is not acceptable in most nursing and respiratory care programs.

51 Basic Anatomy and Physiology

Prerequisite: None
Hours: 54 hours lecture
This course provides instruction involving basic human anatomy and physiology. This course is designed for medical assisting majors, medical secretaries, and other health-related technologies. It covers body organization, basic chemistry, cells, and tissues. In addition, Biology 51 covers respiratory, digestive, urinary, endocrine, and reproductive systems. Either Biology 50 or 51 may be taken first, however, both courses are necessary for a complete study of human anatomy and physiology. AA/AS area A

51L Basic Anatomy and Physiology Laboratory

Prerequisite: None
Corequisite: Biology 51
Hours: 54 hours laboratory
This course is an optional introductory laboratory course in basic human anatomy and physiology designed to complement the lecture course Biology 51. It is designed for medical assisting, medical records, and hazardous materials technician majors, and other health-related technologies. It is not acceptable in most nursing and respiratory care programs.
## Introduction to Concepts of Human Anatomy and Physiology

**Prerequisite:** None  
**Hours:** 54 hours lecture  
This course examines body systems from an anatomical and physiological point of view and is designed as a non-transfer anatomy and physiology course. It meets the minimum requirements for licensed vocational nursing, paramedic, gerontology, and strengthening or developing a vocabulary in human anatomy and physiology to pursue studies in Biological Sciences. AA/AS area 3A

### 60L Introduction to Concepts of Human Anatomy & Physiology Lab

**Prerequisite:** None  
**Corequisite:** Biology 60  
**Hours:** 54 hours laboratory  
This optional course provides a lab to accompany Biology 60. The basic anatomy and physiology of all the body systems will be covered. Activities will include working with microscopes and models, simple physiology experiments and demonstrations. It will provide hands-on experience to reinforce concepts presented in Biology 60.
“Business” describes a broad range of activities involving the buying and selling of products and/or services. The field of business education, however, is divided into two general areas.

The first area of study deals with directing the flow of goods and services from producer to consumer. These activities include selling and such sale-supporting functions as buying, transporting, storing, promoting, financing, marketing research and management.

The second general area of study may lead to employment and/or advancement in occupations that include recording and retrieval of data, supervision and coordination of office activities, internal and external communication, and the reporting of information.

**Career Opportunities**

The range of well-paying positions in business is expanding. There are excellent opportunities for well-prepared people in private business, high-tech industries and government agencies.

The Business Area offers degrees and certificates in seven different areas: Accounting, Computer Information Science, General Business, Management, Marketing, Office Administration, and Real Estate. The programs are designed to prepare students for entry-level employment and/or for transfer to a four-year college or university.

To earn an AA degree in Business, all students are required to complete a business core of 14-18 units, the concentration requirements of the particular major, and the college's graduation requirements.

ARC offers business degrees in 22 different areas of study (concentrations). Certificate programs have been developed with the assistance of business and industry advisory committees to provide vocational training for students who are seeking employment. Many of the courses required for a certificate may apply towards an AA degree. American River College offers certificates in 15 different areas.

**Business Core For Degree Programs**

The following core classes are required of all business degree candidates. If an option is listed, the student should check the required classes for a concentration to determine which class meets the degree requirement.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting 60* or Accounting 1A</td>
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</tr>
<tr>
<td>Business 1 or competency exam to demonstrate ability to type 25 wpm</td>
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</tr>
<tr>
<td>Business 20** or 18A*</td>
<td>3</td>
</tr>
<tr>
<td>Business 50* or Economics 1A*</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1 or selected from CIS classes or Accounting 5, 6, Business 9, 11</td>
<td>3</td>
</tr>
</tbody>
</table>

*Course option defined for concentration. See Requirements for Degree under specific concentration.

**Business 20 required for all degree programs except General Business Transfer and Management—Total Quality Management Option.

**Pending approval from the State Chancellor's office
**General Business - A.A.**

Designed to prepare students for entry-level positions in business and government.

**Requirements for Degree Major:** 38-40 units

**Business Core Requirements** 17-19 units

- Accounting 1A or 60 3-4
- Business 1 (or the passing of a keyboarding competency test) 0/1
- Business 8
- Business 18A or 16
- Business 20
- Business 59 or Economics 1A
- Computer Information Science 11A and 12A 2

**Concentration Requirements** 21 units

- Business 15
- Business 60
- Marketing 20
- Management 19

A minimum of 9 units selected from Business Area courses.

**General Business - Basic Certificate**

**Requirements for Certificate** 20 units

**Courses Required**

- Business 15 3
- Business 20 3
- Business 50 3
- Business 71B, D, E, F, I 5
- Business 83 3
- CIS 1 1
- CIS 11A & 12A 2

**General Business - Basic Call Center Certificate**

**Requirements for Certificate** 18 units

**Courses Required**

- Business 1 3
- Business 8 3
- Business 83 3
- Business 87 3
- Business 88 2
- CIS 1 1
- CIS 11A 1
- CIS 11B 1
- CIS 11C 1

**General Business Pre-Professional Certificate**

**Requirements for Certificate:** 35-37 units

**Courses Required**

- Accounting 60 or 1A 3-4
- Business 1 (or the passing of a keyboarding competency test) 0/1
- Business 8
- Business 11
- Business 18A
- Business 20
- Business 59 or Economics 1A
- Computer Information Science 12A 1

**General Business - Transfer a.a.**

Designed to prepare students for advanced study in business. Provides for the business core required of most four-year colleges and universities as well as the college graduation requirements. Students should confer with their counselor about specific transfer requirements or any additional general education requirements. Many colleges and universities have different CORE requirements. You can obtain this information from your counselor.

No certificate program.

**Requirements for Degree Major:** 34-36 units

**Business Core Requirements** 14-16 units

- Accounting 1A 4
- Business 1 (or the passing of a keyboarding competency test) 0/1
- Business 18A or 16
- Business 20
- Economics 1A
- CIS 11A & 12A 2

**Concentration Requirements** 20 units

- Accounting 1B 4
- Economics 1B 3
- Mathematics 43 or 44 3
- Statistics 1 3

7 units chosen from the following: Accounting 5 or 6, Business 9, 11, or 14, CIS 13A, 16A, 17A, or 21A, Management 1, or 19, Marketing 20.

**General Education Graduation Requirements:** Students must also complete the general education graduation requirements for an A.A. degree. See Graduation requirements.

**Business - Office Administration**

**Administrative Assistant**

Preparation for secretarial and related administrative-support careers in an automated office environment.

**Requirements for Degree Major:** 35-37 units

**Business Core Requirements** 19-21 units

- Accounting 60 or 1A 3-4
- Business 1 (or the passing of a keyboarding competency test) 0/1
- Business 8
- Business 11
- Business 18A
- Business 20
- Business 59 or Economics 1A
- Computer Information Science 12A 1
## Concentration Requirements

**16 Units**

<table>
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<th>Course</th>
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<tr>
<td>Business 2</td>
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<tr>
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<tr>
<td>Business 50</td>
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<td>Business 53</td>
<td>1</td>
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<td>Business 90</td>
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<td>Computer Information Science 16A or 21A</td>
<td>1</td>
</tr>
<tr>
<td>Management 1 or 19</td>
<td>3</td>
</tr>
</tbody>
</table>

## Recommended Electives

- Business 14, 15, 60, 98, Computer Information Science 13A, 14A, 15A, 16A, 16B, 21A

## Requirements for Certificate: 25-26 units

### Courses Required

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting 60 or 1A</td>
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<td>3</td>
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<td>1</td>
</tr>
<tr>
<td>Business 90</td>
<td>3</td>
</tr>
<tr>
<td>Computer Information Science 12A or 13A</td>
<td>1</td>
</tr>
<tr>
<td>Computer Information Science 16A or 21A</td>
<td>1</td>
</tr>
<tr>
<td>Management 1 or 19</td>
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</tr>
</tbody>
</table>

## General Office Administration

Preparation for general clerical work, and related administrative-support employment.

## Requirements for Degree Major: 28-29 units

### Business Core Requirements 15-16 Units

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>Accounting 60 or 1A</td>
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<tr>
<td>Business 18A or 16</td>
<td>3</td>
</tr>
<tr>
<td>Business 20</td>
<td>3</td>
</tr>
<tr>
<td>Business 59 or Economics 1A</td>
<td>3</td>
</tr>
<tr>
<td>Computer Information Science Applications or Business 11</td>
<td>5</td>
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</table>

### Concentration Requirements 13 Units

<table>
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<td>Business 50</td>
<td>3</td>
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<tr>
<td>Business 53</td>
<td>1</td>
</tr>
<tr>
<td>Computer Information Science 12A</td>
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</tr>
<tr>
<td>Computer Information Science 16A or 21A</td>
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</table>

### Recommended Electives


## Requirements for Certificate: 17-18 units

### Courses Required 17-18 Units

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<td>Business 2</td>
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## Office Technology Certificate

### Requirements for Certificate: 19 units

### Courses Required

<table>
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<th>Course</th>
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<td>Business 8</td>
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<td>Business 9</td>
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<td>Business 11</td>
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<td>Business 53</td>
<td>1</td>
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<tr>
<td>Business 90</td>
<td>3</td>
</tr>
<tr>
<td>Computer Information Science 12A</td>
<td>1</td>
</tr>
<tr>
<td>Computer Information Science 13A</td>
<td>1</td>
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<tr>
<td>Computer Information Science 14A</td>
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<tr>
<td>Computer Information Science 15A</td>
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<tr>
<td>Computer Information Science 16A or 21A</td>
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</tbody>
</table>

## Office Careers Certificate - Fast Track

### Requirements for Certificate: 18 units

### Courses Required

<table>
<thead>
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<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>Business 1</td>
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<td>Business 50</td>
<td>3</td>
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<tr>
<td>Business 53</td>
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</tr>
<tr>
<td>Business 83</td>
<td>3</td>
</tr>
<tr>
<td>Business 11 or CIS 11A and 11b</td>
<td>2</td>
</tr>
<tr>
<td>Business 98</td>
<td>2</td>
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<tr>
<td>CIS 1</td>
<td>1</td>
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</tbody>
</table>

*Three units selected from the following: Business 55, CIS 12A, 13A, 14A, 15A, 16A, 21A*

## Office Assistant Certificate

### Requirements for Certificate: 7 units

### Course Required

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business 56</td>
<td>7</td>
</tr>
</tbody>
</table>

American River College 2002-2003
1  Beginning Keyboarding/Applications (1-3)
Prerequisite: None
Advisory: English 58 or 60 and 78; or ESL 2R and 2W
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory
This course provides computer training for employment and personal use. Module 1 covers keyboarding and skill development techniques. Modules 2 and 3 introduce basic formats for business correspondence - memorandums, letters, e-mail, tables, and reports. Advanced placement is determined by testing and career goals. Enroll at any time during the semester. Earn one unit of credit for each module successfully completed.

2  Intermediate Keyboarding/Applications (1-3)
Prerequisite: Business 1
Transfer Credit: Accepted for credit: CSU
Hours: 12-36 hours lecture; 18-54 hours laboratory
This course develops computer keyboarding, word processing, and document production skills. Formatting applications include business correspondence and reports, tables and charts, form templates, flyers, newsletters, and in-basket projects. Students may enroll up to the twelfth week. Credit is based on the number of modules successfully completed.

8  Business Communications (3)
Prerequisite: Business 50 or English 58 or 60 and 78; or ESL 2W with a grade of "C" or better, or placement through assessment
Advisory: Keyboarding skills or Business 1
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture
This course focuses on the concepts, strategies, and principles of effective communication. Tools to communicate effectively in a fast-paced technological, global marketplace are emphasized. The course provides opportunities to create, evaluate, critique, and judge business documents and reports. A formal research paper using analytical skills and the ability to draw conclusions and make recommendations is required. AA/AS area D1

9  Introduction to Office Technology (1)
Prerequisite: None
Advisory: Business 1
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture
This course focuses on the integration of office technology and business skills in the work environment. Topics include hardware and software; e-mail, voice, and fax communications; electronic calendars and scheduling; Internet resources; and the virtual office. This is an introductory course recommended for all business students.

11  Introduction to Word/Information Processing (1-3)
Prerequisite: Business 1
Transfer Credit: Accepted for credit: CSU
Hours: 12-36 hours lecture; 18-54 hours laboratory
This course reviews basic word/information processing and introduces intermediate and advanced formatting for correspondence, tables, reports, newsletters, presentations, Internet documents, and other business information. Related topics include scanning, E-mail, calendars, scheduling, and integrated office applications. Units are based on modules successfully completed. The course may be repeated for credit on a different software package or version for a maximum of six units.

12  Advanced Word/Information Processing (3)
Prerequisite: Business 11 (3 units)
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory
Provides training on advanced word/information processing functions. Stresses improvement of skill in organizing and producing correspondence, manuscripts, reports, and tabulations. Strengthens formatting, language arts, composition, and decision-making skills using the microcomputer.

14  Concepts in Personal Finance (Same as Economics 14) (3)
Prerequisite: None
Advisory: English 58 or 60 and 78 or ESL 2R and 2W, and Business 60
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture
This course is designed to assist individuals to analyze their financial affairs. Elements and conceptual basis of financial planning, analysis, and decision making in areas of budgeting, taxes, borrowing, money management, insurance, investments, and retirement will be examined with an emphasis on principles to develop students’ economic decision making. Not open to students who have completed Economics 14. AA/AS area 3C2, E2; CSU area D3

15  Managing Diversity in the Workplace (3)
Prerequisite: None
Advisory: English 58 or 60 and 78 or ESL 2R and 2W
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture
The course examines the leadership skills and abilities needed to manage a multicultural workplace. A primary focus is placed upon the workplace impact of various historical, social, and cultural experience/perspectives related to gender, age, ethnicity, and disability. Workplace issues related to the diversity of the American consumer and global consumer impact on the United States are analyzed. AA/AS areas C2 and F; CSU area D3

16  Law and Society (Same as Political Science 16) (3)
Prerequisite: None
Advisory: English 58 or 60 and 78 or ESL 2R and 2W
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This course is an introduction to the Anglo-American Common Law system with emphasis upon the nature and purpose of law. The evolution of legal concepts as a reflection of the social environment, and the basic organization and functioning of the American judicial system presented from a theoretical rather than a practical viewpoint through analysis of selected cases and reading materials. Not to be taken in place of Business 18A (Business Law) where required. Not open to students who have completed Political Science 16. AA/AS area C2; CSU area D3; IGETC area 4

18A  Business Law (3)
Prerequisite: None
Advisory: English 58 or 60 and 78 or ESL 2R and 2W
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This course focuses on the law in its relationship to the environment of business. Topics covered include the American legal system as an instrument of economic, social, and political control, sources and processes of law, contracts and sales, agency, business organizations, ethics, and the regulatory process. (CAN BUS 12)
20  Introduction to Business

Prerequisite: None
Advisory: English 58 or 60 and 78 or ESL 2R and 2W
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This course is a survey class for those commencing studies in any business field. It will survey the primary majors in business such as Management, Marketing, Finance, Accounting, Computer Information Science, and Business Law. Topics will also cover the many environments of business such as business ethics, community concerns, pollution, and many other areas. AA/AS area C2

25  Small Business Management/Entrepreneurship (formerly Business 70)

Prerequisite: None
Advisory: English 58, 60, and 78 or ESL 2R and 2W
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture
This class provides an overview of the various elements involved in starting and operating a small business. It introduces such topics as developing a business plan, finding financial resources, developing personal and business goals, meeting legal requirements, understanding marketing concepts, and other topics of interest to the entrepreneur.

48  Work Experience

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: See Work Experience
This course is supervised work experience in business for the purpose of increasing the understanding of the nature and scope of the operation of business, government or service agencies. This course requires that students be employed in paid or a volunteer work experience environment. May be taken for credit for a maximum of 16 units of which only 8 are transferable.

50  Business English

Prerequisite: English 256 and 270, or ESL 1R and ESL 1W with a grade of "C" or better; or placement through assessment
Advisory: Touch-typing
Hours: 54 hours lecture
This course stresses the mechanics of English as specifically applied to the field of business. Contents include sentence structure, punctuation, grammar, spelling, business vocabulary, dictionary usage, and business document formatting. The application of these skills requires the use of a computer. This course is required of all office administration majors. It is recommended for all business majors during their first semester.

53  Computer Keyboarding: 10-Key

Prerequisite: None
Advisory: Business 1 or a keyboarding speed of 30 WAM
Hours: 12 hours lecture; 18 hours laboratory
This course introduces the numeric keypad and develops the ability to key information into a computer with speed and accuracy.

55  Keyboarding Skills

Prerequisite: None
Advisory: English 270; Touch-typing
Hours: 12-36 hours lecture; 18-54 hours laboratory
This course offers an organized, step-by-step approach to preparing a business plan. The plan will enable students to solve problems "on paper" before they become operational or money problems. Students will create a business plan as part of the course.

56  Office Assistant Training

Prerequisite: None
Advisory: English 58 or 60 and 78; or ESL 2R and 2W; or placement through assessment
Hours: 96 hours lecture; 90 hours laboratory
This course combines the skills needed for office assistant positions into one program. The content includes computer keyboarding, word processing, and spreadsheet programs; alphabetic filing; 10-key skill development to 10,000+ keystrokes/hour; office procedures and communications, including telephone, mail, E-mail, and Internet; human relations; and employment resources. This course may be offered as a short-term, fast-track program. Certificates are granted upon successful completion of all course segments.

59  Business Economics

Prerequisite: None
Advisory: English 58 or 60 and 78 or ESL 2R and 2W
Hours: 54 hours lecture
This course is designed for two-year Accounting, Business, Computer Information, Marketing, and Real Estate majors. Both microeconomic and macroeconomic theory will be covered with an emphasis towards applications. Does not meet Economics 1A or 1B requirements for transfer students. AA/AS area C2

60  Business Mathematics

Prerequisite: None
Advisory: English 58 or 60 and 78, or ESL 2R and 2W; or placement through assessment
Hours: 54 hours lecture
This course is a review of basic mathematical skills and introduces equations and formulas in solving for unknowns. Applications of mathematics in business include such areas as banking, commercial discounts, retail and wholesale markup/markdown, payroll computations, simple and compound interest, bank discount, present value, taxes, insurance, depreciation, and financial statements. Recommended and useful for every major in business. AA/AS area D2

68  Retail/Wholesale Operations Management

Prerequisite: None
Advisory: Marketing 20, 24
Hours: 54 hours lecture
This is a specialized course for those in the marketing distribution system at either the wholesale or retail level. Purchasing, transportation, storage, pricing, asset management, and information management are a few of the topics covered.

71A  The Business Plan

Prerequisite: None
Advisory: English 256 and 270 or ESL 1R and 1W; Business 25, 60
Hours: 18 hours lecture
This course offers an organized, step-by-step approach to preparing a business plan. The plan will enable students to solve problems "on paper" before they become operational or money problems. Students will create a business plan as part of the course.
71B Marketing for Small Businesses (1)
Prerequisite: None
Advisory: English 256 and 270 or ESL 1R and 1W; Business 25, 60
Hours: 18 hours lecture
This course emphasizes how a small business or non-profit organization can market its service or product to the consumer. The student will learn about ways to improve market mix, identify target markets, and develop a marketing plan.

71C Financing a Small Business (1)
Prerequisite: None
Advisory: English 256 and 270 or ESL 1R and 1W; Business 25, 60
Hours: 18 hours lecture
This course covers sources and ways of raising capital for small businesses. It will explore how much money is needed and where it can be obtained, start-up costs, and projecting monthly and yearly costs. Financial ratios and key financial statements are also covered.

71D Essential Records for the Small Business (1)
Prerequisite: None
Advisory: English 256 and 270 or ESL 1R and 1W; Business 25, 60
Hours: 18 hours lecture
This course emphasizes the various types of records that small businesses must keep. The focus will be upon financial, employment, and tax records. Simple, easy-to-use recordkeeping systems will be covered.

71E Management Skills for the Small Business (1)
Prerequisite: None
Advisory: English 256 and 270 or ESL 1R and 1W; Business 25, 60
Hours: 18 hour lecture
A small business owner must understand and motivate others to help the business reach its objectives. This course covers such functions as planning and organizing work flow, delegating responsibilities, understanding leadership styles, decision making, stress and time management, and working with employee organizations.

71F Retailing and Merchandising for the Small Business (1)
Prerequisite: None
Advisory: English 256 and 270 or ESL 1R and 1W; Business 25, 60
Hours: 18 hour lecture
This course will emphasize retailing concepts, such as inventory control and turnover rates, selecting merchandise sources, using trade and cash discounts, pricing, markup and markdown, and shrinkage control. Students will also learn how to develop a merchandising plan, inventory control system, and assess consumer behavior and demographics.

71J Loss Prevention and Security (1)
Prerequisite: Business 25
Advisory: English 256 and 270 or ESL 1R and 1W; Business 25, 60
Hours: 18 hours lecture
This course focuses on the procedures in developing a loss prevention program. Such topics as store design, employee training, and the use of loss detection devices will be introduced. Local laws relating to shoplifting will be presented and explained.

71K Selling Techniques for the Small Business (1)
Prerequisite: None
Advisory: English 256 and 270, or ESL 1R and 1W, and Business 25, Marketing 20
Hours: 18 hours lecture
This class will focus on those skills that will aid an individual to become a professional salesperson. The skills presented will be those that will aid both product and service salespeople. This course is recommended for anyone who might have to use some sales techniques in any business, industry, or government position.

71M QuickBooks (R) for Small Business (same as Accounting 61) (1)
Prerequisite: None
Advisory: English 58 or 60, or ESL 2R and 2W; Business 25
Hours: 18 hours lecture
This class will emphasize the use of QuickBooks (R) to aid the small business operator in creating financial statements and other financial reports. Not open for students who have taken Accounting 61.

80 Topical Seminars in Business (.5-.3)
Prerequisite: None
Advisory: English 256 and 270 or ESL 1R and 1W
Hours: 0-54 hours lecture; 0-108 hours laboratory
Individualized topics are developed in cooperation with business and industry to meet specialized training needs. Topics may be selected from accounting, business, computer science, management, marketing, office administration and real estate. Maximum of six units. Topics may not be repeated.

83 Workplace Skills for the Office (3)
Prerequisite: None
Advisory: English 58 or 60 and 78; or ESL 2R and 2W; or placement through assessment
Hours: 54 hours lecture
This course introduces basic procedures that are required of office workers to perform effectively in office-related occupations. Specific topics include planning a career, working with the office team, communicating effectively, preparing and processing information, seeking employment opportunities, and developing a portfolio. This course emphasizes activities and techniques that develop competencies needed in the changing workplace.

83A Workplace Skills: Communicating (1)
Prerequisite: None
Hours: 18 hour lecture
This course introduces basic oral and written procedures that are required of office workers to perform effectively in office environments. Specific topics include presenting information orally, using active listening techniques, and
writing messages effectively. This course emphasizes activities and techniques that develop competencies needed in a diverse workplace. Not open to students who receive credit for Business 83.

83B Workplace Skills: Teambuilding (1)

Prerequisite: None
Hours: 18 hours lecture
This course focuses on effective interaction and communication in office environments. Specific topics include helpful and harmful team roles, team leadership skills, and conducting effective meetings. This course emphasizes activities and techniques that develop competencies needed in a diverse workplace. Not open to students who receive credit for Business 83.

83C Workplace Skills: Problem Solving (1)

Prerequisite: None
Hours: 18 hours lecture
This course focuses on using basic problem solving skills in the office environment. Specific topics include identifying problems in the workplace, finding their root causes, selecting and implementing solutions. This course emphasizes activities and techniques that develop competencies needed in a diverse workplace. Not open to students who receive credit for Business 83.

87 Call Center Customer Service (3)

Prerequisite: None
Hours: 54 hours lecture
This course is designed to provide an understanding of customer service and methods for practicing the same in the modern contact center environment. Course topics include: Defining customer service, types of customers, the value of a customer to a business, establishing rapport and dealing with difficult coworkers, customers and situations. The course also introduces the contact center via the Virtual Call Center Simulator (VCCS), client calls, responses, data-entry and a number of additional simulated call center situations.

88 Call Center Operations (2)

Prerequisite: None
Advisory: English 58 or 60, English 78; or ESL 2R and 2W
Hours: 36 lecture hours
This course is designed to provide an understanding of the call and contact center environment, what it means to be a customer service representative (CSR), and how to efficiently use the phone to maximize your effectiveness as a CSR. Course topics include various types of call centers and how each differs in goal and function, and mastering the use of the phone as a CSR tool.

90 Office Administration (3)

Prerequisite: Business 1
Corequisite: Business 8
Advisory: Business 11
Hours: 36 hours lecture; 54 hours laboratory
This course provides preparation for the office professional in the changing workplace. Course content covers office technology, office communications, records management, and preparation of meeting, travel, and financial documents. Career planning and career development are addressed.

98 Work Experience (1-4)

Prerequisite: None
Hours: See Work Experience
This course is supervised work experience in business for the purpose of increasing the understanding of the nature and scope of the operation of business, government or service agencies. This class requires that students be employed in paid or a volunteer work experience environment. May be taken for credit for a maximum of 16 units.
American River College's chemistry program provides a series of courses designed to meet transfer requirements for physical and biological science majors as well as students majoring in other fields of study.

Requirements for a degree major
Students must complete 18 units of transfer-level course work in science in addition to other graduation requirements.

General Science Degree Requirements
Two laboratory courses must be included, one in a physical science and one in a biological. Courses may be selected from anatomy, astronomy, bacteriology, biology, botany, chemistry, geology, physical anthropology, physical geography, physical science, physiology, physics and zoology. See ARC graduation requirements.

Mathematics & Physical Science Degree Requirements
18 units of transfer level course work in addition to other graduation requirements Courses may be selected from astronomy, chemistry, engineering, geology, mathematics, physical geography, physical science, physics and statistics. See Graduation requirements.

1A General Chemistry (5)
Prerequisite: Mathematics 53 with a grade of "C" or better and one of the following:
1) Chemistry 3 with a grade of "C" or better
2) Or Chemistry 2A with a grade of "C" or better and placement through the chemistry assessment process
3) Or High School Chemistry with a grade of "C" or better and placement through the chemistry assessment process
Advisory: English 78 and 58 or 60, or ESL 63 and 2R
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours lecture; 108 hours laboratory
This course covers the basic principles of chemistry with emphasis on chemical calculations, chemical reactions including balancing of complicated redox reactions, stoichiometry, gas laws, thermodynamics, atomic structure and bonding theories, ionic equations, solutions, intermolecular forces and phases of matter and acid/base chemistry including titrations and pH. Laboratory work is devoted to investigations of the theoretical work discussed in lecture. (CAN CHEM SEQ A - CHEM 1A+1B; CAN CHEM 2) AA/AS area 3A; CSU area B1; IGETC area 5A

1B General Chemistry (5)
Prerequisite: Chemistry 1A with a grade of "C" or better
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours lecture; 108 hours laboratory
This course is a continuation of the principles of chemistry with emphasis on types of equilibria, bonding, thermodynamics, kinetics and electrodynamics. A brief introduction to nuclear and organic chemistry is included. Laboratory work is devoted to qualitative analysis and experiments dealing with the theoretical work discussed in lecture. (CAN CHEM 4) CSU area B1, IGETC area 5A

1H Honors General Chemistry (1)
Prerequisite: Chemistry 1A with a grade of "B" or better; English 1A with a grade of "B" or better or honors placement on the English assessment; GPA of 3.0 or better
Corequisite: Chemistry 1B
Transfer Credit: Accepted for credit: UC, CSU
Hours: 18 hours lecture
This honors course provides advanced studies for general chemistry students. It involves in-depth discussion and analysis of recent scientific articles in terms of general chemical principles.

2A Introduction to Chemistry (5)
Prerequisite: Mathematics 51, 52 or 53 with a grade of "C" or better
Advisory: English 78 and 58 or 60, or ESL 63 and 2R; or placement through assessment
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 72 hours lecture; 54 hours laboratory
This course covers principles of chemistry and scientific method, including a brief introduction of organic chemistry. It is primarily designed for general education and majors in allied health, home economics, physical education, physical therapy(*), psychology(*), natural resources(*). (*)May require Chemistry 1A. (CAN CHEM SEQ B - CHEM 2A+2B; CAN CHEM 6) AA/AS area 3A; CSU area B1; IGETC area 5A

2B Introduction to Chemistry (5)
Prerequisite: Chemistry 2A with a grade of "C" or better
Advisory: English 78 and 58 or 60; or ESL 63 and 2R; or placement through assessment
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 72 hours lecture; 54 hours laboratory
This course is a continuation of Chemistry 2A. It covers the organic functional groups and reactions involved in the mechanisms of the chemistry of life processes (biochemistry), particularly applied to the health sciences. (CAN CHEM 8)
3 Chemical Calculations
Prerequisite: Math 51 with a grade of "C" or better
Corequisite: Math 53
Advisory: English 78 and 58 or 60, or ESL 63 and 2R
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture; 108 hours laboratory
This course covers principles and techniques involved in fundamental gravimetric and volumetric analyses and separation techniques including methods of data analysis, precipitation, acid/base neutralization, complex formation, oxidation-reduction, spectroscopy and chromatography. It includes an introduction to modern instrumental analytical procedures with emphasis on optical, electrochemical and chromatographic techniques including UV-visible and atomic absorption spectroscopy, electrodeposition, coulometry, and ion exchange, gas and high performance liquid chromatography. (CAN CHEM 12)

5 Quantitative Analysis
Prerequisite: Chemistry 1B with a grade of "C" or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture; 108 hours laboratory
This course covers principles and techniques involved in fundamental gravimetric and volumetric analyses and separation techniques including methods of data analysis, precipitation, acid/base neutralization, complex formation, oxidation-reduction, spectroscopy and chromatography. It includes an introduction to modern instrumental analytical procedures with emphasis on optical, electrochemical and chromatographic techniques including UV-visible and atomic absorption spectroscopy, electrodeposition, coulometry, and ion exchange, gas and high performance liquid chromatography. (CAN CHEM 12)

7 Environmental Chemistry
Prerequisite: Mathematics 205 with a grade of "C" or better
Corequisite: English 78 or ESL 2R; or placement through assessment
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture, 108 hours laboratory
This course covers some basic principles of chemistry and their applications to our environment. It includes topics related to the chemistry of water, air, consumer products, and living systems. The laboratory is designed to familiarize students with the methods of science while investigating the presence and interactions of chemicals in the environment. AA/AS area 3A; CSU area B1; IGETC area 5a

8 Organic Chemistry - Short Survey
Prerequisite: Chemistry 1A with a grade of "C" or better
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 72 hours lecture; 54 hours laboratory
This course is an introductory survey of the compounds of carbon with emphasis on those of biological interest, designed primarily for students majoring in the life sciences and related fields. Chemistry 12A/B are recommended for students majoring in chemistry, chemical engineering, medicine, dentistry, pharmacy, and chiropractic. CSU area B1, IGETC area 5a

9H Biology/Chemistry Honors Seminar
Prerequisite: Chemistry 1A with a grade of "B" or better; Biology 1A with a grade of "B" or better; English 1A Honors with a grade of "B" or better: 3.0 or better cumulative GPA
Transfer Credit: Accepted for credit: CSU
Hours: 18 hour lecture
This honors section will provide a seminar approach for advanced students of general chemistry and biology to discuss and analyze in-depth recent scientific articles in terms of the chemical and biological principles introduced in these curricula. Not open to students who have taken Biology 9H. May be taken twice.
Computer Information Science

Degree:
- A.S. - Computer Science
- A.S. - Computer Networking Management
- A.S. - Database Management
- A.A. - Microcomputer Applications
- A.S. - PC Support Management
- A.S. - Programming
- A.S. - Technical Communication*

Certificate:
- Database Certificate
- Networking Certificate
- PC Support Certificate
- Programming Certificate
- Software Applications Certificate
- Web Programming Certificate*
- Web Publishing Certificate*

Computer information science relates to the many uses of computers in business and industry for accounting, payroll, inventory, billing, and desktop publishing. The computer technician may assist senior computer programmers, as well as accountants, engineers and scientists in data input and in preparing computer programs for numerous applications. In smaller organizations, the technician may serve as a combination programmer/analyst, computer operator and system troubleshooter. Lecture and laboratory experience includes the theory, operation and application of data processing equipment, including a fundamental knowledge of programming techniques and systems analysis. While the mathematics requirement for entry-level jobs is minimal, the student planning to progress through programming to system work should include some mathematics as electives.

Career Opportunities

Career possibilities for computer technicians are excellent since computer systems have become essential to small- and medium-sized businesses. In addition, trained technicians are in a good position to advance their careers in computer sciences and/or business through additional education at four-year institutions.

Business - Computer Information Science

Training for employment as a computer information technician including theory, operation and application of data processing equipment, with emphasis on computer programming, checkout techniques and systems analysis. While the mathematics requirement for entry level jobs is minimal, the student planning to progress through programming to system work should include some mathematics as electives.

Computer Science A.S.

Requirements for Degree Major: 38-41 units

<table>
<thead>
<tr>
<th>Business Core Requirements</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Information Science 32A</td>
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</tr>
<tr>
<td>Computer Information Science 35 or 35A</td>
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</tr>
<tr>
<td>Computer Information Science 40</td>
<td>4</td>
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<tr>
<td>Computer Information Science 41</td>
<td>3</td>
</tr>
<tr>
<td>Computer Information Science 44</td>
<td>3</td>
</tr>
<tr>
<td>Math 9A</td>
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<tr>
<td>Math 9B</td>
<td>5</td>
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<tr>
<td>One course from the following:</td>
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<tr>
<td>Math 35 or Math 9D</td>
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</tr>
<tr>
<td>Phys 4A</td>
<td>4</td>
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<tr>
<td>One course from the following:</td>
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<tr>
<td>Biology 2</td>
<td>5</td>
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<tr>
<td>Biology 5</td>
<td>5</td>
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<tr>
<td>Biology 25 or 26</td>
<td>5</td>
</tr>
<tr>
<td>Chemistry 1A</td>
<td>5</td>
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<tr>
<td>Engr 17</td>
<td>3</td>
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<tr>
<td>Engr 45</td>
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</tbody>
</table>

Recommended Electives
CIS 3, 31, 32B, CIS 35A, 38, 39

Computer Networking Management

Requirements for Degree Major: 38-40 units

<table>
<thead>
<tr>
<th>Business Core Requirements</th>
<th>Units</th>
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<tbody>
<tr>
<td>Accounting 60 or 1A</td>
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<tr>
<td>Business 1 (or passing of a keyboarding competency test)</td>
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<tr>
<td>Business 8, or English 1A</td>
<td>3</td>
</tr>
<tr>
<td>Business 18A</td>
<td>3</td>
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<tr>
<td>Business 20</td>
<td>3</td>
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</tbody>
</table>
Business 59 or Economics 1A 3
Computer Information Science 11A 1
Computer Information Science 12A 1

Concentration Requirements 21 Units
Computer Information Science 3 3
Computer Information Science 14A 1
Computer Information Science 16A 1
Computer Information Science 29A 3
Computer Information Science 80 2
Computer Information Science 81 3
Computer Information Science 82 3

Five units from the following:
Computer Information Science 15A 4
Computer Information Science 21B 4
Computer Information Science 32A 1
Computer Information Science 32B 1
Computer Information Science 40 4

Computer Networking Certificate
Requirements for Certificate: 21 units
Business 8, CIS 3, 14A (Unix), 16A, 16B, 29A, 80, 81, 82

Database Management
Requirements for Degree Major: 41-43 units

Core Requirements 17-19 Units
Accounting 60 or 1A 3/4
Business 1 (or passing of keyboarding competency test) 0/1
Business 8, or English 1A 3
Business 18A 3
Business 20 3
Business 59 or Economics 1A 3
Business 59 or Economics 1A 3
Computer Information Science 11A 1
Computer Information Science 12A 1

Concentration Requirements 24 Units
Computer Information Science 3 3
Computer Information Science 13A 1
Computer Information Science 14A 1
Computer Information Science 14B 1
Computer Information Science 51 4
Computer Information Science 34 4
Computer Information Science 37 3
Computer Information Science 51 3

Four units from the following:
CIS 39 or CIS 40 4

Database Certificate
Requirements for Certificate: 21 units
Business 8, CIS 3, 12A, 12B, 13A, 13B, 14A, 37, 38
and one of the following:
CIS 51, CIS 20

PC Support management
Requirements for Degree Major: 39-42 units
Business Core Requirements 17-19 units
Accounting 60 or 1A 3/4
Business 1 or (or passing of a Keyboarding competency test) 0-1
Business 8, or English 1A 3
Business 18A 3
Business 20 3
Business 59 or Economics 1A 3
Computer Information Science 11A 1
Computer Information Science 12A 1

Concentration Requirements 22-23 Units
Computer Information Science 3 3
Computer Information Science 13A 1
Computer Information Science 14A 1
Computer Information Science 15A 1
Computer Information Science 16A 1
Computer Information Science 16B 1
Computer Information Science 21A 1
Computer Information Science 21B 1
Computer Information Science 29A 3
Computer Information Science 29B 2
Computer Information Science 51 4

One course chosen from the following:
CIS 32A, CIS 32B, CIS 33, CIS 34, CIS 35, CIS 35A, CIS 36A, CIS 38, CIS 39

PC Support Certificate
Requirements for Certificate: 19 units
Choose one of the following:
CIS 15A, CIS 21B

Microcomputer Applications
The program will concentrate on the use of the microcomputer and current software
to solve problems in the business environment. The training will include
microcomputer applications in accounting, database publishing, electronic
spreadsheets, graphics, operating systems, integrating software, telecommunications,
word processing, and at least one programming language.

Requirements for Degree Major: 33-35 units
Business Core Requirements 16-17 Units
Accounting 1A 4
Business 1 or keyboarding competency 1-0
Business 18A 3
Business 20 3
Computer Information Science 3 3
Business 59 or Economics 1A 3

Concentration Requirements 17-18 Units
Computer Information Science 1 (PC) 1
Computer Information Science 11A 1
Computer Information Science 11B 1
Computer Information Science 11C 1
Computer Information Science 12A 1
Computer Information Science 12B 1
Computer Information Science 13A 1
Computer Information Science 14A (UNIX) 1

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Computer Information Science

- Computer Information Science 14A (WINDOWS) 1
- Computer Information Science 20 3

Two units selected from:
- Accounting 5; CIS 13B, 15A, 16A, 16B, 17A 2
- One course selected from:
  - CIS 30, 31, 32A, 33, 36A, 37, 38

Relevant Electives
- Accounting 1B, 6, Business 8, Computer Information Science 1 (MAC), 17B

Software Applications Certificate

Requirements for Certificate: 21 units
- Business 8

Programming

Requirements for Degree Major: 35-37 units

Business Core Requirements 16-17 Units
- Accounting 1A 4
- Business 1 or keyboarding competency 1.0
- Business 18A 3
- Business 20 3
- Computer Information Science 3 3
- Business 59 or Economics 1A

Concentration Requirements 19-20 Units
- Computer Information Science 1 (PC) 1
- Computer Information Science 34 or 35 or 35A 4
- Computer Information Science 40 or 51 3

One class selected from:
- CIS 32A, 36A 4

Two classes selected from:
- CIS 31, 32B, 36B, 37, 38, 39 7-8

Recommended Electives
- Accounting 1B, Business 60, Computer Information Science 11A, 12A, 13A, 14A, 15A, 16A, 33, Management 1, 24, Speech 1 or 15

General Education Graduation Requirements: Students must also complete the general education graduation requirements for an A.A. degree. See Graduation requirements.

Web Programming Certificate

Requirements for Certificate: 34 units
- Business 8 3
- Computer Information Science 3 3
- Computer Information Science 14A (Win) 1
- Computer Information Science 14A (Unix) 1
- Computer Information Science 14B (Unix) 1
- Computer Information Science 22 1
- or Interdisciplinary Studies 22
- Computer Information Science 23 4

Web Publishing Certificate

Requirements for Certificate: 19 units

Business 8 3
- Computer Information Science 3 3
- Computer Information Science 14A (Win) 1
- Computer Information Science 14A (Unix) 1
- Computer Information Science 22 3
- or Interdisciplinary Studies 22
- Computer Information Science 23 4

One Course from:
- Art New Media 42 3
- Computer Information Science 28/ 4
- Art New Media 45

One Course from:
- Art New Media 40 (Photoshop for the Web) 1
- Computer Information Science 21G/ 4
- Art New Media 31

Technical Communication

Requirements for Degree Major: 42 units

Core Requirements
- Art 14 3
- Art 15B 3
- Art New Media 15 3
- Computer Information Science 1 1
- Computer Information Science 11A* 1
- Computer Information Science 11B 1
- Computer Information Science 11C 1
- Computer Information Science 14A 1
- Computer Information Science 22 3
- English 13A 3
- English 13B 1
- English 13C 1
- English 13D 1.5
- English 13E 1.5
- English 13F 1
- English 13G 1
- English 13H 1
- English 13I 1
- English 13J 1

Four units selected from:
- English 13A 1
- English 13B 1
- English 13C 1
- English 13D 1
- English 13E 1
- English 13F 1
- English 13G 1
- English 13H 1
- English 13I 1
- English 13J 1

*One unit of Business 11 may be substituted for CIS 11A, or two units of Business 11 may be substituted for CIS 11A and 11B.

Concentration Requirements

<table>
<thead>
<tr>
<th>Requirements for Certificate</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>Twelve units selected from:</td>
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<tr>
<td>Art New Media 16 or</td>
<td>3</td>
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<tr>
<td>Computer Information Science 17A and</td>
<td>2</td>
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<tr>
<td>Computer Information Science 17B</td>
<td>2</td>
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<tr>
<td>Art New Media 18</td>
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<td>Art New Media 20</td>
<td>3</td>
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<tr>
<td>Art New Media 24A</td>
<td>3</td>
</tr>
<tr>
<td>Art New Media 24B</td>
<td>3</td>
</tr>
<tr>
<td>Art New Media 32</td>
<td>3</td>
</tr>
</tbody>
</table>
1. **Computer Familiarization** (1)

   **Prerequisite:** None

   **Advisory:** English 78 or ESL 2R and ability to keyboard 20 WAM

   **Transfer Credit:** Accepted for credit: CSU

   **Hours:** 18 hours lecture

   The introductory course provides a general non-technical knowledge on how computers work and basic computer terminology and concepts. The focus is hands-on instruction using an operating system, word processing, spreadsheet, and internet software. The course may be taken twice for credit on a different hardware platform. AA/AS area D2

2. **Applied Applications Lab** (1)

   **Prerequisite:** None

   **Corequisite:** CIS 1 or CIS 11A or CIS 12A or CIS 13A

   **Advisory:** English 78 or ESL 2R and ability to keyboard 20 WAM

   **Transfer Credit:** Accepted for credit: CSU

   **Hours:** 27 hours laboratory

   This course will complement CIS 1, CIS 11A, CIS 12A, and CIS 13A. It provides supplemental lab instructions and an additional experience with individualized assistance. The material will reinforce the concepts and techniques presented in these courses. This course may be taken four times for credit. This is credit/no credit course only.

3. **Introduction to Computer Information Science** (3)

   **Prerequisite:** None

   **Advisory:** English 78 or ESL 2R

   **Transfer Credit:** Accepted for credit: UC, CSU

   **Hours:** 54 hours lecture

   This course is a survey of the computer field covering the function and purpose of computer hardware and software, computer programming concepts, productivity software, employment opportunities, and the social impact of the computer.

4. **Computer Skills for Educators** (3)

   **Prerequisite:** None

   **Transfer Credit:** Accepted for credit: CSU

   **Hours:** 45 hours lecture; 27 hours laboratory

   This course is for educators to acquire knowledge of hardware and software that will facilitate the preparation of instructional materials, recordkeeping, access supplementary materials and resources, facilitate management of equipment and laboratory materials, and make powerful presentations. Operating system, word processing, spreadsheet, database, presentation graphics, utilities, and Internet software, as well as review various types of instructional software will be used.

5. **Beginning Word Processing** (1)

   **Prerequisite:** Business 1

   **Advisory:** Computer Information Science 1

   **Transfer Credit:** Accepted for credit: CSU

   **Hours:** 18 hours lecture; 18 hours laboratory

   This is an introductory course in word processing. It includes basic word processing operations, such as creating, editing, saving, filing, retrieving, and printing text, and introduces selected intermediate functions, such as merge, sort, graphics and macros. The course may be taken four times on a different software package or version. AA/AS area D2

6. **Intermediate Word Processing** (1)

   **Prerequisite:** Computer Information Science 11A with grade of “C” or better

   **Transfer Credit:** Accepted for credit: CSU

   **Hours:** 18 hours lecture; 18 hours laboratory

   This course continues the study of word processing with emphasis on applications for business documents and reports, disk management procedures, and printer options. The course may be taken four times on a different software package or version.

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**Requirements for Certificate:** 18-19.5 units

**Courses Required**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tr>
<td>Computer Information Science 11A*</td>
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<td>Computer Information Science 11B*</td>
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<td>Computer Information Science 11C</td>
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<td>English 13A</td>
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<td>English 13D</td>
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<td>Art New Media 20</td>
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<td>Art New Media 24A</td>
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<td>Art New Media 24B</td>
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<td>Art New Media 32</td>
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<td>Art New Media 40 or</td>
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<td>Art New Media 42</td>
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<tr>
<td>Computer Information Science 15A</td>
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<td>Computer Information Science 22</td>
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<td>Computer Information Science 23</td>
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*One unit of Business 11 may be substituted for CIS 11A, or two units of Business 11 may be substituted for CIS 11A and 11B.
11C  Advanced Word Processing
Prerequisite:  Computer Information Science 11B with a grade of “C” or better
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture; 18 hours laboratory
This course builds upon previous training in the study of word processing with emphasis on macro programming, complex style commands, importing data from non-word processing applications, linking word processing files with other applications and using Desktop Publishing concepts and features to enhance document presentation. These document enhancements include rotating text and graphics, watermarking, working with scanned images, clip art and multi-column layouts necessary for producing newsletters, posters, fliers, and tri-fold mailers. The course may be taken 3 times on a different software package or version.

12A  Electronic Spreadsheet
Prerequisite: None
Advisory: Computer Information Science 1 and ability to touch type
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture; 18 hours laboratory
This course introduces the use of electronic spreadsheet programs. The course will include designing a spreadsheet, developing formulas for automatic calculations, using special functions, developing “what if” models, and producing printed reports. This course may be taken four times on a different software package or version. AA/AS area D2

12B  Intermediate Electronic Spreadsheets
Prerequisite: Computer Information Science 12A with a grade of “C” or better
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture; 18 hours laboratory
This course builds upon previous training in the study of electronic worksheets with emphasis on workbook design and integration, template design, use of complex formulas and built-in financial and database functions. The course also includes look-up tables and the use of worksheet analysis tools. The course may be taken four times for credit on a different software package or version.

13A  Database Management
Prerequisite: None
Advisory: Computer Information Science 1 and Business 1
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture; 18 hours laboratory
This course introduces the student, through hands-on operation, to the use of database management programs on the microcomputer. It includes designing a database, accessing, searching, updating files, and designing and producing printed reports. The course may be taken four times for credit on a different software package or version. AA/AS area D2

13B  Intermediate Database Management
Prerequisite: Computer Information Science 13A with a grade of “C” or better
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture; 18 hours laboratory
This course continues the study of microcomputer database with emphasis on database design, reporting, application building, and utilization of files created using other software. This course may be taken four times on a different software package or version.

13C  Advanced Database Management
Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture; 18 hours laboratory
This course continues the study of microcomputer database with emphasis on database design, reporting, application building, and utilization of files created using other software. The course may be taken four times for credit on a different software package or version.

14A  Operating Systems
Prerequisite: None
Advisory: Computer Information Science 1 and ability to touch type
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture; 18 hours laboratory
This course introduces students to operating systems for the IBM and IBM compatible microcomputer. It includes lecture and hands-on application of operating system concepts, program management, file/directory organization, printer control, and procedures for installation of software. This course may be taken four times on a different operating system or version.

14B  Intermediate Operating Systems
Prerequisite: CIS 14A (for corresponding operating system)
Advisory: One course in programming is highly recommended
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture; 18 hours laboratory
The content covers the study of advanced commands, effective utility use, advanced batch files/script files, program logic, disk organization, making user-friendly systems, and anticipating and preventing system problems. This course may be taken four times on a different operating system.

15A  Presentation Graphics
Prerequisite: None
Advisory: Computer Information Science 1 and ability to touch type
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture; 18 hours laboratory
This course is an introduction to presentation graphics for business. Topics include system requirements, graphics software, types of graphics, and design techniques for visual presentations. This course may be taken four times on a different software package or version.

16A  Introduction to Data Communications
Prerequisite: None
Advisory: Computer Information Science 1 and ability to touch type
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture
This course introduces business data communications including media, data communications, protocols, interfaces and packet switching. Hands-on applications include using Web browsers for locating, viewing, printing, and downloading information.

16B  Introduction to Local Area Networks (LAN)
Prerequisite: Computer Information Science 14A with a grade of “C” or better
Advisory: Computer Information Science 16A with a grade of “C” or better
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture; 18 hours laboratory
This course introduces local area networks and provides hands-on training in LAN applications and network administration. Topics include planning, installing, and maintaining a LAN, responsibilities of the system administrator, and human implications. This course may be taken four times on a different operating system.
17A  Desktop Publishing
(2)

Prerequisite: None
Advisory: Computer Information Science 1, 11A and ability to touch type
Transfer Credit: Accepted for credit: CSU
Hours: 27 hours lecture; 27 hours laboratory
The course is designed to present an overview of desktop publishing and a
major desktop publishing program. Material presented will include page lay-
out skills needed to produce newsletters, brochures, flyers, reports, and direc-
tories on the computer. File and equipment management techniques will be
presented. This course may be taken four times on a different software pack-
age or version.

17B  Intermediate Desktop Publishing
(2)

Prerequisite: Computer Information Science 17A with a grade of "C" or better
Transfer Credit: Accepted for credit: CSU
Hours: 27 hours lecture; 27 hours laboratory
This course is designed to present an overview of advanced desktop publish-
ing (DTP) skills. Advanced techniques in page layout and design, select and
use software programs which interface with DTP, use advanced typographic
features, create and integrate image/graphic designs, handle files and directo-
ries, and analyze DTP needs and equipment integration will be presented.
This course may be taken four times on a different software package or ver-

ten.

18A  Integrated Software
(1)

Prerequisite: None
Advisory: Computer Information Science 11A, 12A, 13A, 14A
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture; 18 hours laboratory
This course introduces the student to concepts of integration of software.
Students use the microcomputer to demonstrate file formats, importing and
exporting files, selection criteria for software packages, and features of inte-
gration. This course also covers utility software, networking, and other ad-
avanced topics. This course may be taken four times on a different software pack-
age or version.

20  System Development for Microcomputers
(3)

Prerequisite: Computer Information Science 11A, 12A, 13A, and one
programming language
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture
This course covers computer system design using structured analysis, auto-
mated analysis and design tools, and prototyping to develop system/software
evaluation tools and recommendations.

21A  Introduction to the Internet
(1)

Prerequisite: None
Advisory: Computer Information Science 1
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture, 18 hours laboratory
This course is an introduction to how the Internet works, how to connect,
and how to use the basic services. Topics will include E-mail, the World Wide
Web, newsgroups, mailing lists, Telnet, and FTP.

21B  Web Page Design
(1)

Prerequisite: Computer Information Science 21A
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture; 18 hours laboratory
This course covers the production of Web pages, including design, layout,
construction, and presentation. Students use HTML to format a Web page.

21G  Imaging for the Web
(same as ARTNM 31)
(1)

Prerequisite: None
Advisory: Computer Information Science 21B or 22
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture; 18 hours laboratory
This course takes an in-depth look at designing graphics for the Web. Indus-
try standard graphic software is used to create original graphics as well as to
manipulate found imagery. Topics include developing graphic elements for a
Web site using a visual theme, creating buttons and intuitive navigational
elements, making background textures and images, understanding Web file
formats, scanning, presenting to a client, and simple animation. May be taken
twice for credit on a different platform or graphics software package. Not
open to students who have completed Art New Media 31 or 40.

22  Introduction to Web Publishing
(same as Interdisciplinary Studies 22)
(3)

Prerequisite: None
Advisory: CIS 1 and CIS 21A
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture
This course is an introduction to publishing on the Internet’s World Wide
Web. Topics include creating WWW pages with the HyperText Markup Lan-
guage (HTML), organizing a series of pages into a web site, and uploading
web pages to a server. The course makes extensive use of the computer tools
necessary to insert HTML tags, create images, and view web documents. This
course prepares apprentice web designers and publishers to identify the infor-
mation dissemination needs of a client, design an appropriate WWW solu-
tion, and implement it.

23  Advanced Web Publishing
(4)

Prerequisite: Computer Information Science 22
Transfer Credit: Accepted for credit: CSU
Hours: 72 hours lecture
This course builds upon previous web publishing concepts and study. The
primary focus of this course is the systematic development of interactive web
sites. Topics include cascading style sheets, dynamics HTML, forms, client-
side programming with JavaScript, CGI scripting with Perl, and web-data-
base interactivity.

25  Scripting for the Internet
(4)

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 54 hour lecture; 54 hours laboratory
This course emphasizes the creation of web pages incorporating complex pro-
cesses using traditional structures, topdown design and an implementation
approach. Topics covered include the design and writing of scripts to auto-
mate processes; maintaining databases; handling image maps; maintaining
security; implementing statistical data collection; performing problem analy-
sis; building templates; and other multi-media tasks. This course may be
taken four times on different scripting languages.

26  Scripting for Applications
(3)

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory
This course is an introduction to the application scripting via object oriented
programming concepts. Topics covered include the OS environment; office
suites; scripting languages; user interface; creating application macros and scripts; using application objects; properties and methods; customizing applications; linking application data; buttons; boxes; graphics; data handling; error handling; control; and form handling. This course may be taken four times with a different scripting language.

### 28 Web Team Projects (same as Art New Media 45)

**Prerequisite:** CIS 22, or CIS 23, or ARTNM 42 with a grade of "C" or better  
**Transfer Credit:** Accepted for credit: CSU  
**Hours:** 36 hours lecture; 54 hours laboratory  
This course focuses on web development in a team setting. Emphasis will be placed on the project development cycle including design specification, research, production, modification, and presentation. Web projects assigned in the class will be multifaceted, approaching the complexity that individuals would be expected to encounter in the web development industry. Not open to students who have completed Art New Media 45.

### 29A Microcomputer Support and Repair

**Prerequisite:** CIS 3, 14A (Windows), and 16A with a grade of "C" or better  
**Transfer Credit:** Accepted for credit: CSU  
**Hours:** 36 hours lecture; 54 hours laboratory  
This course is a hardware repair course for stand-alone personal computers. It includes training to troubleshoot hardware to a field replaceable component. Desktop operating system installation and simple networking will be covered. It provides a firm grounding in the hardware that runs the supported software and helps in distinguishing hardware from software problems. This course provides a foundation to study for and pass the A+ certification.

### 29B Microcomputer and Applications Support

**Prerequisite:** CIS 11A, 12A, and 13A with a grade of "C" or better  
**Corequisite:** CIS 29A  
**Transfer Credit:** Accepted for credit: CSU  
**Hours:** 18 hours lecture, 54 hours laboratory  
This course is an internship in the ARC computer labs. It introduces customer service and problem solving skills needed for success in a small or large business environment. It also provides work experience in computer hardware and software support in a "help desk" environment.

### 31 Structured Programming with PASCAL

**Prerequisite:** None  
**Advisory:** Computer Information Science 3, Computer Information Science 41, and Mathematics 53  
**Transfer Credit:** Accepted for credit: UC, CSU  
**Hours:** 54 hours lecture; 54 hours laboratory  
This course is an introduction to PASCAL, a language which emphasizes the concepts of structured programming. Topics include toplow design, input/output, data types, control structures, functions and procedures. Students will design, code test, and run PASCAL programs. (CAN CSCI 12)

### 32A Introduction to Structured Programming

**Prerequisite:** A grade of "C" or better in one of the following: CIS 31, 33, 36A, 38, or 41  
**Transfer Credit:** Accepted for credit: UC, CSU  
**Hours:** 54 hours lecture; 54 hours laboratory  
This course is an introduction to structured programming and objects. Topics include top-down, variables, control flow, constants, libraries, arrays, functions, arguments, input/output, classes and objects. (CAN CSCI 16) AA/AS area D2

### 32B Structured Programming with C++

**Prerequisite:** Computer Information Science 32A with a grade of "C" or better  
**Transfer Credit:** Accepted for credit: UC, CSU  
**Hours:** 54 hours lecture; 54 hours laboratory  
This course is an introduction to the C++ programming language and object-oriented programming. Topics include operation, encapsulation and overloading, classes, inheritance and virtual functions. AA/AS area D2

### 33 FORTRAN Programming

**Prerequisite:** None  
**Advisory:** Computer Information Science 3, CIS 41, and Mathematics 53  
**Transfer Credit:** Accepted for credit: UC, CSU,  
**Hours:** 36 hours lecture; 54 hours laboratory  
This course is an introduction to the computer solution of problems by programming in FORTRAN. The emphasis is on learning the language and structured programming techniques. While problems from many disciplines will be presented, emphasis is placed on solving problems in engineering and the physical sciences. Appropriate for all majors in engineering, science and mathematics. (CAN CSCI 16) AA/AS area D2

### 34 Computer Organization and Assembly Language Programming

**Prerequisite:** CIS 41 with a grade of "C" or better  
**Transfer Credit:** Accepted for credit: UC, CSU,  
**Hours:** 54 hours lecture; 54 hours laboratory  
This course is an introduction to the internal organization of a computer. Topics include learning to program in assembly language, implementing high level logic such as loops and subroutines, and performing low level hardware access. AA/AS area D2

### 35 Advanced Assembly Programming

**Prerequisite:** Computer Information Science 34 with a grade of "C" or better  
**Transfer Credit:** Accepted for credit: UC (unit limitation), CSU  
**Hours:** 54 hours lecture; 54 hours laboratory  
This course is an extension of the language and techniques studied in Computer Information Science 34. Topics include stacks, call frames, arrays and structures in assembly language. Hardware related topics such as interrupts, preemption and multitasking are also introduced. (CAN CSCI 10)

### 35A Assembly Language Programming on Microcomputers

**Prerequisite:** A grade of "C" or better on one of the following: CIS 31, 33, 36A, 38, 41  
**Transfer Credit:** Accepted for credit: UC (unit limitation), CSU  
**Hours:** 54 hours lecture; 54 hours laboratory  
This course is an introduction to the architecture of microcomputers that use the Intel microprocessor. Topics include machine and assembly language, keyboard and screen manipulation, binary and BCD arithmetic, ASCII and binary conversion, table processing, macros, and subroutines. Machines language programs will be traced as an aid to debugging.

### 36A COBOL Programming

**Prerequisite:** CIS 41 or one of the following: CIS 31, CIS 33, or CIS 38  
**Advisory:** Computer Information Science 34  
**Transfer Credit:** Accepted for credit: UC, CSU  
**Hours:** 54 hours lecture; 54 hours laboratory
This is a course in Programming using the language of COBOL to analyze and solve problems found in business and government. The programs use sequential disk files for input. Both printed reports and disk files are demonstrated output options. Updating of sequential files involves the use of multiple files as input and output. Current methods of problem solving include programming structure, topdown design, and modular programming techniques. Topics covered include report formatting, control breaks, and single and double arrays. AA/AS area D2

36B Advanced COBOL Programming (4)
Prerequisite: Computer Information Science 36A with a grade of "C" or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture; 54 hours laboratory
This course covers advanced COBOL concepts and programming techniques. The topics include sequential file processing, data editing, indexed sequential disk file processing, disk sorts, job control language, debugging languages and techniques, table handling, segmentation and subroutines. Emphasis is on structured designed and structured programming utilizing "top down" and modular techniques.

37 Database Programming (3)
Prerequisite: None
Advisory: Computer Information Science 3, 13A, 13B, and CIS 41
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory
This is an introductory course to programming in database. The topics include analysis and design, modular programming, screen displays and menus, and multiple databases. AA/AS area D2

38 Programming in Visual BASIC (4)
Prerequisite: None
Advisory: Computer Information Science 3 and 41
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture; 54 hours laboratory
This is an introductory programming course employing the language of Visual BASIC. Concepts and problems relate to a graphic user interface operating system (such as Windows) and object oriented programming. Terms, rules, and program components used in desktop customization will be explored. Applications include control menu boxes, menu bars, and scroll bar development.

39 Object Oriented Programming (4)
Prerequisite: CIS 32A for JAVA; CIS 31 for Delphi; CIS 38 for Advanced Visual BASIC; or a course in the fundamental language of the object oriented programming language with a grade of "C" or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture; 54 hours laboratory
This is an introduction to object oriented programming. The course will look at data and its relationships to the functions that operate data. Topics will include: forms, components, properties, classes, objects, static and dynamic relationships, data bases, data sets, queries, hierarchies, inheritance, coding, dialog boxes, associations, testing and debugging. This course may be taken four times with a different language.

40 Data Structures (4)
Prerequisite: A course in the fundamental language of the object oriented programming being used with a grade of "C" or better. CIS 31 (Pascal) or CIS 32A or B (C or C++)
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture; 54 hours laboratory
This course uses a case study approach applying techniques for systematic problem analysis, program specification, design, coding, testing, debugging and documentation of large programs. The course uses advanced language features such as strings, sets, non-text files, pointers and recursion. Elementary abstract data structures, and selected searching and sorting techniques are also covered.

41 Algorithm Design/Problem Solving (3)
Prerequisite: None
Corequisite: CIS 3
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture
This course introduces the Computer Science major to methods for solving typical computer problems through algorithm design. Topics covered include assessing and analyzing computer problems in a top-down, divide-and-conquer approach that leads to a programming solution. Programming plans and detailed design documents from which source code versions of programs will be included.

44 Discrete Structures for Computer Science (3)
Prerequisite: Mathematics 29 with a grade of "C" or better
Corequisite: CIS 40
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This course is an introduction to the essential discrete structures used in Computer Science, with emphasis on their applications. Topics to be covered include elementary formal logic and set theory, elementary combinatorics, recursive programming and algorithm analysis, digital logic and switching, combinatorial circuits, and computer arithmetic. AA/AS D2; CSU area B3

46 Teacher Aide (1-4)
Prerequisite: Successful completion of course in which the student wishes to tutor
Transfer Credit: Accepted for credit: CSU
Hours: 9-54 hours lecture; 27 - 162 hours laboratory
This course provides for those who want to develop an in-depth understanding of computer software and who want to learn to work with individual students or small groups in a problem-solving environment. May be taken twice for credit up to a maximum of six units.

51 Computer Systems Analysis and Design (3)
Prerequisite: None
Advisory: Computer Information Science 32A or 36A
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture
This course covers the analysis of the computer needs of a client, the design of computer application system solutions, and the documentation needed to convert a new system from the design phase to the operational phase.
60 Network Administration (3)
Prerequisite: Computer Information Science 3 and 14A (DOS or Windows) with a grade of "C" or better
Advisory: One programming language is recommended
Hours: 45 hours lecture; 18 hours laboratory
This course covers the basics of managing an existing Local Area Network. Topics covered include connecting to a network; utilizing network utilities; planning, accessing, and managing file systems; planning and implementing login and file system security; administering and maintaining the user and printer environment; protecting network data; and installing network applications. Course may be repeated 3 times with different systems.

61 Advanced Network Administration (2)
Prerequisite: Computer Information Science 60 with a grade of "C" or better
Hours: 27 hours lecture; 27 hours laboratory
This course covers topics necessary for an experienced network administrator to monitor, maintain and improve the performance of an existing Local Area Network. Course may be taken four times with different versions.

62 Network Installation and Configuration (2)
Prerequisite: Computer Information Science 61
Hours: 27 hours lecture; 27 hours laboratory
This course covers the basics of installing and configuring a network. Topics covered include installing and configuring network servers, clients, and print servers; setting up system security; setting up workgroups and accounts; and upgrading systems. This course may be taken four times with different systems.

63 Networking Technologies (3)
Prerequisite: CIS 3, and 14A (Windows)
Advisory: CIS 16A
Hours: 54 hours lecture
This course provides a comprehensive survey of Local Area Networks, technologies, protocols, and connectivity. Topics covered include the Open Systems Interconnection seven-layer model for communication, communication protocols and standards, data translation, transmission and media, and network topologies and access methods.

64 TCP/IP Protocols (2)
Prerequisite: CIS 60, 63
Hours: 27 hours lecture; 27 hours laboratory
This course covers the TCP/IP protocols used on the Internet and how to install a TCP/IP server on a network. This course may be taken four times on a different version.

79A Data Communication and Networking Fundamentals (3)
Prerequisite: None
Advisory: CIS 14A and CIS 1 or 3
Hours: 54 hours lecture; 18 hours laboratory
This course is an introduction to data communication and networking fundamentals. It surveys data communication hardware and software components and basic networking concepts. Topics covered include data communication, the OSI Model, IP addressing, routing concepts, LAN media, and network management and analysis. This is the first course in preparation for Cisco CCNA certification examination.

79B Networking Theory and Routing Technologies (3)
Prerequisite: CIS 79A
Hours: 54 hours lecture; 18 hours laboratory
This course is an introduction to networking theory and routing technologies, including the main Cisco Internet operating system, beginning router configurations, routed and routing protocols. This is the second course in preparation for Cisco CCNA certification examination.

79C Advanced Routing and Switching (3)
Prerequisite: CIS 79B
Hours: 54 hours lecture; 18 hours laboratory
This course is an introduction to advanced routing and switching technologies. Topics covered include advanced router configurations, network management, advanced network design, LAN switching, and VLANs. This is the third course in preparation for Cisco CCNA certification examination.

79D Wide-Area Networks and Project-Based Learning (3)
Prerequisite: CIS 79C
Hours: 54 hours lecture; 18 hours laboratory
This course develops knowledge and skills to design and configure advanced wide area network (WAN) projects using Cisco IOS command set. This is the fourth course in preparation for Cisco CCNA certification examination.

80 Network Systems Administration (2)
Prerequisite: Computer Information Science 3, 14A (Windows), 14A (UNIX), 16A, 16B, 21A
Hours: 27 hours lecture; 27 hours laboratory
This course covers the administration of a server in a client/server network. Topics covered include designing a basic network; installing and configuring a network shares; setting up and managing network printers; backing up servers; monitoring and troubleshooting network resources; and establishing policies and procedures for networking operations.

81 Intermediate Network Systems Administration (3)
Prerequisite: Computer Information Science 80
Hours: 45 hours lecture; 27 hours laboratory
This course covers advanced system administration in a client/server network. Topics covered include configuring the server environment; implementing system policies; implementing and managing fault-tolerant disk volumes; managing applications; managing connectivity for different network and client operating systems; managing remote servers; implementing directory replication and file synchronization; and advanced troubleshooting techniques.

82 Advanced Network Systems Administration (3)
Prerequisite: Computer Information Science 81
Hours: 45 hours lecture; 27 hours laboratory
This course covers the administration of a server in an enterprise network. Topics covered include designing an enterprise network; optimizing network servers for enterprise-related roles; managing enterprise users, groups and resources; planning and implementing connectivity to other networks within the enterprise; server and network optimization; and troubleshooting techniques at the enterprise level.
### Networking with TCP/IP

**Prerequisite:** Computer Information Science 81  
**Hours:** 45 hours lecture; 27 hours laboratory  
This course covers the implementation of the TCP/IP protocol suite in an enterprise network. Topics covered include installing, configuring and testing TCP/IP; planning and implementing subnetworks; managing IP address assignments and IP routing; installing and configuring DNS; TCP/IP network printing; troubleshooting the network with TCP/IP utilities; and planning for IPv6.

### Web Server Administration

**Prerequisite:** Computer Information Science 84  
**Hours:** 45 hours lecture; 27 hours laboratory  
This course covers web server installation and administration for the Internet and intranets. Topics covered include the installation, configuration, management and tuning of web servers; WWW and FTP services; security features; on-line transaction processing; and web site optimization.

### Messaging Server Administration  
**Using Exchange Server**

**Prerequisite:** Computer Information Science 81  
**Hours:** 45 hours lecture; 27 hours laboratory  
This course covers the installation and administration of messaging servers. Topics covered include the installation, configuration, management and tuning of mail and messaging services on both servers and clients; mail access protocols; security issues; and Internet connectivity.

### High Performance Web Caching and  
**Firewall Security Via Proxy Server**

**Prerequisite:** Computer Information Science 84  
**Hours:** 27 hours lecture; 27 hours laboratory  
This course covers the planning, installation, configuration and administration of proxy servers. Proxy Servers provide the cornerstone on which to build an Internet Web site, or an intranet, while protecting the rest of the network from the outside world. Topics covered include planning the proxy server implementation; proxy server installation; proxy client configuration; proxy server security; firewall implementation via proxy server; managing and tuning proxy servers; Internet access via proxy servers; high performance Web caching; as well as, troubleshooting and complex deployment/configuration issues.

### Client Operating Systems

**Prerequisite:** Computer Information Science 81  
**Hours:** 27 hours lecture; 27 hours laboratory  
This course covers the planning, installation, configuration and administration of Client Operating Systems. Client Operating Systems are an essential component for both the client/server and peer-to-peer network models. Topics covered include planning the Client Operating System implementation; installation and configuration; managing user resources; connectivity of clients in heterogeneous networking environments; monitoring and optimization of the network; and common troubleshooting techniques.

### Special Topics in Computer Information Science

**Prerequisite:** To be determined with each topic  
This is an individualized course developed in cooperation with industry and/or government to meet specialized training needs. The course may be taken twice for credit.

### Work Experience

**Prerequisite:** None  
**Corequisite:** Must be enrolled in a minimum of 7 units including work experience  
**Hours:** 18 hours lecture; 324 TBA  
This course is supervised work experience in Computer Information Science for the purpose of increasing the understanding of the nature and scope of the operation of business, government or service agencies. This course requires that students be employed in paid or a volunteer work experience environment. May be taken four times for a maximum of 16 units.
Criminal Justice

Basic Police Academy
Probation Officer Core Course
Corrections Officer Core Course
Juvenile Counselor Core

Area: Sacramento Regional Public Safety Training Center
Dean: Richard W. McKee
Phone: (916) 570-5000
Counseling: (916) 484-8572

The Sacramento Regional Public Safety Training Center, operated by American River College, is dedicated to providing high quality training and education programs for public safety personnel. The center offers entry-level and advanced instruction in areas that meet the needs of individuals as well as public and private agencies. The instructional program includes probation, fire technology, EMT, law enforcement, and corrections. All courses meet the academic standards of the Los Rios community college district. These courses may be certified by the Commission on Peace Officer Standards and Training (POST), the Standards and Training for Corrections (STC), and/or the Commission on Correctional Peace Officer Standards and Training (C POST).

Most courses are offered in a concentrated, short-term format.

Graduates from these programs may be eligible for employment in municipal, county and state law enforcement agencies specializing in police, corrections and probation.

Recommended community college preparation:
Students interested in a criminal justice career would benefit from a liberal arts program.

Technical/Professional Development Courses

Technical training courses are geared primarily for the law enforcement, corrections, probation, or crime prevention professional seeking technical knowledge, skills and abilities mandated by the California Commission on POST and California Commission on STC, and the Commission on Correctional Peace Officer Standards and Training. Technical courses which include manipulative skills development may require proficiency skill testing of all students. Technical courses involving instructor certification may require a proficiency skills test prior to registration.

Student registration into some courses may be restricted by California statute. Sacramento Regional Public Safety Training Center courses may be used for elective credit.

Program Costs: Students are required to pay for the cost of materials consumed during training courses. Students are required to pay the established community college registration and material fees.

Course registration is accomplished at the SRPSTC facility.

68 Private Investigations (3)
100A Peace Officer-Specialized Investigator Course (6)
100B Basic Peace Officer Training (12)
101 Requalification of Basic Peace Officer (5)
102 Reserve Officer Training (9)
103 Officer Safety and Field Tactics (1)
105 Computer Investigation (.5)
106 Computer Internet Investigation (.5)
107 Computer Crime (.5)
108 COPPS-POPPS (1)
110 Basic Crime Prevention (4)
111 Crime Prevention through Environmental Design (2)
112 Commercial/Retail Security (1)
113 Electronic Security (1)
114 Crime Prevention Program Development (1)
116A Law Enforcement Chaplain’s Academy (4)
121A Arrest, Search and Seizure (2)
121B Firearms Familiarization (1)
125 Basic Force and Weaponry (2)
126 Advanced Force and Weaponry (1)
127 Management of Assaultive Behavior (.5)
128 Advanced Management of Assaultive Behavior (1)
131 Plain Clothes Officer Survival/24 Hour (1)
131A Plain Clothes Officer Survival (1)
133 Weaponless Defense Instructor (2)
133A Weaponless Defense Instructor Update (1)
134 Weaponless Defense Instructor Advanced (2)
137 Juvenile Institutions Counselor (5)
138 Probation Officer Core Course (5)
139 Corrections Officer Core (5)
140 Supervisory (4)
141 Impact Weapons Instructor (2)
141A Impact Weapons Instructor Update (1)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>143A</td>
<td>Boating Safety and Enforcement (Basic)</td>
<td>2</td>
</tr>
<tr>
<td>144</td>
<td>Boating Accident Reconstruction</td>
<td>2</td>
</tr>
<tr>
<td>146</td>
<td>Bicycle Patrol</td>
<td>1</td>
</tr>
<tr>
<td>147</td>
<td>Bicycle Instructor</td>
<td>1</td>
</tr>
<tr>
<td>148</td>
<td>Boating Intoxication</td>
<td>1</td>
</tr>
<tr>
<td>149</td>
<td>Less-than-Lethal Munitions</td>
<td>.5</td>
</tr>
<tr>
<td>150</td>
<td>Advanced Officer</td>
<td>.5-2</td>
</tr>
<tr>
<td>151</td>
<td>Skills and Knowledge Modules</td>
<td>.5-2</td>
</tr>
<tr>
<td>151A</td>
<td>Skills and Knowledge Modules</td>
<td>.5-2</td>
</tr>
<tr>
<td>152</td>
<td>Background Investigation</td>
<td>2</td>
</tr>
<tr>
<td>153</td>
<td>Chemical Agent Instructor</td>
<td>.5</td>
</tr>
<tr>
<td>154</td>
<td>Distraction Device Instructor</td>
<td>.5</td>
</tr>
<tr>
<td>155</td>
<td>Driving Under the Influence Update</td>
<td>1</td>
</tr>
<tr>
<td>156</td>
<td>Drug/Alcohol Recognition</td>
<td>1</td>
</tr>
<tr>
<td>157</td>
<td>Field Training Officer</td>
<td>2</td>
</tr>
<tr>
<td>158</td>
<td>Firearms Instructor</td>
<td>3</td>
</tr>
<tr>
<td>160</td>
<td>Media Relations</td>
<td>1</td>
</tr>
<tr>
<td>161</td>
<td>Protection of Public Officials</td>
<td>2</td>
</tr>
<tr>
<td>162</td>
<td>Under the Influence of Narcotics and Drugs</td>
<td>1</td>
</tr>
<tr>
<td>163</td>
<td>Tracking-Urban</td>
<td>.5</td>
</tr>
<tr>
<td>164</td>
<td>Canine Handler</td>
<td>2</td>
</tr>
<tr>
<td>165</td>
<td>Semi-Auto Pistol Training</td>
<td>.5</td>
</tr>
<tr>
<td>166</td>
<td>Tactical Entry</td>
<td>1</td>
</tr>
<tr>
<td>168A</td>
<td>Fully Automatic Weapons Training</td>
<td>1</td>
</tr>
<tr>
<td>168B</td>
<td>Fully Automatic Weapons Training-Condensed</td>
<td>.5</td>
</tr>
<tr>
<td>170</td>
<td>Bloodstain Dynamics</td>
<td>2</td>
</tr>
<tr>
<td>171</td>
<td>Death Investigation</td>
<td>4</td>
</tr>
<tr>
<td>172</td>
<td>Detective Orientation</td>
<td>4</td>
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<tr>
<td>172A</td>
<td>CDC Advanced Investigations</td>
<td>2</td>
</tr>
<tr>
<td>173</td>
<td>Fingerprint Investigation (Basic)</td>
<td>2</td>
</tr>
<tr>
<td>174</td>
<td>Interview and Interrogation Techniques</td>
<td>2</td>
</tr>
<tr>
<td>174B</td>
<td>Interview and Interrogation Condensed</td>
<td>1</td>
</tr>
<tr>
<td>175</td>
<td>Regulatory Investigative Techniques</td>
<td>2</td>
</tr>
<tr>
<td>176</td>
<td>Crime Analysis</td>
<td>2</td>
</tr>
<tr>
<td>177A</td>
<td>Child Abuse</td>
<td>2</td>
</tr>
<tr>
<td>177B</td>
<td>Sexual Assault</td>
<td>2</td>
</tr>
<tr>
<td>179</td>
<td>Course Development</td>
<td>1</td>
</tr>
<tr>
<td>180</td>
<td>Dispatcher Basic</td>
<td>6</td>
</tr>
<tr>
<td>182</td>
<td>Radar Operator</td>
<td>2</td>
</tr>
<tr>
<td>183</td>
<td>Radar Instructor</td>
<td>2</td>
</tr>
<tr>
<td>184</td>
<td>Traffic Collision, Basic</td>
<td>2</td>
</tr>
<tr>
<td>189</td>
<td>CDC Internal Affairs Investigation</td>
<td>2</td>
</tr>
<tr>
<td>190</td>
<td>Technical Courses</td>
<td>.5-4</td>
</tr>
<tr>
<td>199</td>
<td>Special Topics</td>
<td>.5-1</td>
</tr>
</tbody>
</table>
Design Technology

ARC’s design technology program provides a background in skill and theory to qualify the student for employment as a design draftsperson. The ARC Design Technology Program emphasizes the basic skills needed for success in architectural, mechanical and engineering occupations. These include dimensioning, orthographic projection and geometric construction. Basic training in the use of drawing instruments and letter technique is also available for those who have had no high school mechanical drawing experience.

The use of computers is emphasized throughout the program since they are the tool of choice in the industry.

Career Opportunities

Whether building a bridge, a satellite, a television set, a skyscraper or a home, workers rely on drawings that show the exact dimensions and specifications of the entire object and each of its parts.

Using traditional or computerized drawing tools, design draftpersons prepare detailed drawings from rough sketches, specifications and calculations provided by scientists, engineers, architects and designers. Final drawings contain detailed views of the object, as well as specifications for materials to be used and procedures to be followed.

Civil, mechanical, electrical, aeronautical, structural and architectural design drafting are major fields of employment.

Although accomplished design technicians usually specialize, the ARC program prepares graduates for entry-level positions in all principal areas of employment.

Employment of design technicians is expected to increase as a result of the increasingly complex design of products and processes. If you plan a career in design technology you should be prepared to do both freehand and detailed computer-assisted drawings of three-dimensional objects with a high degree of accuracy. You must also be able to function as a part of a team, since you will work directly with engineers, architects and craft workers.

Design & Engineering Technology

Degree: A.A. - Design Technology
A.S. - Engineering Technology
Certificate: Design Technology
Engineering Technology

Area: Technical Education
Dean: Gabriel Meehan
Phone: (916) 484-8354
Counseling: (916) 484-8572

Requirements for Degree Major: 39 units
Design Technology 51 3
Design Technology 53 3
Design Technology 54 3
Design Technology 55 4
Design Technology 56 5
Design Technology 58 5
Design Technology 66 2
Design Technology 67 2
Design Technology 68A, B, C, or D (any two) 2
Design Technology 57 or Engineering 10 4
Engineering 37 or 78 3
Mathematics 53 3

Recommended Electives
Chemistry 2A or 3, Computer Information Science 12A and 12B
Horticulture 75, Mathematics 15, Physics 10, Physics 5A,
Engineering 2

Requirements for Certificate: 39 units
Design Technology 51 3
Design Technology 53 3
Design Technology 54 3
Design Technology 55 4
Design Technology 56 5
Design Technology 58 5
Design Technology 66 2
Design Technology 67 2
Design Technology 68A, B, C, or D (any two) 2
Design Technology 57 or Engineering 10 4
Engineering 37 or 78 3
Mathematics 53 3

General Education Graduation Requirements:
Students must also complete the general education graduation requirements for an A.A. degree. See Graduation requirements.

Engineering Technology

Students gain a background in skill and theory to qualify them for employment as a technician with government or industry.

While scientists discover new products and principles, and the engineers design ways of putting these discoveries to practical use, it is the engineering technicians and technologists who often do the testing, implementation, fabrication, and trouble shooting of these engineering designs.

All engineering technicians require a common academic background. The ARC engineering technician program is designed to give the student this basic
preparation in physics, mathematics, drafting, computer-aided drafting and design (CADD), chemistry, manufacturing processes, engineering materials and other subjects necessary for the well trained technician.

Upon completion of the A.S. degree the engineering technician will be prepared to go directly into the employment market as a technical assistant to engineers, or other technical employment, or to transfer to California State University, Sacramento, with junior standing, in their mechanical engineering technology or construction management programs.

The two-year A.S. degree program provides options for special concentration: engineering technology, architectural engineering technology, civil engineering technology, electrical engineering technology, or mechanical engineering technology.

In addition, the college offers special transfer options to California State University, Sacramento, including Mechanical Engineering Technology and Construction Management.

A certificate program in engineering technology is also offered by the college.

Career Opportunities

For every engineer, several technicians are required. Engineering technicians are needed in the fields of manufacturing, architecture, construction, materials testing, public utilities and many other fields. Salaries are dependent upon local industries.

Requirements for Degree Major

18 units of transfer level course work in addition to other graduation requirements. Courses may be selected from astronomy, chemistry, engineering, geology, mathematics, physical geography, physical science, physics and statistics. See graduation requirements.

Requirements for Degree Major: 38-40 units

Chemistry 2A or 3
Computer Information Science 12A and 12B
Design Technology 53 or Engineering 27
Design Technology 55 or Engineering 37
Design Technology 57 or Engineering 10
Design Technology 51, 56, or 58, 66, 67, 68B and 68D Engineering 78
Mathematics 15
Physics 5A or 10

Recommended Electives

Business 8, 18A, Design Technology 54, Electronics 30A, 30B
Engineering 2, English 13A, 13B, Mathematics 16A, 16B, Speech 1, Statistics 1, Welding 51

Requirements for Certificate: 38-40 units

Chemistry 2A or 3
Computer Information Science 12A and 12B
Design Technology 53 or Engineering 27
Design Technology 55 or Engineering 37
Design Technology 57 or Engineering 10,
Design Technology 56 or 58, 66, 67
Engineering 78
Mathematics 15
Physics 10 or 5A

Engineering Technology Degree Concentrations

As an option to the two-year Engineering Technology degree, a student may petition to have a specific area of concentration noted on the transcript. To qualify for a concentration the following courses must be completed (note that some courses are in addition to the degree core).

Architectural Engineering Technology Concentration
Design Technology 54, 56, 58, 68A

Civil Engineering Technology Concentration
Design Technology 53, 54, 56, Design Technology 57 or Engineering 10, Engineering 78

Electrical Engineering Technology Concentration
Design Technology 67, Electronics Technology 30A, 30B, Engineering 17, 78.

Mechanical Engineering Technology Concentration
Design Technology 53, 54, 55, 68B, 68D, Engineering 37, 78.

Mechanical Engineering Technology (CSU Transfer option)

A background in skill and theory to satisfy the transfer requirement to California State University, Sacramento, leading to a Bachelor of Science Degree in Mechanical Engineering Technology. This sequence of classes satisfies the Associate of Science Degree in Engineering Technology, and transfers directly to upper division courses at CSUS. Consult Counseling Department for graduation requirements. Students planning to complete a four year degree in Mechanical Engineering Technology should take this option.

Requirements for Degree Major: 68 units

Recommended Course Sequence for Degree Program

First Semester 17 Units
Mathematics 16A 3
Chemistry 1A or 2A 5
Design Technology 51 3
Language and Rationality 3
Statistics 1 3

Second Semester 17 Units
Physics 5A 4
Computer Information Science 30 3
Design Technology 53 or Engineering 27 3
Design Technology 66 2
Mathematics 16B 3
Humanities 3

Third Semester 18 Units
Design Technology 55 4
Design Technology 56 or 58 5
Social Science 3
Physics 5B 4
Electives 2

Fourth Semester 16 Units
Engineering 37 3
Engineering 78 3
Design Technology 57 or Engineering 10 4
Social Science 3
Electives 3

Recommended Electives

Electronics Technology 30A, 30B; English 1A; Design Technology 54, 56, 67, 68B, 68D;
Business 8, 18A; Welding 51
## Construction Management (CSU Transfer option)

A background in skill and theory to satisfy the transfer requirement to California State University, Sacramento, leading to a Bachelor of Science Degree in Engineering Technology - Construction Management. To satisfy the Associate of Science Degree, for this option, and graduation requirements, consult with the counseling department. Students planning to complete a four year degree in Engineering Technology - Construction Management, should take this option.

* Students can take CM 22, Construction Documents, as a cross over course prior to transferring to CSUS. Consult with counseling department.

### Requirements for Degree Major: 68-70 units

#### Recommended Course Sequence for Degree Program

<table>
<thead>
<tr>
<th>Semester</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td>15-17</td>
</tr>
<tr>
<td>Mathematics 16A</td>
<td>3</td>
</tr>
<tr>
<td>Physics 5A</td>
<td>4</td>
</tr>
<tr>
<td>Design Technology 66</td>
<td>2</td>
</tr>
<tr>
<td>Engineering 2 or Design Technology 54</td>
<td>1,3</td>
</tr>
<tr>
<td>Biology</td>
<td>4</td>
</tr>
<tr>
<td>Computer Information Science 14A</td>
<td>1</td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td>15</td>
</tr>
<tr>
<td>Mathematics 16B</td>
<td>3</td>
</tr>
<tr>
<td>Physics 5B</td>
<td>4</td>
</tr>
<tr>
<td>Design Technology 53</td>
<td>3</td>
</tr>
<tr>
<td>Business 18A</td>
<td>3</td>
</tr>
<tr>
<td>Computer Information Science 12A</td>
<td>1</td>
</tr>
<tr>
<td>Computer Information Science 11A</td>
<td>1</td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td>18</td>
</tr>
<tr>
<td>Engineering 78 or 45</td>
<td>3</td>
</tr>
<tr>
<td>Design Technology 57 or Engineering 10</td>
<td>4</td>
</tr>
<tr>
<td>Design Tech. 56 or Design Tech. 58</td>
<td>5</td>
</tr>
<tr>
<td>Accounting 1A</td>
<td>3</td>
</tr>
<tr>
<td>English 1A</td>
<td>3</td>
</tr>
<tr>
<td><strong>Fourth Semester</strong></td>
<td>15</td>
</tr>
<tr>
<td>Engineering 35</td>
<td>3</td>
</tr>
<tr>
<td>Statistics 1</td>
<td>3</td>
</tr>
<tr>
<td>Accounting 1B</td>
<td>3</td>
</tr>
<tr>
<td>Speech 3</td>
<td>3</td>
</tr>
<tr>
<td>* Construction Management 22</td>
<td>3</td>
</tr>
</tbody>
</table>

*Students can take CM 22, Construction Documents, as a cross over course prior to transferring to CSUS. consult with counseling department.

### 51 Basic Technical Drawing (same as Engineering 51) (3)

- **Prerequisite:** None
- **Advisory:** English 58 or 60, 78 or ESL 2R and 2W or placement through assessment process
- **Transfer Credit:** Accepted for credit: CSU
- **Hours:** 36 hours lecture; 72 hours laboratory

This course covers fundamental training in the use of drawing instruments for engineering and architectural design drafting. It includes lettering, geometric construction, sketching, orthographic and isometric projection. It is required of Engineering, Architectural, and Design Technology and Engineering Technology students who have no previous drafting experience. Not open to students who have completed Engineering 51.

### 53 Graphic Analysis (3)

- **Prerequisite:** Design Technology 51 or portfolio
- **Transfer Credit:** Accepted for credit: CSU
- **Hours:** 36 hours lecture; 72 hours laboratory

This course will cover orthographic projection and geometric construction principles to solve technical problems. Graphical analysis of the true length, true shape, true angle in the solution of engineering and architectural problems. Satisfies the transfer requirements to CSUS for engineering, engineering technology, and design technology students.

### 54 Three Dimensional Graphics and Design (3)

- **Prerequisite:** None
- **Advisory:** English 58 or 60, 78 or ESL 2R and 2W or placement through assessment process
- **Transfer Credit:** Accepted for credit: CSU
- **Hours:** 54 hours lecture; 54 hours laboratory

This course covers instruction and practice in freehand engineering and architectural technical expression in various graphic media. Additionally, students will develop design solutions represented in freehand perspectives and 3D CADD solutions.

### 55 Machine Design (4)

- **Prerequisite:** Design Technology 53
- **Advisory:** Design Technology 66
- **Transfer Credit:** Accepted for credit: CSU
- **Hours:** 54 hours lecture; 54 hours laboratory

This course covers instruction in machine design and dimensioning of engineering machine drawings. Basic dimensioning of orthographic, sections, auxiliaries, forging, and casting drawings will be studied as well as basic manufacturing techniques. Emphasis will be placed on the latest ANSI Standard for Geometric Dimensioning and Tolerancing and its application to working drawings. Satisfies the transfer requirement for machine drawing to CSUS Mechanical Engineering Technology Program.

### 56 Architecture and Construction (5)

- **Prerequisite:** Design Technology 53
- **Advisory:** Design Technology 54 and 66, Mathematics 53
- **Transfer Credit:** Accepted for credit: CSU
- **Hours:** 36 hours lecture; 162 hours laboratory

This course will cover individual and group exercises simulating typical design, drafting and procedures in architecture and construction. Focus will be on residential design and wood frame construction.
57  Surveying and Construction Measurement Techniques  (4)

Prerequisite:  Design Technology 53 and 66
Corequisite:  Mathematics 53
Advisory:  Mathematics 15
Transfer Credit:  Accepted for credit: CSU
Hours: 54 hours lecture; 54 hours laboratory
This course will cover instruction in basic measurement and alignment techniques used in light and heavy construction for design technology majors. Additionally, the course will include site, road staking, cut and fill calculations, and elementary surveying principles.

58  Commercial Engineering Design and Drafting  (5)

Prerequisite:  Design Technology 53, 66
Advisory:  Design Technology 54, 67
Transfer Credit:  Accepted for credit: CSU
Hours: 36 hours lecture; 162 hours laboratory
This course employs individual and group exercises simulating typical design and engineering problems in structures, land planning, and environmental systems in buildings. Design solutions will be presented by freehand, manual drafting, and CADD application. The course includes both individual and team design problems.

66  Introduction to Computer Aided Drafting and Design (CADD)  (2)

Prerequisite:  None
Hours: 18 hours lecture; 54 hours laboratory
This course is an introduction to the basic drawing and editing commands used by AutoCad software. The projects will encompass: Architectural design, Mechanical design, electronic schematics, and Interior Design/Space planning. Course can be repeated three times for credit.

67  Intermediate Computer Aided Drafting and Design (CADD)  (2)

Prerequisite:  Design Technology 66
Hours: 18 hours lecture; 54 hours laboratory
This course will be a continuation of Design Technology 66, with an emphasis on advanced AutoCad commands. This course will present a variety of CADD areas and projects using existing and new skills for problems in a variety of fields. The projects will encompass: architectural design, mechanical design, 3D drawings, isometrics, developments, attributes, civil drafting, interior design/space planning. A project will be developed to present a graphic documentation of the CADD skills developed in the student's area of focus. Course can be repeated three times for credit.

68A  Advanced Computer Aided Design-Architectural  (1)

Prerequisite:  Design Technology 56 or 58, Design Technology 67 (Design Technology Majors); or Design Technology 66, Interior Design 24 and 26 (Interior Design Majors)
Transfer Credit:  Accepted for credit: CSU
Hours: 9 hours lecture; 27 hours laboratory
This course covers an advanced study in computer aided design and drafting, CADD. The labs will emphasize design and drawings in site planning, architecture, interior design, and structural engineering with advanced computer concepts and skills to be applied. This will include freehand concept design, design development, and computer aided working drawings.

68B  Solids Modeling  (1)

Prerequisite:  Design Technology 67
Transfer Credit:  Accepted for credit: CSU
Hours: 9 hour lecture; 27 hours laboratory
This course covers solids modeling techniques for mechanical and architectural design. Consideration will be given to design analysis and manufacturing using solids models.

68C  AutoCad Customizing  (1)

Prerequisite:  Design Technology 67
Advisory:  Knowledge of standard keyboard
Transfer Credit:  Accepted for credit: CSU
Hours: 9 hour lecture; 27 hours laboratory
This course covers advanced CADD applications in customizing techniques. Topics will include macros, menu modification, linetype and hatch pattern definition, and introduction to Auto Lisp.

68D  Advanced Mechanical Design  (1)

Prerequisite:  Design Technology 67
Transfer Credit:  Accepted for credit: CSU
Hours: 9 hour lecture; 27 hours laboratory
This course covers advanced techniques and skills in mechanical drafting and design. Students will prepare a complete set of working drawings for facility planning, machine design, process flow, and HVAC systems. Special emphasis will be placed on CADD layout, planning, dimensioning, and accuracy.

90  Drafting for Design Majors  (1)

Prerequisite:  None.
Hours: 9 hours lecture; 27 hours laboratory
Basic drafting techniques for interior design and theatre arts majors. Not recommended for drafting or engineering majors.

98  Work Experience  (1-4)

Prerequisite:  Design Technology 51 and department interview
Students will be provided with practical and developmental experiences while receiving on-the-job training. These experiences will be determined on an individual basis according to the employer's need and the student's capability.
Early Childhood Education

Degree: A.A. - Early Childhood Education
Certificates: Associate Teacher*
Family Child Care*
Family Service*
Infant Specialist
Management Specialist*
Master Teacher
Site Supervisor
Teacher
School Age Specialist

Early Childhood Education is a field that addresses the needs of children from birth through eight years of age, with some services provided in after-school programs for children up through 14 years of age. Early childhood programs provide simultaneously for the education and care of young children. In so doing, they focus on all aspects of development—a child’s mind, body, emotional security, and social competence. Early childhood educators work closely with the families of children served in their programs, supporting not only the education of the children, but also the well-being of the children’s families. Such programs cover a diverse range of services and have various names—preschool education, child care and development centers, school-age child care, family child care, infant care, foster care, family service, instructional assistance in kindergarten and primary classrooms, children’s advocacy, and child care resource and referral.

Career Opportunities

National interest in the education and care of children has made Early Childhood Education a rapidly growing field. The California Commission on Teacher Credentialing grants permits to those preparing to teach children younger than five or older children in after-school child care programs. These permits, known as Child Development Permits, authorize service in publicly-funded child care and development programs. The American River College Early Childhood Education program is a partner with the Commission on Teacher Credentialing in a special project designed to help students prepare for and receive Child Development Permits. Through this partnership, ARC students who complete one of a select group of American River College Early Childhood Education certificates and verify required experience are recommended by the ECE faculty for issuance of a Child Development Permit from the Commission on Teacher Credentialing.

The Early Childhood Education certificates and degree prepare students to work at various levels of the early childhood teaching profession—teacher assistant, teacher, supervisor, and director of child care and development centers; instructional assistant in kindergarten and primary grade classrooms in public schools; and teacher or teacher assistant in private school. The course work also prepares those who wish to be foster parents and family service workers. For students who have an interest in teaching in public elementary schools and plan to complete a four-year degree in child development, the AA degree provides a strong foundation.

The ARC Program

The course work in the ARC Early Childhood Education department is approved by the California Commission on Teacher Credentialing as meeting the requirements for the California Child Development Permits. Students who complete selected certificates in the ECE program are recommended by the American River College faculty to the Commission on Teacher Credentialing for direct issuance of Child Development Permits.

Upon completion of the AA degree, a student will possess the course work required to work as a teacher in both private and public preschool and child care and development programs.

The ARC program offers a sequence of certificates, which guide students in working their way up the career ladder in the field of early childhood education.

1) Students who complete the Associate Teacher Certificate, which leads to the Associate Teacher Permit issued by the state of California, are prepared to work as teacher assistants in publicly-funded early childhood education programs and as teachers in many privately-funded early childhood education programs.
2) Students who complete the Teacher Certificate, which leads to the Teacher Permit, are prepared to work as teachers in both publicly and privately funded early childhood education programs.
3) Those who complete the Master Teacher Certificate, leading to the Master Teacher Permit, are prepared to work as supervising teachers in early childhood classrooms.
4) Students who complete two additional courses in administration may apply for the Site Supervisor Certificate, leading to the Site Supervisor Permit, required of those supervising an early childhood education site.

The Early Childhood Education Department is also authorized to recommend students for the entry level permit known as the Assistant Teacher Permit (a 6-unit permit) and for the permit known as the Program Director Permit (requiring a BA degree). This permit is required for those supervising multiple publicly-funded early childhood education sites.

For those students who seek courses which will prepare them to work with a specific age group or program type, the Early Childhood Education program offers five certificates which do not lead to Child Development Permits. These certificates focus on 1) infant care; 2) school-age care; 3) family child care; 4) management; and 5) family service.

### Requirements for Degree Major:

| Early Childhood Education 1 | 5 |
| Early Childhood Education 3 | 4 |
| Early Childhood Education 4 | 4 |
| Early Childhood Education 5 or 47 | 2-5 |
| Early Childhood Education 7B | 3 |
| Early Childhood Education 13 | 1 |
| Early Childhood Education 34/Psychology 34 | 3 |
| Early Childhood Education 35/Family and Consumer Science | 3 |
| Early Childhood Education 36 | 3 |

*and two of the following:*

- Art 26A: Early Childhood Education 7A, 9, 11, 37, 14/Nutrition and Foods 14;
- English 39; MUSM 9; Recreation 47 or Theatre Arts 24

### Recommended Electives:

- Biology 10; Early Childhood Education 5, 15, 47, 48; English 10; Family and Consumer Science 3; Health Education 10, 15; MUPV 30A/B, 42AB; MUFH 9;
- Nutrition & Foods 10, 12 and 16/Hospitality Management 16; Sign Language Studies 1, 2; Spanish 11A, 11B, 12B

### General Education Graduation Requirements:

Students must also complete the general education graduation requirements for an A.A. degree. See Graduation requirements.

### Certificates Leading to Child Development Permits

Students who complete the following requirements will, upon verification of required experience, be recommended to the Commission on Teacher Credentialing for issuance of Child Development Permits.

### Associate Teacher Certificate

**Requirements for Certificate:** 13 units

**Courses Required:**

- Early Childhood Education 1, 3, 34, 35

Upon completion of this certificate, and with appropriate documented experience, the student meets the minimum requirements for employment as a teacher in privately funded child care programs. This certificate also provides the student with coursework required for the Associate Teacher Permit issued by the Commission on Teacher Credentialing. It is recommended that applicants for this certificate complete ECE 13 and certification in pediatric CPR and pediatric first aid in order to meet state requirements.

### Teacher Certificate

**Requirements for Certificate:** 24 units

**Courses Required:**

- Early Childhood Education 1
- Early Childhood Education 3
- Early Childhood Education 4
- Early Childhood Education 7 or 9 or 11
- Early Childhood Education 13
- Early Childhood Education 34
- Early Childhood Education 35
- Early Childhood Education 36

Plus 16 units, including one course from each of the following four categories of courses listed under the ARC Graduation Requirements.

1. Math/Science: Any course from area 3A or Area 4C1.
2. English: Any course from Area 3D1.
3. Humanities: Any Area 3B course
4. Social Sciences: Any Area 3C course

### Master Teacher Certificate

**Requirements for Certificate:** 32 units

**Courses Required:**

- Early Childhood Education 1
- Early Childhood Education 3
- Early Childhood Education 4
- Early Childhood Education 7B or 9 or 11
- Early Childhood Education 13
- Early Childhood Education 34/Psychology 34
- Early Childhood Education 35/Family & Consumer Science 35
- Early Childhood Education 36
- Early Childhood Education 47
- Early Childhood Education Specialization Options

Plus 16 units, including one course from each of the following four categories of courses listed under the ARC Graduation Requirements.

1. Math/Science: Any course from Area 3A or Area 4C1
2. English: Any course from Area 3D1
3. Humanities: Any area 3B course
4. Social Sciences: Any Area 3C course

### Master Teacher Specialization Concentrations

(Courses included in the specialization concentrations may not be used to fulfill requirements for the Teacher Certificate.)

**Infant Care**

| Requirements for Certificate: | 6 units |
| ECE 7A and 7B; or if ECE 7B is used to fulfill other requirements for the Master Teacher Certificate, student may take ECE 7A and 3 unit sfrom the following: ECE 7L and/or 48 with placement in an infant center. |
Special Needs (6 units)
ECE 11 and one of the following:
Physical Education Theory 15; Sign Language Studies 1, 5, 6, ECE 48, with placement in a classroom for children with special needs.

School-Age Care (6 units)
ECE 9 and one of the following:
Recreation 47 or ECE 48 with placement in a school-age child care program.

Art with Children (6 units)
Art 26A and one of the following:
Art 10, 14, 26B

Music with Children (6 units)
MUSM 9 and 3 units from one of the following:
MUFL H, MUI VI 30A, MUI VI 30B, MUI VI 42A, MUI VI 42B

Drama with Children (6 units)
Theatre Arts 24, Theatre Arts 25, or Theatre Arts 26

Children's Literature (6 units)
English 39, 39B, 39C, 39D

Children's Health, Safety and Nutrition (6 units)
ECE 14 and Nutrition and Foods 10.

Culture and Diversity (6 units)
ECE 37 and any 3 units from area 3F of the ARC graduation requirements, with the exception of ECE 36

Site Supervisor Certificate

Requirements for Certificate: 38 units

Courses Required
Early Childhood Education 1 3
Early Childhood Education 3 4
Early Childhood Education 4 4
Early Childhood Education 5 3
Early Childhood Education 6 3
Early Childhood Education 13 1
Early Childhood Education 15 3
Early Childhood Education/Psychology 34 3
Early Childhood Education/Family & Consumer Science 35 3
Early Childhood Education 36 3
Early Childhood Education 38 2

General Education to complete the A.A. degree

The Early Childhood Education Department is also authorized to recommend students to the Commission on Teacher Credentialing for the Child Development Assistant Permit and for the Program Director Permit. Students who wish to be recommended for the Child Development Assistant Permit must have completed ECE/ PSYCH 34, and ECE 1 for a total of six units. Students who wish to be recommended for the Child Development Program Director Permit must verify completion of a BA degree, possess the Child Development Teacher Certificate, and complete ECE 5, 15 and 47. This permit is required for those supervising multiple publicly-funded early childhood education sites.

Certificates not leading to Child Development Permits

The following certificates are designed for students who seek courses which will prepare them to work with a specific age group or program type. These certificates do not lead directly to a Child Development Permit.

The following certificates meet the minimum requirements for teaching in or administering privately-funded preschool and child care and development programs.

Family Child Care Certificate

Requirements for Certificate: 12 units

Early Childhood Education 13, 19, 34/Psychology 34, 35/Family and Consumer Science 35, Early Childhood Education 48 with placement in family child care homes.

Family Service Certificate

Requirements for Certificate: 15 units

Courses Required
Early Childhood Education 34/Psychology 34; Early Childhood 35/Family and Consumer Science 35; Early Childhood Education 36; Early Childhood Education 38; Human Services 14.

Infant Specialist Certificate

Requirements for Certificate: 21 units

Courses Required
Early Childhood Education 1, 3, 7A, 7B, 7L, 13, 34/Psychology 34, 35/Family and Consumer Science 35

Upon completion of this certificate, and with appropriate documented experience, the student meets the minimum requirements for employment as a teacher in privately funded infant care programs. These minimum requirements are outlined in Title 22 (Department of Social Service) regulations for child care licensing.

Management Specialist Certificate

Requirements for Certificate: 23-26 units

Courses Required
Early Childhood Education 1, 3, 5, 13 15, 47; Early Childhood 34/Psychology 34; Early Childhood Education 35/Family and Consumer Science 35; Early Childhood Education 48 (with placement in a management position in a licensed child care facility).

Upon completion of this Certificate and with appropriate, documented experience, the student meets the minimum requirements for employment as a director/manager of a privately funded child care program. These minimum requirements are outlined in Title 22 (Department of Social Service) regulations for child care licensing.

School Age Specialist Certificate

Requirements for Certificate: 18-21 units

Courses Required
Early Childhood Education 1 3
Early Childhood Education 5 4
Early Childhood Education 4 or 48 1-4
(With placement in a school age child care Program) or Recreation 47
Early Childhood Education 9
Early Childhood Education 13
Early Childhood Education 34/
Psychology 34
Early Childhood Education 35/
Family and Consumer Science 35

Upon completion of this certificate, and with appropriate documented experience, the student meets the minimum requirements for employment as a teacher in privately funded before and after school child care programs. These requirements are outlined in Title 22 (Department of Social Service) regulations for child care licensing.

1 Introduction to Early Childhood Education

Prerequisite: None
Transfer Credit: Accepted for credit: CSU

This course is an introduction to early childhood education, including an overview of the history of the field, current curriculum approaches, and programs serving children from infancy through the school-age years. It reviews the current status of education for young children, with a focus on integrated education. Techniques for observing, documenting, and interpreting the behavior of young children and opportunities to observe in a variety of early childhood education settings will be included.

3 Principles and Practices in Early Childhood Education

Prerequisite: Early Childhood Education 1; Early Childhood Education 34/
Psychology 34; and current tuberculosis clearance
Transfer Credit: Accepted for credit: CSU

This laboratory class provides experience working with children in an early childhood setting under the supervision of a mentor teacher. Lectures cover principles of curriculum development, classroom design, and child guidance. Laboratory provides opportunities for applying these key teaching principles in practical situations.

4 Advanced Principles and Practices in Early Childhood Education

Prerequisite: Early Childhood Education 3, and current Tuberculosis clearance
Transfer Credit: Accepted for credit: CSU

This advanced laboratory class provides experiences in applying principles of overall early childhood curriculum design and effective classroom management. Lecture and laboratory components build on introductory experiences offered in Early Childhood Education 3 and provide opportunities to plan, provision, and supervise the overall learning setting. Course work is aimed at mastering classroom leadership in the areas of child observation, documentation of children's work, child assessment, guidance of behavior, group management, collaborative teaching, and effective oversight of long-term study projects.

5 Administration of Child Development Centers

Prerequisite: None
Transfer Credit: Accepted for credit: CSU

This is an introductory course in the elements of program planning, budgeting, supervision and personnel administration for schools and private child care and development centers serving children and families.

7 Infant Development and Care

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture

This course covers current research in infant development, with emphasis on principles for caring for infants from birth through three years of age. The course includes discussion of practices which provide for the emergence of infants' full competencies in the emotional, social, cognitive, and physical aspects of development.

7A Infant Development

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture

This course is an examination of the developmental needs of infants, from conception to three years of age, preparing both parents and health, education, and social service professionals with strategies for care that are based on research in infant development. ARC E2

7B Education and Care of Infants in Group Settings

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture

This course applies current research in infant development to the teaching and care of infants in group settings. Emphasis is on early childhood education principles and practices when applied to the care and education of infants from birth to three years of age. It includes strategies for designing, implementing, and evaluating group care programs for infants.

7L Laboratory with Infants and Toddlers

Prerequisite: Current tuberculosis clearance
Corequisite: Early Childhood Education 7 or 7A or 7B
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours laboratory

This course offers experience working with infants and toddlers in a group care program. It is designed as a laboratory for those who have completed or are enrolled in Early Childhood Education 7 or 7A or 7B. The course requires participation for a designated three hours per week with infants and/or toddlers under the supervision of experienced teachers in a supervised infant - toddler care setting. This course may be taken twice for credit.

9 Programs for the School-Age Child

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture

This course covers the fundamentals of planning, implementing and evaluating programs for before and after school care of school-age children (K-6). Emphasis on developmental levels, age-appropriate activities and day-to-day program operations.

10A Introduction to Elementary Teaching with Field Experience

Prerequisite: None
Advisory: ECE 34/Psych 34 with a grade of “C” or better
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory
This course is a career exploration course with an early field experience for K-8 teaching. It includes a supervised field placement of four hours weekly in a local elementary school in addition to weekly class meetings on campus. It will fulfill one of the early field experiences for the CSUS blended liberal studies major. Course content includes the profession and culture of teaching, observation skills, communication skills, diversity, and social issues. Field experience will integrate and apply the course content. Not open to students who have completed English 10A. ARC E2

11 Children with Special Needs

Prerequisite: Early Childhood Education 34/Psychology 34
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture
This course is designed to provide a broad overview of the characteristics, assessment techniques, methods of intervention, community and family resources, and current issues of young children (from birth to age eight) with special needs. The focus is to increase the awareness and understanding of children's individual needs in an early childhood setting and to provide practical information to those currently involved with children with special needs. Observations in public or private children's centers, schools, and agencies are required.

13 Health and Safety in Child Care Settings

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture
This course covers health and safety issues in child care centers and Family Day Care Homes. It includes preventative health practices such as control of infectious diseases, injury prevention, nutrition, sanitation, emergency preparedness and evacuation. Meets partial requirements of Assembly Bill 962 for child care providers for the preventative health portion of the bill.

14 Children's Health, Safety and Nutrition
(Same as Nutrition and Foods 14)

Prerequisite: None
Advisory: English 58 or 60, and 78; or ESL 2R and 2W; or placement through assessment process
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture
This course is designed to look at basic nutrition, health, and safety needs of children from the prenatal period through school age. Topics include identification of the nutrients in foods as they affect a child's physical and mental development. Course emphasis is placed on maintaining the optimal health, safety, and nutritional status of children at home and in group care. (Not open to students who have completed Nutrition and Foods 14.)

15 Advanced Coordination and Supervision of Child Development Programs

Prerequisite: Early Childhood Education 3 or 5 or ECE 34/Psychology 34
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture
This is an advanced course in administration and coordination of multi-faceted Child Development Programs. The emphasis of the course is on publicly funded programs and personnel management. This course meets the requirements of the Education Code under Title 5 and the Commission for Teacher Credentialing.

19 Introduction to Family Child Care

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture
This course is an orientation to Family Child Care. It includes state and local regulations, issues of health and safety, curriculum, behavior guidance, and business management of child care programs operating in the provider's home.

34 Child Development
(Same as Psychology 34)

Prerequisite: None
Advisory: English 58 or 60, and 78; or ESL 2R and 2W; or placement through assessment process
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This course is a study of the growth and development of children from the prenatal stage through adolescence. For each stage of development, students learn about the physical, cognitive, linguistic, social-moral, and emotional aspects of development, with attention to both typical as well as atypical development in each area. Included are the influences of culture, family and the environment. This material is designed as a foundation for careers in child care, teaching and nursing as well as parenting and preparing general students interested in child development. Not open to students who have completed Psychology 34. (CAN H EC 14) AA/AS area C2; CSU area D3; IGETC area 4

35 The Child in the Family and Community
(Same as Family and Consumer Science 35)

Prerequisite: None
Advisory: English 58 or 60, and 78; or ESL 2R and 2W; or placement through assessment process
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This course will cover the child within the family and within the community. The focus will be on the impact of parenting style, marriage and transitions within the family, culture, school, and media on the child's development. Students will have an opportunity to research and review the diverse community resources available to support the child and the family. Not open to students who have completed Family and Consumer Science 35. AA/AS area 3C2; CSU area D3

36 Culture and Diversity in Early Childhood Education

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture
This course covers culturally responsive care and education in early childhood settings. It includes the study of child rearing and communication styles as they vary across the diverse cultures represented in the classroom and as they impact a child's development. Included are strategies for helping children negotiate and resolve conflicts caused by cultural differences. AA/AS area 3F

37 Leadership in Diversity

Prerequisite: Early Childhood Education 36
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture
This course expands upon ideas developed in Early Childhood Education 36. Specific cultural differences are researched and similarities and differences are addressed. The class critically discusses the role of individual perspective and offers suggestions of ways to implement an anti-biased curriculum that allows for diverse viewpoints of all families and staff of children's programs.

38  Introduction to Family Support Services in Early Childhood Education

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture
This course will cover topics that provide support services to families as they identify and meet their own goals, nurture the development of their children in the context of their family and culture, and advocate for communities that are supportive to children and families of all cultures. This will include building family relationships, accessing community services and enhancing problem solving skills.

46  Teacher Aide

Prerequisite: None
Transfer Credit: Accepted for credit: CSU (6 units minimum)
Hours: 9-36 hours lecture; 27-108 hours laboratory
This course provides students with an in-depth understanding and greater knowledge of issues strategies, and skills in regards to specific facets of early childhood education. This course may be taken twice for credit. May be taken up to a maximum of six units.

47  Adult Supervision: Mentoring in a Collaborative Learning Setting

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture
This course covers principles and strategies for teachers who supervise the work of other teachers in early childhood education. Emphasis is on the role of mentor teacher, one who works collaboratively to guide a teaching team within a classroom setting. This course satisfies the adult supervision requirement for the Master Teacher Permit issued by the California Commission on teacher Credentialing.

48  Work Experience in ECE

Prerequisite: Current tuberculosis clearance
Corequisite: Student must be enrolled in a minimum of 7 units, including this course
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture; 60-300 hours laboratory
This course provides work experience in early childhood settings - primarily child care and development centers - with opportunities to work with children from infancy through the school-age years. By combining volunteer or paid work experience with college training, jobs are used as learning settings and together with the employer and the college instructor establish learning objectives for the semester. Enrollment is dependent on employment or on availability of voluntary work placement. Instructor may assist in locating voluntary work placement. Course may be taken four times for a maximum of eight units.
Economics

Degree: A.A. Social Science

Area: Behavioral & Social Sciences
Dean: Whitney Yamamura
Phone: (916) 484-8283
Counseling: (916) 484-8572

Economics is the study of how people and societies produce various commodities and how they distribute them for consumption, now and in the future. ARC’s economics offerings include the study of the American economic system, using techniques for the analysis of contemporary economic problems, allowing students to make informed personal economic decisions.

Social Science

Requirements for Degree Major

18 units of transfer-level work in addition to other graduation requirements.

Courses taken must be in at least four of the following areas: Anthropology, Economics, Geography, History, Philosophy, Political Science, Psychology (except Psychology 4), and Sociology.

1A Principles of Economics (3)

Prerequisite: None
Advisory: English 58 or 60, 78 or ESL 2R, 2W; Mathematics 51; or placement through assessment process
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture

This course, an introduction to macroeconomics, is concerned with the economic well-being of the national economy. Topics covered include: supply, demand, aggregate supply, aggregate demand, equilibrium, money, banking, taxation, inflation, employment, and economic growth. (CAN ECON 2) AA/AS area C2; CSU area D3; IGETC area 4

1B Principles of Economics (3)

Prerequisite: None
Advisory: English 58 or 60, 78 or ESL 2R, 2W; Mathematics 53; or placement through assessment process
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture

This course, an introduction to microeconomics, is concerned with individuals and business firms and how they interact in the marketplace to determine price, output, employment and efficient utilization of economic resources. International economic principals will also be discussed. Topics covered include: marginal utility, production and resource allocation under conditions of competition, monopoly and oligopoly; monopolistic competition; antitrust and labor economics; and international trade and finance. (CAN ECON 4) AA/AS area C2; CSU area D3; IGETC area 4

14 Concepts in Personal Finance (Same as Business 14) (3)

Prerequisite: None
Advisory: English 58 or 60, 78 or ESL 2R, 2W; Business 60; or placement through assessment process
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture

This course is designed to assist individuals to analyze their financial affairs. Elements and conceptual basis of financial planning, analysis and decision making in areas of budgeting, taxes, borrowing, money management, insurance, investments, and retirement will be examined with an emphasis on principles to develop students’ economic decision making. Not open to student who have completed Business 14: AA/AS area C2 or E2; CSU area D3
Electronic Technology

The Electronic Technician puts engineering, science and theory to work in the design, development, construction and manufacture of electronic devices. Technicians also have the opportunity to work on many different types of equipment from cellular telephones and advanced satellite communication systems to personal computers and the Internet.

The ARC Program

The ARC Electronic Technology program includes CMOS Mask Design, Electronic Communication Technology, Digital Systems Technology and Telecommunications Management. The first two semesters of the program consist of the fundamentals of electrical circuit theory. These fundamental classes are the same for each of the options except Telecommunications Management. During the third and fourth semesters students specialize in the option of their choice. The Electronics Department works closely with local industry to insure the education the students received is relevant, up-to-date and satisfies the requirements of industry.

The CMOS Mask Design Program focuses on the design and manufacture of IC’s (Integrated Circuits). Students gain experience in component layout using advanced computer software that is currently being used by major Integrated Circuit manufacturers.

The Communications option focuses on transmitting and receiving devices and associated products. To keep up with industry needs, classes in Fiber Optics, one of the newest communication mediums has been added.

The Digital Systems option focuses on digital and analog Integrated Circuits, microprocessors, and computer software integration and development. PLC (Programmable Logic Controller) classes have recently been added to keep pace with advances in industry.

Career Opportunities

With the influx of high technology industries into Sacramento and the surrounding areas, the need for skilled Electronic technicians has been increasing and according to economic predictions will continue to increase.

Digital Systems Technology

Preparation for technician entry level positions in electronic computer technology. A grade of “C” or better is necessary in each of the required Electronic Technology courses for progression in the program and for an associate degree or certificate.

Requirements for degree major: 42.5 units

Courses Required:

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Recommended Electives

Electronic Technology 83, 86, 87; Computer Information Science 14A (UNIX)

Requirements for certificate: 42.5 units

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Electronic Technology

Electronic Technology 89 3.0
Electronic Technology 90 2.0

**Recommended Electives**

Electronic Technology 83, 86, 87; Computer Information Science 14A (UNIX)

**General Education Graduation Requirements:**

Students must also complete the general education graduation requirements for an A.S. degree. See graduation requirements.

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**Electronic Communication Technology**

Preparation for technician entry level positions in electronic communication technology. A grade of “C” or better is necessary in each of the required Electronic Technology courses for progression in the program and for an associate degree or certificate.

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</tr>
<tr>
<td>Electronic Technology 76</td>
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</tr>
<tr>
<td>Electronic Technology 78</td>
<td>4.0</td>
</tr>
<tr>
<td>Electronic Technology 81</td>
<td>5.0</td>
</tr>
<tr>
<td>Electronic Technology 86</td>
<td>2.0</td>
</tr>
<tr>
<td>Electronic Technology 89</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Recommended Electives**

Electronic Technology 67, 83, 87, 88

**General Education Graduation Requirements:**

Students must also complete the general education graduation requirements for an A.S. degree. See graduation requirements.

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**Fiber Optics Certificate**

By earning a Fiber Optics certificate students are qualified for employment in the telecommunication industry as entry level Fiber Optics technicians. A grade of “C” or better is required for progression in the program and for the certificate.

<table>
<thead>
<tr>
<th>Requirements for Certificate:</th>
<th>11 units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Courses Required</strong></td>
<td><strong>Units</strong></td>
</tr>
<tr>
<td>Electronic Technology 53</td>
<td>3</td>
</tr>
<tr>
<td>Electronic Technology 78</td>
<td>4</td>
</tr>
<tr>
<td>Electronic Technology 86</td>
<td>2</td>
</tr>
<tr>
<td>Electronic Technology 87</td>
<td>2</td>
</tr>
</tbody>
</table>

**CMOS Mask Design Certificate**

By earning a CMOS mask design certificate students are qualified for employment at an entry level position at one of the numerous semiconductor design facilities. A grade of “C” or better is required for progression in the program and for the certificate.

<table>
<thead>
<tr>
<th>Requirements for Certificate:</th>
<th>13 units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Courses Required</strong></td>
<td><strong>Units</strong></td>
</tr>
<tr>
<td>Electronic Technology 71</td>
<td>5</td>
</tr>
<tr>
<td>Electronic Technology 96A</td>
<td>3</td>
</tr>
<tr>
<td>Electronic Technology 96B</td>
<td>3</td>
</tr>
<tr>
<td>Computer Information Science 14A (UNIX)</td>
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<tr>
<td>Computer Information Science 14B (UNIX)</td>
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</table>

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**Telecommunications Management Certificate**

<table>
<thead>
<tr>
<th>Requirements for Certificate:</th>
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</thead>
<tbody>
<tr>
<td><strong>Courses Required</strong></td>
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</tr>
<tr>
<td>Electronic Technology 52</td>
<td>2</td>
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<td>Electronic Technology 53</td>
<td>3</td>
</tr>
<tr>
<td>Electronic Technology 62</td>
<td>2</td>
</tr>
<tr>
<td>Electronic Technology 63</td>
<td>3</td>
</tr>
<tr>
<td>Electronic Technology 70</td>
<td>3</td>
</tr>
<tr>
<td>Electronic Technology 75</td>
<td>3</td>
</tr>
<tr>
<td>Electronic Technology 79</td>
<td>2</td>
</tr>
</tbody>
</table>

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**30A DC Theory and Circuit Fundamentals** **(2.5)**

Prerequisite: None
Corequisite: ET 51A
Transfer Credit: Accepted for credit: CSU
Hours: 27 hours lecture; 54 hours laboratory

This course is an introduction to the concepts of Direct Current Theory including a detailed study of the components of Direct Current circuits, energy sources, circuit fundamentals, the relationship of current and resistance in series, parallel and combination DC circuit configurations and the principles of magnetism and electromagnetism. Emphasis is on learning and applying electronic concepts to practical situations through critical thinking. Laboratory activities provide hands-on experience in the operation and use of analog and digital test equipment in analyzing and testing of Direct Current circuits.

**30B AC Theory and Circuit Fundamentals** **(2.5)**

Prerequisite: ET 30A with a grade of “C” or better
Corequisite: ET 51B
Transfer Credit: Accepted for credit: CSU
Hours: 27 hours lecture; 54 hours laboratory

This course is an introduction to the concepts of Alternating Current Theory including a detailed study of alternating current and voltage, transformers, inductors and capacitors. An in-depth study of resistance, impedance, capacitive and inductive reactance and the effect frequency has on each of these components when used in series and parallel circuit configurations. This course
also includes the study of RC, RL, time constants and RLC resonant circuits. Emphasis is on learning and applying alternation current concepts to practical situations through critical thinking. Laboratory activities provide hands-on experience in AC circuit analysis that teach and stress the use of signal generators, frequency counters, analog and digital multi-meters, oscilloscopes and a variety of specialized electronic equipment in analyzing and testing of alternating current circuits.

50   Electronics Fabrication and Soldering Techniques
Prerequisite: None
Advisory: Electronic Technology 30A
Corequisite: Electronic Technology 200, 51A
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture; 54 hours laboratory
This course covers the skills needed for identification and the safe and efficient use of hand tools and soldering equipment used in basic electronics repair. Familiarization with fabrication, soldering/de-soldering techniques, electro-static discharge (ESD), assembly, and safety practices are covered.

51A Mathematics for DC Circuit Fundamentals
Prerequisite: None
Advisory: Concurrent enrollment in Electronic Technology 30A; Electronic Technology 200, English 58 or 60 and 78, or ESL 2R and 2W or placement through assessment
Transfer Credit: Accepted for credit: CSU
Hours: 27 hours lecture
This course covers mathematics for DC circuit fundamentals. Uses of powers of ten, algebra and other mathematical concepts necessary for calculation of resistance, DC voltage and current distribution in series, parallel, and combination circuits are covered. Computer-aided learning software including MultiSim 2001 (Electronic Workbench) will be used to assist in understanding how mathematical equations relate to electronic circuitry. AA/AS area D2

51B Mathematics for AC Circuit Fundamentals
Prerequisite: Electronic Technology 51A with a grade of “C” or better
Advisory: Electronic Technology 30B
Transfer Credit: Accepted for credit: CSU
Hours: 27 hours lecture
This course covers the application of algebra and trigonometry for the mathematical analysis of AC concepts involving resistances and/or reactances in series, parallel and combination circuits. Computer aided learning software including MultiSim 2001 (Electronic WorkBench) will be used to assist in applying mathematical equations to electronic circuitry. AA/AS area D2

52 Introduction to Telecommunications Systems
Prerequisite: Electronic Technology 200 or placement through assessment process
Hours: 36 hours lecture
Significant historic, current and future development in telecommunications. Emphasis on the relationships of voice, data and facsimile as means to transfer information. Specific topics include analog communications, microwave transmission codes and media, digital terminals, circuit and message switching, networks, and both analog and digital facsimile.

53 Telecommunications Technology
Prerequisite: None
Hours: 54 hours lecture
Introduction to all aspects of information transmission techniques. Fundamental concepts of network design, analog and digital coding techniques, signaling, wire, radio, and light guide transmission engineering are presented. Overview of United States toll voice and data switching plan with techniques of quality control transmission management. Local plant and subscriber premises are considered.

54 Mathematics for Semiconductor Theory
Prerequisite: Electronic Technology 30B and 51B with a grade of “C” or better
Advisory: Electronic Technology 61
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture
This course is a detailed study of the mathematics required for problem solving in semiconductor circuits. Concepts include algebra, vector algebra, load line and graph plotting, logarithms and decibels and their application to power supplies and discrete bipolar and field effect transistor and integrated amplifier circuits.

55 Semiconductor Theory
Prerequisite: Electronic Technology 30B and 51B
Corequisite: Electronic Technology 60,
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture; 108 hours laboratory
This course is a detailed study of semiconductor devices such as junction diodes, bipolar and field effect transistors, op-amps and their use in power supplies and amplifiers. Laboratory assignments reinforce lecture theory and provide experience in assembling circuits from schematics, trouble shooting and the use of test and measurement equipment.

56 Telecommunications Regulatory Policy
Prerequisite: Electronic Technology 53
Hours: 36 hours lecture
Overall regulatory policy affecting telecommunications within the United States. Covers FCC policy evaluation, major FCC decisions, FCC policy impact, proposed legislation, AT&T divestiture and common carrier services.

57 Voice Networks
Prerequisite: Electronic Technology 53
Hours: 54 hours lecture
Fundamentals of telecommunications technology with emphasis on the emerging stored program controlled digital network. Covers the integrated telecommunications network and the critical balance between service and cost. Examines present and developing telecommunications technologies. Students participate in a group case problem which stresses the integrated relationship among network components.

58 Semiconductor Devices with Computer Analysis and Lab
Prerequisite: Electronic Technology 30B and 51B with a grade of “C” or better
Transfer Credit: Accepted for credit: CSU
Hours: 72 hours lecture; 108 hours laboratory
This course is a detailed study of semiconductor devices such as junction diodes, bipolar and field effect transistors and op-amps, and their use in
power supplies and amplifiers, as well as the comprehensive mathematics required for problem solving. Hands-on laboratory assignments reinforce lecture theory and provide experience in assembling circuits from schematics, troubleshooting, and using test and measurement equipment. Computer laboratory assignments utilizing MultiSim (Electronic WorkBench) will be used to assist in understanding how mathematical equations relate to electronic circuitry.

65 Technical Data Acquisition for the Electronics Technician
Pre requisite: None
Hours: 18 hours lecture; 27 hours laboratory
This course introduces the electronics technician to the multi-media sources that are needed to access technical data. It will include retrieving technical data contained on CD ROM and world wide data banks in addition to downloading product updates and software drivers. Includes methods of obtaining new product information prior to formal release. Electronics resumes submission is discussed as well as information retrieval from world wide job boards. May be taken four times for credit.

67 Principles of Television
Pre requisite: Electronic Technology 60 and 61 with a grade of “C” or better
Advisory: Electronic Technology 78
Hours: 36 hours lecture
This course is a comprehensive theoretical treatment of video signal acquisition and monochrome television display. The scope of coverage includes basic optics, photo-electricity, video amplification, receiver sections and synchronization.

68 Introduction to Personal Computers for Electronics Technicians
Pre requisite: None
Advisory: English 58 or 60 and 78 or ESL 2R, 2W; Business 1
Hours: 36 hours lecture; 54 hours laboratory
This course covers the technical use of the personal computer for the electronics technician. It includes the use of floppy disk drives, hard disk drive, mouse and laser printer. Emphasis is on learning and applying computer use to electronics industry concepts through critical thinking and problem solving unique to the electronics technician.

70 Data Network
Pre requisite: Electronic Technology 53
Hours: 54 hours lecture
Techniques and application in the Data Processing/Data Communications (DP/DC). Develops an understanding of the DP/DC environment from basic to intermediate levels. Provides terminology and concepts necessary to function effectively in the DP/DC environment.

71 Analog and Digital Integrated Circuit Applications
Pre requisite: Electronic Technology 64 or 60 and 61 with a grade of “C” or better
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture; 108 hours laboratory
This is an analog and digital application course that includes a complete overview of integrated circuits used in various industrial and consumer applications. Digital topics include digital logic gates, truth tables, counters, and decoder design and operation. The analog portion covers circuits utilizing operational amplifiers, comparators, timers, and phase lock loops.

75 Office Automation
Pre requisite: Electronic Technology 53
Hours: 54 hours lecture

76 Programming for Electronics Technicians Using Visual BASIC
Pre requisite: Electronic Technology 64 (ET 60 and ET 61) and ET 68 with a grade of “C” or better
Hours: 36 hours lecture; 54 hours laboratory
This course is an introduction to programming using the Microsoft Visual Basic programming language. The course involves problem solving unique to the electronics technician, including Ohm’s Law, series and parallel circuits, and transistor amplifier circuits.

77 Microprocessor Machine Language Programming
Pre requisite: Electronic Technology 60 and 61 with a grade of “C” or better
Corequisite: Electronic Technology 71
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture; 54 hours laboratory
This course provides an introduction to machine language software development. A custom designed 8 bit microprocessor trainer is used to demonstrate the use of software control of external devices. A custom assembler/emulator is also used for the simulation of I/O interfacing and for observation of internal CPU register operations. Laboratory activities emphasize software applications of I/O interfacing plus control and testing of hardware devices. AA/AS area D2

78 Introduction to Electronic Communications
Pre requisite: Electronic Technology 60 and 61, or 64 or 53 with a grade of “C” or better
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture; 54 hours laboratory
This is an introductory course in electronic communications covering UHF, VHF, microwave, satellite and fiber optic communication systems. The individual system components including AM and FM transmitters, transmission lines, antennas and receivers are analyzed down to component level. Propagation, wave theory, decibels and signal transmission limitations are also covered. Technician safety, along with proper test equipment use is stressed throughout the class.

79 Purchasing Telecommunications Systems
Pre requisite: Electronic Technology 53
Hours: 36 hours lecture
Covers telecommunication marketplace and explores present and future implications for organizational planners and decision-makers. Detailed planning process relative to selecting and implementing the telecommunication system that best meets organizational needs. Students participate in workshop planning exercises.
81 Communications Systems

Prerequisite: Electronic Technology 71, 78 with a grade of “C” or better
Advisory: Electronic Technology 89
Hours: 54 hours lecture; 108 hours laboratory
Comprehensive study of high frequency communication concepts including transmission line theory, signal sources and processing methods. Emphasis given to microwave components, measurement and test equipment and measurement and test procedures. Laboratory assignments reinforce lecture theory and provide experience in microwave measurement techniques utilizing specialized equipment.

83 Advanced Student Projects Laboratory

Prerequisite: Electronic Technology 71 with a grade of “C” or better
Transfer Credit: Accepted for credit: CSU
Hours: 108 hours laboratory
This course provides an opportunity for students to pursue advanced projects which are selected by the electronics department. This course may be taken twice for credit.

85 Digital Electronic Systems

Prerequisite: Electronic Technology 71, 77 with a grade of “C” or better
Advisory: Electronic Technology 89
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture; 108 hours laboratory
This course provides an integrated treatment of both the hardware and software aspects of digital systems. The focus is on the basic concepts underlying a microprocessor device, such as buses, machine cycles, various processes of data flow (parallel, serial, interrupts, and DMA), internal register architecture, programming, interfacing with memory, serial/parallel Input/Output devices, data converters (DAC/ADC), serial/parallel programmable I/O devices and stepper motors. Emphasis is on troubleshooting hardware and software problems, including the use of a logic analyzer for problem solving.

86 Beginning Fiber Optics

Prerequisite: None
Advisory: Electronic Technology 60, 61
Hours: 36 hours lecture
This is an introductory course in fiber optic theory and operation including the complete fiber optic communication system. It also includes terminology and knowledge of the tools and equipment associated with fiber optic installation and maintenance. Testing of the fiber optic systems will be performed using sophisticated equipment such as power meters and optical time domain reflectometers. May be taken twice for credit.

87 Advanced Fiber Optics

Prerequisite: Electronic Technology 86 with a grade of “C” or better
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture
This course covers advanced Fiber Optic theory and operation. Fiber Optic systems are vital communication links that enable high speed transfer of video, telephone, and data to occur. Testing of Fiber Optic systems using sophisticated electro-optical test equipment such as the Optical Time Domain Reflectometer will also be included. This class also introduces the use of computer based software to simplify Fiber Optic system design. May be taken twice for credit.

88 Communications Units

Prerequisite: Electronic Technology 78 with a grade of “C” or better
Hours: 54 hours lecture
This course covers the operation and troubleshooting of HF, VHF, and UHF communication systems. Antennas, transmission lines, receivers, and transmitters utilizing AM, FM and SSB modulation are studied. Emphasis is on analyzing and troubleshooting commercial, aircraft and marine radio communication systems. The course is designed for electronic technology students preparing to take the FCC General Class Radio-Telephone License examination.

89 Circuit Review and Application

Prerequisite: Electronic Technology 71 with a grade of “C” or better
Hours: 54 hours lecture
This course is a thorough review of electronics theory and devices with emphasis on circuit analysis and troubleshooting techniques. Commercial schematics are used in the review of DC/AC fundamentals, digital systems, analog circuits (bipolar and field effect transistors as well as op amps) and non-linear devices such as SCR’s and triacs. This course is helpful in preparing for job interviews and is also a refresher course for technicians currently employed in the field of electronics. This course may be taken twice for credit.

90 Introduction to Programmable Logic Controllers (PLCs)

Prerequisite: None
Corequisite: Electronic Technology 71
Hours: 36 hours lecture
This course is an introduction to the operation and use of the Programmable Logic Controller (PLC), an electronic device that controls machines and processes. The PLC uses a programmable memory to store instructions and executes specific functions that include on/off control, timing, counting, sequencing, arithmetic, and data handling. Ladder logic is used in programming and troubleshooting the PLC. May be taken twice for credit.

92 Computer Aided Drafting for Electronics

Prerequisite: Electronic Technology 61, 68 with grade of “C” or better
Corequisite: Electronic Technology 71
Hours: 54 hours lecture; 54 hours laboratory
This course will cover instruction in drawing electronic schematics and fundamental Printed Circuit Board layout, using IBM compatible computers and AutoCAD software. Intended for electronics students, technicians, and engineers, who have had no previous CAD experience.

93 Topics in Electronics — New and Emerging Occupations

Prerequisite: To be determined for each topic
Hours: 9-90 hours lecture and/or 27-270 hours laboratory
This is an individualized course developed in cooperation with industry to meet specialized training needs. It may be taken four times with no duplication of topics.
94 Personal Computer System Analysis for Electronic Technicians

Prerequisite: Electronic Technology 76B, 85 with a grade of "C" or better
Hours: 54 hours lecture; 54 hours laboratory
This course covers the operation of the personal computer, based on IBM-compatible personal computers. Each sub-section will be studied, with emphasis on how it relates to the complete system. The initial setup and configuration of a computer system will be studied. The personal computer as a controller of peripheral equipment will also be studied in lecture and laboratory assignments.

96A CMOS Mask Design I

Prerequisite: None
Corequisite: Electronic Technology 71
Hours: 54 hours lecture
This course is an entry level integrated circuit (IC) layout and design in CMOS (Complimentary Metal Oxide Silicon) technology. This course provides practical experience in drawing logic diagrams, transistor level schematics, cross sectional views, STIK diagrams, and in converting STIKS to the actual layout of the layers that will be used to manufacture the IC. The course stresses application of design rules, area estimation, and pin and bus placements.

96B CMOS Mask Design II

Prerequisite: Electronic Technology 96A with a grade of "C" or better
Hour: 36 hours lecture; 54 hours laboratory
CMOS Mask Design II is a continuation of CMOS Mask Design I (ET-96A). This course introduces more complex logic and design rules for integrated circuit layout. This course also includes practical experience in the use of a Unix-based integrated circuit design tool, Cadence VLE, from Cadence Design Systems.

98 Work Experience

Prerequisite: None
Corequisite: Maintain a minimum of 7 units
Hours: See Work Experience
This course gives practical experience to students who are training for careers in the electronics industry by providing actual supervised work at various electronics firms within the Sacramento area.

118 Employability Skills for Technical Careers (same as Automotive Technology 118 and Welding 118)

Prerequisite: None
Hours: 36 hours lecture
This course provides the opportunity of exploring technical careers while developing valuable work and life skills. It is an introduction to a variety of technically-related occupations. Emphasis is placed on exploring technical careers in the Sacramento area. Activities are designed to enhance personal development, employability skills, and self esteem through leadership, citizenship, and character development.

200 Elements of D.C. Circuits

Prerequisite: None
Hours: 54 hours lecture
Basic course for those interested in electronics who do not meet the requirements for ET-30A. Includes DC circuit analysis, powers of ten and basic algebra as related to electronics; satisfies the algebra requirement for ET-30A and 51A.

207 Mobile and Cellular Radio Systems

Prerequisite: Electronic Technology 53
Hours: 36 hours lecture
Nature of mobile radio signal and its properties. Statistical communication theory introduced and applied in four areas of mobile communications: propagation, received signal characteristics, functional design and system performance. Historic, legal and regulatory aspects of cellular radio industry. Covers specific services and features of the technology, control architectures and switching systems, and siting and economic considerations.

208 Traffic Engineering for Voice and Data Systems

Prerequisite: Electronic Technology 53
Hours: 54 hours lecture
Course divided into two sections: Voice and Data. Voice: Overview of telecommunications traffic engineering. Basic engineering, formulas derived that permit economic analysis and analysis of trade-offs between grade of service and cost of equipment. Formulas interpreted and applied to typical situations found in the field. Data: Understanding of computer network topologies and access methods. Various transmission mediums are described and compared. Concepts of performance analysis using probability and queuing theory are discussed.
Engineering

Engineering involves the design and solution to technical problems through the application of scientific and mathematical principles. Career opportunities exist in the following field of study: aerospace, agricultural, architectural, biomedical, chemical, civil, computer, electrical, environmental, industrial, materials, mechanical, mining, nuclear, petroleum, and research.

ARC’s program provides the foundation in mathematics, physics, and engineering necessary to transfer to a four-year institution and complete a bachelor’s degree in engineering. Students should consult the institution to which they wish to transfer for the specific lower division requirements.

Most lower division engineering programs require the following ARC courses: Mathematics 9A, 9B, 9C, 9D; Physics 4A, 4B, 4C; Chemistry 1A, and Engineering 17, 35, 36, 45.

This course covers the basic fundamentals of surveying for engineers. Electronic surveying instruments are used in this course to develop the principles of measurement for distance, elevations and angles. Additional topics include discussions on systematic and random errors, line directions, profiles and cross-sections, traverse computations, horizontal and vertical curves, and earthwork quantity calculations. This course is intended for civil engineers, but may also be required for other programs. (CAN ENGR 10)

17 Introduction to Electrical Circuits and Devices (3.5)

Prerequisite: Physics 4B with a grade of “C” or better
Corequisite: Math 9D
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture; 36 hours laboratory

This course covers the basic fundamentals of electrical circuit theory and analysis for engineers. Topics include circuit analysis techniques, sinusoidal analysis, phasors, first- and second-order circuits with natural and step responses, operational amplifiers, and average power. This course is intended to provide a solid foundation for upper division engineering courses. (CAN ENGR 6)

27 Engineering Graphics (3)

Prerequisite: Engineering 51 or Design Technology 51 with a grade of “C” or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 36 hours lecture; 72 hours laboratory

This course applies the graphical tools needed to analyze, interpret and solve engineering problems. The engineering design process is taught using manual and introductory interactive computer-aided design and drafting (CADD) as tools to solve typical three-dimensional engineering problems. Topics include descriptive geometry, vector graphics, orthogonal projection, and primary and secondary auxiliary views. This course is intended for mechanical and civil engineers, but may also be required for other programs.

34 Engineering Mechanics (3)

Prerequisite: Physics 4A with a grade of “C” or better
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture

This course covers the study of bodies in equilibrium with emphasis on structures and friction, including methods to calculate centroids and moments of inertia. It also includes the fundamental principles of kinematics and kinetics, and the study of motion and force analysis of particles and rigid bodies.
35  Statics  (3)

Prerequisite: Physics 4A and Mathematics 9B with a grade of “C” or better
Corequisite: None
Advisory: Engineering 51 or Design Technology 51 and Mathematics 35
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This course covers the study of bodies in equilibrium with emphasis on force systems, structures, distributed loads, friction and virtual work. In this course, analytical rather than graphical methods of problem solving will be emphasized. (CAN ENGR 8)

36  Dynamics  (3)

Prerequisite: Engineering 35 and Mathematics 9C with a grade of “C” or better
Advisory: Mathematics 9D; English 1A or ESL 5
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This course covers the basic fundamentals of dynamics for engineers. Topics include kinematics and kinetics of particles, systems of particles and rigid bodies; systems with fixed and rotating axes; and the equations of motion, energy and momentum.

37  Manufacturing Processes  (3)

Prerequisite: Engineering 27 or Design Technology 53; English 60 or 1A or ESL 5
Transfer Credit: Accepted for credit: UC, CSU
Hours: 36 hours lecture; 54 hours laboratory
Principles of manufacturing processes in the areas of material removal, addition, joining, and change of form or condition. Hands-on experience in welding, machinery operation, (e.g. lathe, milling machine drill press, etc.) and various casting techniques (sand casting, etc).

45  Properties of Materials  (4.5)

Prerequisite: Chemistry 1A with a grade of “C” or better
Corequisite: None
Advisory: Physics 4A, English 1A or ESL 5
Transfer Credit: Accepted for credit: UC, CSU
Hours: 72 hours lecture; 27 hours laboratory
This is an introductory course in properties of materials used in engineering. This course places emphasis upon the theory underlying the behavior of engineering materials. The course includes a laboratory component, in which work will cover the testing of metals, polymers, composites, wood and other materials. (CAN ENGR 4)

51  Basic Technical Drawing  (same as Design Technology 51)  (3)

Prerequisite: None
Advisory: English 58 or 60 and 78 or ESL 2R and 2W
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 72 hours laboratory
This course covers fundamental training in the use of drawing instruments for engineering and architectural design drafting. It includes lettering, geometric construction, sketching, orthographic and isometric projection. It is required of Engineering, Architectural and Design Technology, and Engineering Technology students who have no previous engineering experience. Not open to students who have completed Design Technology 51.

78  Industrial Materials Testing  (3)

Prerequisite: None
Advisory: Mathematics 51 with a grade of “C” or better, Mathematics 53 and English 58 or 60 and 78 or ESL 2R and 2W
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory
This course covers the basic properties of materials used in industry. The course emphasizes the practical use of the materials, but uses sufficient theory to understand these applications well. The course covers metals, concretes, plastics, ceramics, glasses, wood, and other composites. This course is primarily intended for drafting, engineering technicians and other technical students.
The ARC English Department offers broad study of the fields of written and spoken language. This study teaches skills that are universal to every other discipline. In particular, the ability to read effectively and to write expressively will prove invaluable to any student.

Career Opportunities
Technical Communication

Technical Communication is one of the fastest growing professions in the Sacramento region and the country. The Sacramento chapter of the Society for Technical Communication, the professional organization of technical communicators, is also growing rapidly. Although a degree or certificate is not always required for someone entering the profession, having one is an advantage in the competitive job market. The Technical Communication program at American River College is designed for students desiring a two-year degree or certificate, for those who will transfer to earn BA degrees, or for employees who want to upgrade their skills.

Technical communicators work in business, industry, and government as technical writers, Web designers, and multimedia artists. They work on a wide variety of writing projects, including, formal reports, instructions and procedures, grants, feasibility studies, proposals, technical manuals, scientific reports, computer documentation, training manuals, and marketing materials. Online information technology, including Web publishing and digital graphics, is a major trend in the profession. Consequently, Technical Communication program at American River College combines courses from three academic areas: Technical Writing, Computer Information Science, and Art New Media.

What skills do technical communicators need? Technical Communicators must analyze information and communicate it clearly to their readers. They must comprehend complex systems and summarize them simply. Good writing, research, and editing skills are paramount. Technical communicators must be able to think critically and logically, working independently and on teams. They must be comfortable with technology and be proficient with computers. They must be able to manage writing projects and meet deadlines.

Language and Literature Degree

Requirements for Degree Major: 24 units

Core Requirements | Units
--- | ---
English 1A or 1A Honors | 3
English 1B or 1B Honors or Speech 1 | 3
and 18 units of transfer level course work from the following subjects: composition, speech, foreign language, journalism, literature. Up to six units may be in humanities or philosophy.

General Education Graduation Requirement
Students must also complete the general education graduation requirements for an A.A. degree. See general education requirements

Technical Communication

Requirements for Degree Major: 42 units

Core Requirements | Units
--- | ---
Art 14 | 3
Art 15B | 3
Art New Media 15 | 3
Computer Information Science 1 | 1
Computer Information Science 11A* | 1
Computer Information Science 11B* | 1
Computer Information Science 11C | 1
Computer Information Science 14A | 1
Computer Information Science 22 | 3
English 13A | 3

Four Units Selected From:

- English 13D | 1
- English 13E | 1
- English 13F | 1.5
- English 13G | 1.5
- English 13H | 1
- English 13I | 1
- English 13J | 1

*One unit of Business 11 may be substituted for CIS 11A, or two units of Business 11 may be substituted for CIS 11A and 11B.
Concentration Requirements

Twelve units selected from:
- Art New Media 16 or
- Computer Information Science 17A and
- Computer Information Science 17B
- Art New Media 18
- Art New Media 20
- Art New Media 24A
- Art New Media 24B
- Art New Media 32
- Art New Media 40
- Art New Media 42
- Computer Information Science 12A
- Computer Information Science 15A
- Computer Information Science 23

Six units selected from:
- English 14A
- English 14B
- English 17
- English 17A
- Journalism 20A
- Journalism 30
- Art New Media 24B
- Speech 10 or 15

INDIVIDUALIZED ENGLISH
(LANGUAGE AND COMPOSITION)

(3)

Prerequisite: None
Hours: 54 hours lecture

Individualized instruction in English 256, English 58 or English 1A. Students who enroll in the course should either have been assessed or have successfully completed the appropriate prior course. Immediate advancement from one course to the next is allowed upon completion of the prescribed work. Students receive three units of credit when they have completed all of the work for the respective course. English 58 students must take the department proficiency test. Units earned in Language and Composition English 1A will transfer to the UC or CSU systems. Students who, for legitimate cause, do not complete the course work within a semester may be, at the discretion of the instructor, assigned an "In-Progress" grade at the end of the semester but must enroll again the following semester to complete the work.

1A College Composition

(3)

Prerequisite: English 58 with a grade of "C" or better, or placement through assessment process
Advisory: Concurrent enrollment in English 4 or 5
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours lecture

This course emphasizes writing, reading, and critical thinking skills essential for successful completion of a four-year college program. Writing assignments include expository and argumentative papers (6,500 words minimum for course). A research paper written in the MLA format is required. Works read and analyzed will include essays exhibiting a variety of structures and styles. One or more additional hours per week may be required in the Learning Resource Center or the Writing Across the Curriculum or Reading Across the Disciplines programs. (CAN ENGL SEQ A - ENGL 1A; CAN ENGL 2 - ENGL 1A) AA/AS area D1; CSU area A2; IGETC area 1

1A Honors College Composition

(3)

Prerequisite: Placement through assessment process
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours lecture

This honors composition course requires the analysis of professional essays and at least one full-length volume of non-fiction that exhibit complexity in both subject and structure. It emphasizes writing carefully reasoned, stylistically sophisticated essays of varying lengths and in varying rhetorical modes; at least one of those essays requires research and appropriate MLA documentation. Essays written during the term will total at least 6,500 words. One or more additional hours per week in the Learning Resources Center or Writing Across the Curriculum or Reading Across the Disciplines programs may be required. (CAN ENGL 2) AA/AS area D1; CSU area A2; IGETC area 1

1B College Composition & Literature

(3)

Prerequisite: English 1A with a grade of "C" or better
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours lecture

This course offers further study and practice in analytical reading and writing. It covers principles of logic such as reasoning inductively and deductively, recognizing logical fallacies, and suspending judgements. Assigned readings include novels, short stories, poems, plays, biographies, and literary criticism. Essays written for the course (6,500 words minimum) generalize from the texts to present carefully reasoned arguments. At least one essay will include citations from secondary sources, documented according to current MLA format. Attendance at a live theatre production may be required. One or more additional hours per week in the Learning Resource Center or Writing Across the Curriculum or Reading Across the Disciplines programs may be required. (CAN ENGL 4) AA/AS area D2; CSU area A3; IGETC area 1

*One unit of Business 11 may be substituted for CIS 11A, or two units of Business 11 may be substituted for CIS 11A and 11B
1B Honors College Composition & Literature (3)

Prerequisite: Cumulative GPA of 3.0 or higher; English 1A or English 1A Honors with a grade of "C" or better
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours lecture
This is an advanced course in critical reasoning and writing about literature. It examines the four major genres: the novel, the short story, poetry, and drama by authors representing diverse perspectives. It will explore principles of formal and informal logic, characteristics of sophisticated writing, and means of recognizing logical fallacies. Written analyses will total at least 6,500 words and will include material from secondary sources, cited and documented according to MLA format. Attendance at a live theatre production may be required. One or more additional hours per week in the Learning Resource Center or Writing Across the Curriculum or Reading Across the Disciplines programs may be required. (CAN ENGL 4) AA/AS area D2; CSU area A3; IGETC area 1B

1C Advanced Composition and Critical Thinking (3)

Prerequisite: English 1A with a grade of "C" or better
Advisory: English 4
Transfer Credit: Accepted for credit: UC (unit limitation, CSU
Hours: 54 hours lecture
This course further develops analytical skills through writing and discussion. It examines methods by which people are persuaded to think, believe, and/or act. It also includes analyses of arguments or expressions of opinions for their validity and soundness. Finally, it focuses on critically assessing, developing, and effectively expressing opinions on issues, including cultural diversity. It emphasizes thinking clearly and organizing thought carefully by using principles of logic. The course includes writing a minimum of 6,500 words. AA/AS area D2; CSU area A3; IGETC area 1B

1C Honors Advanced Composition and Critical Thinking (3)

Prerequisite: Cumulative GPA of 3.0 or higher; English 1A or English 1A Honors with a grade of "C" or better
Advisory: English 4 or 5
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours lecture
This is a course in critical reasoning, reading, and writing requiring a high level of competence in English composition. Complex texts (essay and book-length works) reflecting a variety of cultural, historical, and philosophical perspectives will be read, discussed, and analyzed. The course includes inductive and deductive reasoning, fallacious reasoning, and use of persuasive language. The minimum word requirement of 6,500 words will be divided among at least four formal essays, ranging from 1,000-3,000 words each, two of which will include primary and secondary research, and MLA format. Several group and individual class presentations will be required. AA/AS area D2; CSU area A3; IGETC area 1B

2 Structure of English (3)

Prerequisite: English 1A with a grade of "C" or better
Advisory: English 1B with a grade of "C" or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This course is a study of the structure of English grammar systems, especially as they relate to writing. It includes the study and practice of traditional and transformational grammar, standard usage, phonology and orthography, with emphasis on the relationship to writing (2000 word writing requirement); it also includes the study of the history of the English language and varied methods of language acquisition among the culturally diverse population in California schools. It is designed for those who plan to teach or who are especially interested in grammar as it relates to writing. It meets CSUS requirement for Liberal Studies major.

4 College Reading - Critical Comprehension and Speed Reading (3)

Prerequisite: English 78 with a grade of "C" or better, or placement through assessment process
Advisory: Concurrent enrollment in English 1A
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture
This overview course covers the theory and practice of critical reading skills and speed needed for successful academic performance with an emphasis on the following: (1) critical and analytical evaluation of college level expository and argumentative essays, (2) development of flexible reading rate and speed, (3) critical analysis and evaluation of research, (4) vocabulary development, and (5) application in multicultural essays, journals, fiction and nonfiction reading. Individual work in the Learning Resource Center, Writing Across the Curriculum or Reading Across the Disciplines programs may be required. May be taken twice for credit. AA/AS area D2 & 4B

5 Academic Textbook Reading (3)

Prerequisite: English 78 with a grade of "C" or better, or placement through assessment process
Advisory: Concurrent enrollment in English 1A
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours laboratory
This course will concentrate on the refinement of the ability to read, understand and respond to college-level textbooks across the curriculum. Emphasis is on critical thinking, graphs, discipline-based vocabulary, and reading rates as they relate to academic success. This course satisfies the Reading Competency requirement for graduation. AA/AS area D2 & 4B

6 Reading Across the Disciplines (RAD) (.5-1)

Prerequisite: None
Corequisite: Enrollment in a transfer level content area course
Transfer Credit: Accepted for credit: CSU
Hours: 27-54 hours laboratory
This course offers individualized instructional modules designed to acquire or improve reading skills in the various content area classes. Course offerings vary, depending upon the needs and abilities of the student. A partial list may include the following: textbook comprehension, principles of learning and retention, notetaking, annotating, discipline-based vocabulary, paraphrasing, reading graphics, test taking, speed reading and research techniques. Credit/No Credit. Registration is open through the twelfth week of the semester. May be taken four times for a maximum of two units.

10 Service Learning: Tutoring Elementary Students in Reading (3)

Prerequisite: English 78 with a grade of "C" or better, or placement through assessment process
Corequisite: TB and fingerprint clearance
Transfer Credit: Accepted for credit: CSU
Hours: 37 hours lecture; 40 hours laboratory
This class offers an opportunity to learn and practice basic methods of tutoring elementary school children to read. The class will meet on campus for the first part of the semester to be trained, and then will be assigned to a nearby elementary school where they will have in-depth practice tutoring elementary children who are reading below grade level. This course is one of the two required field experience courses for the CSUS Blended Teacher Preparation Program. This course may be offered in conjunction with a non-profit organization such as SMART Kids. May be taken twice for credit. AA/AS area 3E2
10A Introduction to Elementary Teaching with Field Experience

Prerequisite: None
Co-requisite: None
Advisory: ECE 34/Psych 34 with a grade of C or better
Transfer Credit: CSU
Hours: 36 hours lecture; 54 hours laboratory
This course is a career exploration course with an early field experience for K-8 teaching. It includes a supervised field placement of four hours weekly in a local elementary school in addition to weekly class meetings on campus. It will fulfill one of the early field experiences for the CSUS blended liberal studies major. Course content includes the profession and culture of teaching, observation skills, communication skills, diversity, and social issues. Field experience will integrate and apply the course content. Not open to students who have completed English 10A. ARC E2

11A Technology in the English Classroom: Presentational Software

Prerequisite: English 1B or 1C
Advisory: Working knowledge of Macintosh or PC.
Transfer Credit: Accepted for credit: CSU
Hours: 6 hours lecture; 9 hours laboratory
The course offers reading and writing instructors the opportunity to experience software, hardware, and Internet tools and to explore the effective integration of these technologies and their related pedagogies into the teaching of English. The course will require specific hands-on activities and development of materials using technologies featured within the course. The course work will integrate such presentational technologies as PowerPoint, and web-based presentational tools. Technologies offered within the class will vary as the field of computers and English evolves. This course may be repeated once with a different software package or version.

11B Technology in the English Classroom: Collaborative Software

Prerequisite: English 1B or 1C
Advisory: Working knowledge of Macintosh or PC.
Transfer Credit: Accepted for credit: CSU
Hours: 6 hours lecture; 9 hours laboratory
The course offers reading and writing instructors the opportunity to experience software, hardware, and Internet tools and to explore the effective integration of these technologies and their related pedagogies into the teaching of English. The course will require specific hands-on activities and development of materials using technologies featured within the course. The course will integrate such presentational technologies as Daedalus, and CommonSpace. Technologies offered within the class will vary as the field of computers and English evolves. This course may be repeated once with a different software package or emphasis.

11C Technology in the English Classroom: Internet Tools

Prerequisite: English 1B or 1C
Advisory: Working knowledge of Macintosh or PC.
Transfer Credit: Accepted for credit: CSU
Hours: 6 hours lecture; 9 hours laboratory
The course offers reading and writing instructors the opportunity to experience software, hardware, and Internet tools and to explore the effective integration of these technologies and their related pedagogies into the teaching of English. The course will require specific hands-on activities and development of materials using technologies featured within the course. The course will integrate such Internet-based technologies as e-mail and web-based instructional tools. Technologies offered within the class will vary as the field of computers and English evolves. This course may be repeated once with a different internet emphasis.

11D Technology in the English Classroom: Creation of Web Documents

Prerequisite: English 1B or 1C
Advisory: Working knowledge of Macintosh or PC.
Transfer Credit: Accepted for credit: CSU
Hours: 6 hours lecture; 9 hours laboratory
The course offers reading and writing instructors the opportunity to experience editing software and technologies and to create their own instructional web documents. The course will explore the effective integration of these technologies and their related pedagogies into the teaching of English. The course will require specific hands-on activities and development of materials using such technologies as Netscape and BBEdit, and other web-based editing tools. Technologies offered within the class will vary as the field of computers and English evolves. This course may be repeated once with a different project emphasis.

13A Introduction to Technical/Professional Communication

Prerequisite: None
Advisory: English 58 or 60 with a grade of "C" or better, or English 1A placement through assessment process
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture
This is a writing class recommended for students whose professions will require writing and for those employed in business, government and industry. It emphasizes principles of reader-centered writing by introducing students to formats encountered in various career fields and academic disciplines. Students develop portfolios, which may include memos, letters, brochures, reports, procedures, proposals, grants, feasibility studies, training materials, instructions, scientific reports, computer documentation, and case studies. The course includes individual and team projects, one of which will be presented orally. Guest speakers introduce students to current practices in the professions. One or more additional hours per week may be required in the Learning Resource Center. AA/AS area D2

13C Technical/Professional Communication: Introduction to Tech./Prof. Writing

Prerequisite: None
Advisory: English 60
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture
This course is an overview to technical/professional writing and provides the foundation for other courses in technical/professional writing. It offers principles of audience analysis, purpose statements, visual logic, and an active, concise writing style. It also introduces common formats encountered in various career fields and academic disciplines. This course is not open to students who are enrolled in or who have completed English 13A.

13D Technical/Professional Communication: Writing Instructions and Procedures

Prerequisite: None
Advisory: English 13A, or 13C, and 60
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture
This course emphasizes the writing of instructions and procedures. Students plan, develop, test, and evaluate instructions and procedures while applying project management techniques. The use of workplace projects is encouraged.
13E Technical/Professional Communication: (1)
Plain English
Prerequisite: None
Advisory: English 60 or equivalent course or experience. English 13A or 13C recommended
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture
This course emphasizes the use of plain English in professional writing. Includes planning, developing, testing, and evaluating documents, using principles of clear writing and plain English to present complex information to a general audience.

13F Technical/Professional Communication: (1.5)
Proposal Writing
Prerequisite: None
Advisory: English 13A, 13C, or 60
Transfer Credit: Accepted for credit: CSU
Hours: 27 hours lecture
This course emphasizes the writing of proposals. It includes planning, writing, and evaluating proposals, both formal and informal, solicited and unsolicited. Special attention is given to requests for proposal (RFPs) and how to respond to them. The use of workplace projects is encouraged. A collaborative project is required.

13G Technical/Professional Communication: (1.5)
Writing Technical Manuals
Prerequisite: None
Advisory: English 13A, 13C, or 60
Transfer Credit: Accepted for credit: CSU
Hours: 27 hours lecture
This course is designed for professionals in design technology, computer science, engineering, and communications. This course explains how to design and write technical manuals for the users, technical support staff, and developers of technical products. The course offers strategies for audience and task analysis, product learning, document design, drafting, and revision. Hands-on learning will solve problems of desktop publishing and result in a portfolio-quality manual.

13H Introduction to Careers in Technical Communication (1)
Prerequisite: None
Advisory: English 58 or English 60
Hours: 18 hours lecture
This course examines trends in the profession of technical writing, including job opportunities, salaries, responsibilities, requirements, and tools. Permanent employment is compared to independent contracting and contracting with agencies. Visiting technical writers describe a day on the job and share tips for getting started. Topics include letters of application, resumes, and portfolios.

13I Writing Formal Reports (1)
Prerequisite: None
Advisory: English 13A or English 13C
Hours: 18 hours lecture
This technical writing course covers all the elements of formal reports, including how to write letters of transmittal, create title pages, automatically generate tables of contents, write executive summaries, format pages, and prepare glossaries and appendices. Style lessons focus on controlling tone, tense, person, and voice.

13J Writing Training Materials (1)
Prerequisite: None
Advisory: English 13A or English 13C
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture
This technical writing course focuses on developing training materials, including student handbooks, instructor guides, and other instructional aids. The course surveys instructional design theory and the impact of technology in the form of CBT (Computer-Based Training) and WBT (Web-Based Training).

14A Writing for Publication (3)
Prerequisite: None
Advisory: English 1A with a grade of “C” or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This is an introductory course on writing nonfiction for publication. Emphasis will be on developing a saleable magazine article; finding ideas and analyzing print and online publications; writing a query letter; researching and interviewing; organizing, writing and illustrating an article. AA/AS area 3D2

14B Writing for Publication (3)
Prerequisite: None
Advisory: English 1A or 14A with a grade of “C” or better
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture
This course offers a marketing approach to selling nonfiction writing. The course surveys print and online publication, including consumer magazines, trade journals, specialty publications, regional magazines, and local markets. Topics include an analysis of a variety of magazine article styles and types; writing and sending articles to the marketplace; individual and class criticism of student manuscripts. Emphasis is on increasing freelance writing production. The course may be taken twice for credit.

15 Creative Writing (3)
Prerequisite: English 1A with a grade of “C” or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This is a course in creative writing through experience in four genres: short story, poetry, autobiography, and script writing. The course includes analysis of literary models, individual and group criticism of work, and discussion of literary techniques in each genre, such as dialogue, imagery, and narrative. A related objective is to develop critical thinking skills: identifying and defining problems and issues; collecting, analyzing, synthesizing, and evaluating information; and developing conclusions, with special consideration given to the distinctive requirements of each genre. (CAN ENGL 6) AA/AS area 3D2

15A Fiction Writing Workshop (3)
Prerequisite: None
Advisory: English 1A and 15 with a grade of “C” or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This course concentrates on fiction writing. Short stories and/or novel chapters written during the semester will be analyzed in constructive, in-class workshops. The elements of literary creation will be critically examined from a writer’s perspective through lecture, discussion, assigned readings, and in-class writing exercises. The class includes journaling, the preparation of a portfolio of work completed during the class, and individual conferences.
15B  Poetry Writing Workshop  (3)

**Prerequisite:** None
**Advisory:** English 1A and 15 with a grade of "C" or better
**Transfer Credit:** Accepted for credit: UC, CSU
**Hours:** 54 hours lecture

This course is designed for students writing poetry. Focuses on the analysis of poetry written by students in the class. Study of literary devices in modern and contemporary poetry and practice in revising and editing. Review of publication sources, including the Internet.

17C  Creative Nonfiction Writing Workshop  (3)

**Prerequisite:** None
**Advisory:** English 1A and 15 with a grade of "C" or better
**Transfer Credit:** Accepted for credit: CSU
**Hours:** 54 hours lecture

This course introduces career paths in screenwriting, including local government and commercial sources preparing and utilizing film.

17A  College Literary Magazine Production  (3)

**Prerequisite:** None
**Advisory:** English 1A with a grade of "C" or better
**Transfer Credit:** Accepted for credit: CSU
**Hours:** 54 hours lecture; 36 hours laboratory

This course provides instruction in technique and experience in producing the college literary magazine, from selecting, writing, and editing manuscripts to actual formation of a camera-ready final draft for publication. Discussions include text and art layout, CD-ROM development, and Internet applications. Access is provided to computers, laser printers, and other journalism equipment. A campus literary reading will be presented. May be taken twice for credit.

15D  Screenwriting Workshop  (3)

**Prerequisite:** None
**Advisory:** English 1A with a grade of "C" or better
**Transfer Credit:** Accepted for credit: CSU
**Hours:** 54 hours lecture

This course is designed for students writing poetry. Focuses on the analysis of poetry written by students in the class. Study of literary devices in modern and contemporary poetry and practice in revising and editing. Review of publication sources, including the Internet.

15A  College Literary Magazine  (3)

**Prerequisite:** None
**Advisory:** English 1A with a grade of "C" or better
**Transfer Credit:** Accepted for credit: CSU
**Hours:** 54 hours lecture; 36 hours laboratory

This course provides instruction in technique and experience in producing the college literary magazine, from selecting, writing, and editing manuscripts to actual formation of a camera-ready final draft for publication. Discussions include text and art layout, CD-ROM development, and Internet applications. Access is provided to computers, laser printers, and other journalism equipment. A campus literary reading will be presented. May be taken twice for credit.

15F  Advanced Screenwriting Workshop  (3)

**Prerequisite:** None
**Advisory:** English 1A with a grade of "C" or better
**Transfer Credit:** Accepted for credit: CSU
**Hours:** 54 hours lecture

This course is designed for students writing poetry. Focuses on the analysis of poetry written by students in the class. Study of literary devices in modern and contemporary poetry and practice in revising and editing. Review of publication sources, including the Internet.

15G  A Short Course in Poetry Writing  (1)

**Prerequisite:** None.
**Advisory:** English 15
**Transfer Credit:** Accepted for credit: CSU
**Hours:** 18 hours lecture

This course is designed for students writing poetry. Focuses on the analysis of poetry written by students in the class. Study of literary devices in modern and contemporary poetry and practice in revising and editing. Review of publication sources, including the Internet.

20  Literature of California  (3)

**Prerequisite:** English 1A with a grade of "C" or better
**Transfer Credit:** Accepted for credit: UC, CSU
**Hours:** 54 hours lecture

This course examines the literature of California in the context of its ethnic, social, political, geographical and intellectual history. The course will examine a wide range of literature (fiction, non-fiction, poetry, memoirs, and essays) including but not limited to Native American legends, early California exploration accounts, prose and poetry from the California heartland, Hollywood crime fiction, and more, with emphasis on what makes the California experience unique. AA/AS area 3B, CSU area C2

21  Mystery and Detective Fiction  (3)

**Prerequisite:** English 1A with a grade of "C" or better
**Transfer Credit:** Accepted for credit: UC, CSU
**Hours:** 54 hours lecture

This course is designed for students writing poetry. Focuses on the analysis of poetry written by students in the class. Study of literary devices in modern and contemporary poetry and practice in revising and editing. Review of publication sources, including the Internet.

25  Studies in Literature  (3)

**Prerequisite:** English 1A with a grade of "C" or better
**Transfer Credit:** Accepted for credit: UC, CSU
**Hours:** 54 hours lecture
This course is a literature course to be scheduled as needed under a title describing specific content. It provides the opportunity to focus on an in-depth study of specific literary subjects or genres. The course will offer an extensive study of works by significant writers or of literature defined by theme, region, vocation, or human experiences. Possible titles include Retelling Stories, The Love Story, The Far West, The Military Experience in Literature, The Hero in Contemporary Fiction, Humor in American Fiction. AA/AS area B; CSU area C2; IGETC area 3

25A Short Literary Topics (1-2)

Prerequisite: English 1A with a grade of “C” or better
Transfer Credit: Accepted for Credit: CSU
Hours: 18-36 hours lecture
This course will provide a brief study of an area of literature or an overview of a literary subject. Specifically, courses might be offered in a particular subgenre (for example, the sonnet or the fairy tale), author, short literary period (for example, the Harlem Renaissance), or theme (for example, The Monster in Literature). Individual course descriptions are provided in the class schedule. The course may be taken four times for a maximum of six units.

26 Mythologies of the World (3)

Prerequisite: English 1A with a grade of “C” or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This course provides an introduction to the characters and themes in dominant myths in world literature; creation stories; gods and goddesses; sagas of heroes; journeys to death and rebirth. Theories of the meanings of myths will be discussed. Students will also learn, through selected examples, how characters and stories in myths remain alive in modern literature and culture. AA/AS area B; CSU area C2; IGETC area 3

27 Women in Literature (3)

Prerequisite: English 1A with a grade of “C” or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
The roles women have played both as creators and as protagonists in the art of fiction will be examined in this course. This course includes reading and evaluating literature from a wide range of times, places, and ethnic groups, by both men and women, although emphasis will be on works written by women. AA/AS area B; CSU area C2; IGETC area 3

28 Introduction to Fiction (3)

Prerequisite: English 1A with a grade of “C” or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This course covers the study of fiction as a type of literature. The course will examine a wide range of fiction, critically analyzing plot, setting, character, theme, and style. The course will include British and American works, as well as fiction in translation. AA/AS area 3B; CSU area C2; IGETC area 3

30 American Literature (3)

Prerequisite: English 1A with a grade of “C” or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This course surveys American literature from precolonial period to the Civil War. Approximately one-third of the semester's reading, discussion, and exploration is devoted to the development and backgrounds of a truly national literature. The larger two-thirds of the semester's study focuses upon the early half of the nineteenth century prior to the Civil War with special emphasis on eight major authors: Poe, Hawthorne, Emerson, Thoreau, Douglass, Melville, Whitman and Dickinson. The course provides an in-depth examination of the major themes and writers and their important forms. The course also examines aesthetic theories, growth of literary methods, and changes in literary tastes and opinions within the intellectual current of the times. (CAN ENGL SEQ C; CAN ENGL 14) AA/AS area B; CSU area C2; IGETC area 3

31 American Literature (3)

Prerequisite: English 1A with a grade of “C” or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This course is a survey of representative literature from the post-Civil War period until the present. It begins with the end of the Romantic period and follows the rise of Realism. Prose includes local color and social criticism, fiction of the “Lost Generation,” and contemporary stories. Poetry includes the many movements from turn-of-the-century to contemporary. (CAN ENGL 16) AA/AS area B; CSU area C2; IGETC area 3

33 World Literature (3)

Prerequisite: English 1A with a grade of “C” or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This course is a survey of world literature by authors of the ancient world to the early seventeenth century. Emphasis is on Western literature; in addition to Greek and Latin masterpieces, the early national literature of Italy, France, and Spain are studied. The entire range of genres is represented and, whenever possible, works are studied in their entirety. AA/AS area B; CSU area C2; IGETC area 3

34 World Literature (3)

Prerequisite: English 1A with a grade of “C” or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This course is a survey of the literature of the world from the 18th century to the present, with emphasis on European literature. It is designed to establish an understanding of the philosophies of the various cultural periods, as well as of the temper of classicism, romanticism and realism in literature and the related arts. AA/AS area B; CSU area C2; IGETC area 3

35 English Literature (3)

Prerequisite: English 1A with a grade of “C” or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This course is a survey of representative works in English literature from the Anglo-Saxon period to the eighteenth century. (CAN ENGL 8) AA/AS area B; CSU area C2; IGETC area 3

36 English Literature (3)

Prerequisite: English 1A with a grade of “C” or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This course is a survey of representative works in English literature from the nineteenth and twentieth centuries. AA/AS area B; CSU area C2; IGETC area 3
37A  Studies in the Literature of Diverse Cultures: Other American Literatures
Prerequisite: English 1A with a grade of "C" or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This course introduces heretofore neglected works from the 16th to the 20th century which have shaped our culture but are not derived from English or Western European sources. Readings are confined to works produced on this continent from discovery to the present. They include works by the following: Native Americans and European explorers/colonizers; French, Spanish, and Mexican inhabitants and African slaves; Black, Asian, Latino, and contemporary Chicano/Hispanic/Mexican-American writers. Cross-cultural comparisons will reveal characteristics of diverse cultures and will create an inclusive multi-cultural canon. Comparisons will also show how diverse writings fit into the traditional Anglo and Euro-centric canon. AA/AS areas B & F; CSU area C2; IGETC area 3

Prerequisite: English 1A with a grade of "C" or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This course surveys autobiographies and fiction written by Asian Americans; the works focus on the experience of Asian Americans growing up in a culture that is dominated by Eurocentric influences. The selected readings were written in American English in the last 60 years by Filipino-, Chinese-, Japanese-, and Korean-Americans. The course compares and contrasts the perspectives with which these four groups of Asian-American writers shape their portrayals of their immigration, discrimination, and assimilation experiences; further, the course examines the diversities of these experiences both within and across the generations. AA/AS areas B & F; CSU area C2; IGETC area 3

37C  Studies in the Literature of Diverse Cultures: African-American Dramatic Literature
Prerequisite: English 1A with a grade of "C" or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This course investigates African-American dramatic literature between 1800 and the present. African-American drama of various periods will be compared to the dominant drama of the time to investigate cultural effects of this drama. Protest drama of the 1960s will receive special focus, as will the recent resurgence of African-American drama. AA/AS areas B & F; CSU area C2; IGETC area 3

38  Science Fiction and Fantasy
Prerequisite: English 1A with a grade of "C" or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
Survey of the principal types of science fiction and fantasy including analysis of traditional as well as contemporary works. AA/AS area B; CSU area C2

39  Children and Literature
Prerequisite: None
Advisory: English 58 or 60 with a grade of "C" or better, or English 1A placement through assessment
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture
This course is a survey of the best literature, past and present, created for children and of criteria for selecting, evaluating, and discussing children's literature. It includes discussion of the history of children's literature and of current issues such as censorship, literacy, and multicultural diversity. The course is intended for prospective teachers, ECE majors, parents, and anyone who is or will be in frequent contact with children. It includes reading to children in a formal group situation. AA/AS area B; CSU area C2

39B  Children and Literature: Storytelling
Prerequisite: None
Advisory: English 58 or 60 with a grade of "C" or better, or English 1A placement through assessment
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture
This course offers further studies in children's literature, emphasizing the principal types and sources of oral literature for children. Students will study the theories of ways in which storytelling develops cognitive and language skills, social growth, self-esteem, and aesthetic appreciation in children. Studies will include multiculturally diverse story sources of oral literature such as folk tales, legends, dramatic poetry, and family and community histories. Practice in storytelling is included. This course may be repeated twice for credit. AA/AS areas B & F; CSU area C2

39C  Children and Literature: Multicultural Literature
Prerequisite: None
Advisory: English 58 or 60 with a grade of "C" or better, or English 1A placement through assessment
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture
This course surveys fiction and non-fiction written for children about racial and ethnic minority groups in the United States. Readings will include literature written by and about Native Americans, African Americans, Hispanic Americans, and Asian Americans. Books written in non-English languages will also be reviewed. Study will emphasize literary analysis and the values of multicultural literature in the development of children's cultural and aesthetic sensitivity. This course may be repeated twice for credit. AA/AS areas B & F; CSU area C2

39D  Children and Literature: Reader's Theatre
Prerequisite: None
Advisory: English 58 or 60 with a grade of "C" or better, or English 1A placement through assessment
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture
This course offers further studies in children's literature with emphasis on selecting and adapting children's literature to group writing and reading aloud dramatically in group situations. Criteria for selection and adaptation will be applied to folk literature, plays, short novels, and storybooks. The emphasis will be on using Reader's Theatre preparation to develop the child's understanding and appreciation of literary aesthetics, language skills, and cultural diversity. This course may be repeated twice for credit. AA/AS areas B & F; CSU area C2

41  Introduction to the Novel
Prerequisite: English 1A with a grade of "C" or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This course examines the novel as a type of literature. Representative novels will be read and analyzed in an intense and thorough manner with emphasis on form, content and style. AA/AS area B; CSU area C2; IGETC area 3
42  Introduction to the Short Story (3)
Prerequisite: English 1A with a grade of “C” or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This course will focus on the development and distinguishing characteristics of the short story; the course includes a range of stories, their backgrounds and criticism. Lecture-discussion format encourages students to develop their understanding and enjoyment of literature and their analytical skills. Written work is designed to aid students in articulating their own critical evaluations. AA/AS area B; CSU area C2; IGETC area 3

43  Introduction to Poetry (3)
Prerequisite: English 1A with a grade of “C” or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
Designed to introduce students to the art of poetry, this course includes analysis and appreciation of poetry as a type of literature, a thorough study of various kinds of poetry, and a brief survey of major poets and movements. It focuses on how to react as a reader and how to help give poetry meaning in the light of one's accumulated feelings, interests, and ideas. AA/AS area B; CSU area C2; IGETC area 3

44  Literary Themes in Dramatic Literature (3)
Prerequisite: English 1A with a grade of “C” or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
The study of drama of a variety of periods and cultures as they reflect recurring themes in literature. Attendance at live theatre productions will be required. AA/AS area B; CSU area C2; IGETC area 3

45  Young People's Literary Classics (3)
Prerequisite: English 1A with a grade of “C” or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This course is a study of works which have earned merit as classics written for both young adult and general audiences. Representative writers may include Shakespeare, Dickens, London, Stevenson, Twain, Tolkein, C.S. Lewis, and contemporary, multi-culturally diverse writers such as J.D. Salinger, Jamake Highwater, Alice Walker, Maya Angelou, and Amy Tan. It includes a discussion of literary form and style, with an emphasis on the contributions of such works to the development of literacy and aesthetic appreciation in young readers. AA/AS area B; CSU area C2; IGETC area 3

46A  Peer Tutoring in English and Reading (1.5-3)
Prerequisite: A grade of “C” or better in the course in which the student is tutoring
Advisory: English 1A, 4, and basic familiarity with computers
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture; 27-108 hours laboratory
This course provides instruction and practical experience for student tutors in English and Reading. The lecture-discussion portion of the course focuses on tutoring techniques and strategies, which will then be applied to tutoring assignments. Lectures will also include a review of key grammatical concepts and reading comprehension as they relate to tutoring. Completion of this course is required for working as a paid tutor in the Reading and Writing Centers. This course is also recommended for any student considering a career in education. May be taken twice for credit

47  Introduction to Shakespeare (3)
Prerequisite: English 1A with a grade of “C” or better
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This course is a survey of eight to ten representative dramatic works of Shakespeare and related literary criticism. It includes an examination of the Elizabethan worldview as a context for the plays. Attendance at live Shakespearean performances may be required. AA/AS area B; CSU area C2; IGETC area 3

49  Special Topics in English (5-3)
Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 9-54 hours lecture
Individual courses will be scheduled as needed to respond to changing demands in English. Refer to the class schedule for current offerings.

54  Writing Center: Writing Skills (5.2)
Prerequisite: Completion of at least 1 unit of English 254, or placement through assessment process
Advisory: Business 1 or CIS 1
Hours: 27-108 hours laboratory
This course offers individualized instruction modules (mini English courses) that focus on improving writing skills, including intermediate to advanced sentence, paragraph, and essay writing, research paper writing, literary analysis, as well as editing and proofreading. Course offerings vary depending on a student's needs and skill levels. Computers will be used to produce writing assignments. The same module may not be repeated for credit. This course is not a substitute for any other English courses. Registration is open through the twelfth week of the semester. Credit/No Credit only. May be taken three times.

58  Proficient Writing (3)
Prerequisite: English 256 with a grade of “C” or better, or placement through assessment
Advisory: Concurrent enrollment in English 78
Hours: 54 hours lecture
This course emphasizes topic selection, prewriting, organization of ideas, and development of introductory, body, and concluding paragraphs for expository and argumentative essays in preparation for English 1A. It also includes the review and further development of sentence writing and editing skills. Hours are devoted to improving writing skills, including intermediate to advanced sentence, paragraph, and essay writing, research paper writing, literary analysis, as well as editing and proofreading. Course offerings vary depending on a student's needs and skill levels. Computers will be used to produce writing assignments. The same module may not be repeated for credit. This course is not a substitute for any other English courses. Registration is open through the twelfth week of the semester. Credit/No Credit only. May be taken three times.

58A  College Timed Writing Workshop (1)
Prerequisite: English 58 with a letter grade, “Incomplete” or “In Progress”
Hours: 18 hours lecture
This course emphasizes topic selection, prewriting, organization of ideas, and development of introductory, body, and concluding paragraphs for expository and argumentative essays in preparation for English 1A. It also includes the review and further development of sentence writing and editing skills and analysis of selected readings. One or more additional hours in the Learning Resource Center or Writing Across the Curriculum or Reading Across the Disciplines programs may be required. The course includes departmental proficiency exam.
60  Practical Communication (3)

Prerequisite: English 256 with a grade of "C" or better, or placement through assessment process
Advisory: Concurrent enrollment in English 78
Hours: 54 hours lecture
This course will present methods of organizing ideas and writing for college and career: reports, resumes, business correspondence. It will include research techniques and intensive review of grammar, spelling and mechanics. The course is designed for students who do not plan to transfer. One or more additional hours per week in the Learning Resource Center may be required. AA/AS area D1

62  Writing in the Workplace: Essentials of Practical Communication (1)

Prerequisite: None
Hours: 18 hour lecture
This course is designed to sharpen the skills of workplace writers. It helps them identify their audience and then establish a purpose and strategy for successful written communication. The course also reviews sentence patterns and punctuation as well as principles of usage, especially as they are applied in the workplace. Team work and peer editing are practiced. Students keep a portfolio of their memos, letters, and other writing assignments.

68  Reading Center: Reading Skills (5-2)

Prerequisite: Placement through assessment
Advisory: English 268
Hours: 27-108 hours laboratory
The Reading Center offers individualized instructional modules designed to strengthen reading skills in specific areas. Course offerings vary, depending upon the needs and abilities. A partial list includes the following: Comprehension (advanced levels), Vocabulary development (advanced levels), Speed Reading, Critical Reading, Textbook Reading, Reading for the Proficiency Exam, Study Skills, Tutor Training. Credit/No Credit only. The same module may not be repeated for credit and is not a substitute for any Reading or ESL course. Scheduling is flexible. Enrollment is open through the 12th week of the semester. Units are awarded upon the successful completion of modules. May be taken four times for a maximum of six units.

78  Proficient Reading (formerly English 71) (3)

Prerequisite: English 270 with a grade of "C" or better, or placement through assessment
Advisory: Concurrent enrollment in English 58 or 60
Hours: 54 hours lecture
This course analyzes expository and argumentative essays, textbooks and literature in preparation for English 4 or 5. It emphasizes recognition of an author's thesis, supporting details, point of view, purpose and tone through an in-depth analysis of an essay's introduction, body and conclusion. It will also focus on applying study strategies for comprehending and retaining information form textbooks in preparation for test. Individual work in the Learning Resource Center, Writing Across the Curriculum Program or Reading Across the Disciplines Program may be required. This course may be taken twice for credit.

201  Spelling (2)

Prerequisite: None
Hours: 36 hours lecture
This course emphasizes the improvement of spelling through study of basic rules of spelling and application of those rules. Readings, writing and individualized spelling lists will be required throughout the course to supplement and reinforce spelling rules.

206  Reading Strategies for Success in Certificate Programs, Level 1 (1.5)

Prerequisite: Placement through assessment
Hours: 27 hours lecture
This course is designed to sharpen the reading skills of students enrolled in campus certificate programs. Students will learn contextual vocabulary and spelling and review basic reading and listening skills. Additionally, the course will cover textbook reading techniques and workplace related reading skills. Students will also participate in team-building and role-playing exercises. Additional hours may be required in the Learning Resource Center.

254  Writing Center: Basic Writing Skills (5-2)

Prerequisite: Placement through assessment or ESL 280R and 280W with a grade of "C" or better
Advisory: Business 1 or CIS 1
Hours: 27-108 hours laboratory
This course offers individualized instruction modules (mini English courses) that focus on improving basic writing skills, including familiarity with the writing process, sentence writing, and paragraph writing, as well as editing and proofreading. Course offerings vary depending on a student's needs and skill levels. Computers will be used to produce writing assignments. The same module may not be repeated for credit. This course is not a substitute for any other English course. Registration is open through the twelfth week of the semester. Credit/No Credit only. May be taken three times.

256  Developmental Writing (4)

Prerequisite: One or more units of English 254 with "credit" grade, or placement through assessment
Advisory: Concurrent enrollment in English 270
Hours: 72 hours lecture
This course focuses on basic writing skills, emphasizing the connection between writing and reading. This course includes reading, studying and responding orally and in writing to short, nonfiction multicultural selections at an appropriate level. The course emphasizes the writing process and development of specific skills within the sentence, paragraph and essay forms in preparation for English 58 or 60. The course also emphasizes the reading process and development of comprehension skills. One or more hours may be required in the Learning Resource Center. This course may be taken twice for credit.

265  Writing Strategies for Success in Certificate Programs, Level 1 (1.5)

Prerequisite: Placement through assessment
Hours: 27 hours lecture
This course is designed to sharpen the writing skills of students enrolled in campus certificate programs. Topics will include techniques for creating and understanding memos and directions, job-related forms and other work related writing. In addition, listening skills, group interaction techniques, and problem-solving skills will be introduced. Additional hours may be required in the Learning Resource Center.

268  Reading Center: Basic Reading Skills (5-2)

Prerequisite: Placement through assessment or ESL 280R with a grade of "C" or better
Hours: 27-108 hours laboratory
The Reading Center offers individualized instructional modules designed to acquire or improve reading skills in specific areas. Course offerings vary, depending upon needs and abilities. A partial list includes the following: Comprehension (beginning-intermediate levels), Vocabulary Development (begin-
ning-intermediate levels), Critical Reading, Study Skills, Spelling Improvement, and ESL Reading/Conversation (non-degree applicable modules). Credit/No Credit. The same module may not be repeated for credit and is not a substitute for any Reading or ESL course. Enrollment is open through the 12th week of the semester. Units are awarded upon the successful completion of modules. May be taken four times for credit with a maximum of six units.

270 Basic Reading Skills (3)

Prerequisite: One or more units of English 268 with "credit" grade, or placement through assessment process
Advisory: Concurrent enrollment in English 256
Hours: 54 hours lecture
This course provides instruction in techniques for improving skills basic to all reading. It involves intensive work with word attack, literal comprehension, vocabulary and study skills, to include practice with multicultural reading materials and strategies. Individual work in the Learning Resource Center may be required by the instructor. May be taken twice for credit.
Composition Courses
with corresponding reading courses

Counselor
Student's placement in a specific level class is determined through consultation with a counselor or by meeting course pre-requisite

Readiness for college-level writing
College Level (AA/AS degree-applicable)
Transfer Level (Transfers to CSU & UC)

English 256
Developmental Writing
4 units
lecture/discussion
Corresponding reading level: English 270

English 60
Practical Communication*
3 units
lecture/discussion
Corresponding reading level: English 78

English 58
Proficient Writing**
3 units
lecture/discussion or individualized
Corresponding reading level: English 78

English IA
College Composition*
3 units
lecture/discussion or individualized
Corresponding reading levels: English 4 or 5

English IB
College Composition & Literature

English IC
Advanced Composition & Critical Thinking

English 254
Writing Center:
Basic Writing Skills
.5-2 units
Individualized writing modules.
Open entry/exit
Corresponding Reading Center: English 268

English 54
Writing Center:
Writing Skills
.5-2 units
Individualized writing modules.
Open entry/exit
Corresponding Reading Center: English 68

Writing Across the Curriculum (WAC)
.5-1 unit, Credit/No Credit
Drop-in program for assistance with writing assignments in academic classes across the curriculum.
Open entry/exit
Corresponding reading program: Reading Across the Disciplines (RAD)

* Fulfills writing competency requirement for AA/AS degree.
** Pre-requisite for English IA
Reading Courses
with corresponding writing courses

Counselor
Student's placement in a specific level class is determined through consultation with a counselor or by meeting course pre-requisite

Readiness
for college-level reading

College Level
(AA/AS degree-applicable)

Transfer Level
(satisfies reading competency for AA/AS degree & transfer to CSU)

English 270
Basic Reading Skills
3 units
lecture/discussion
Corresponding writing level: English 256

English 78
Proficient Reading
3 units
lecture/discussion
Corresponding writing level: English 58 or 60

English 4
College Analytical & Speed Reading
3 units
lecture/discussion
Corresponding writing level: English 1A

English 5
Academic Textbook Reading
3 units
lecture/discussion
Corresponding writing level: English 1A

English 268
Reading Center: Basic Reading Skills
.5-2 units
Individualized reading modules
Open entry/exit
Corresponding Writing Center: English 254

English 68
Reading Center: Reading Skills
.5-2 units
Individualized reading modules
Open entry/exit
Corresponding Writing Center: English 54

English 6
Reading Across the Disciplines (RAD)
.5-1 unit, Credit/No Credit
Drop-in program for assistance with reading assignments in academic classes across the disciplines.
Open entry/exit
Corresponding writing program: Writing Across the Curriculum (WAC)

Referral
Instructors may refer a student, or student may self-refer.
American River College offers courses in English as a Second Language (ESL) designed to provide students with a command of the English language necessary to pursue both transfer and career goals.

1C U.S. Culture through Film (3)
Prerequisite: ESL 280L with a grade of “C” or better, or placement through assessment
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture
This course provides opportunities for non-native speakers of English to become familiar with and make sense of aspects of U.S. culture through the medium of American film and video. Students will watch, discuss, and comment on films chosen for their illumination of selected culture topics. One or more additional hours in the Learning Resource Center may be required. Course includes departmental final examination.

1E Intermediate Editing and Grammar (2)
Review for ESL Writers
Prerequisite: None
Corequisite: ESL 1W or 2W
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture
This course is intended to assist intermediate ESL writers to refine their use of English structures in order to better succeed in ESL 1W and 2W. It is designed to heighten awareness of typical intermediate level ESL grammar errors common to the writing process, using writing and editing exercises that focus on improved analysis and the development of self-help strategies. This course is graded credit/no credit. May be taken twice for credit.

1G Intermediate - High Grammar (4)
Prerequisite: ESL 280G with a grade of “C” or better, or placement through assessment process
Advisory: Enrollment in other ESL skills at the student’s assessed level
Transfer Credit: Accepted for credit: CSU
Hours: 72 hours lecture
This course focuses on further practice of the forms, meanings, and usage of grammatical structures of English at the intermediate-high level. Verbal practice in class reinforces the structures studied.

1L Intermediate-High Listening and Speaking (4)
(formerly Pronunciation Skills)
Prerequisite: ESL 280L with a grade of “C” or better, or placement through assessment.
Advisory: Concurrent enrollment in an ESL Reading and Writing course at the student’s assessed level
Transfer Credit: Accepted for credit: CSU
Hours: 72 hours lecture
This is a course to further practice and develop listening and speaking for academic purposes, including comprehension of lecture, note-taking, and classroom discussion. This course covers a review of American English sounds with emphasis on understanding and producing stress, rhythm, and intonation patterns to communicate effectively. May be taken twice for credit.

1R Intermediate - High Reading (4)
(formerly Intermediate Reading and Vocabulary)
Prerequisite: ESL 280R with a grade of “C” or better, or placement through assessment process
Advisory: Concurrent enrollment in other ESL skills at the student’s assessed level
Transfer Credit: Accepted for credit: CSU
Hours: 72 hours lecture
This course focuses on the introduction of academic reading skills with an emphasis on speed, vocabulary expansion, and comprehension of ideas, and introduces students to library use. Practice will be provided in understanding, paraphrasing, summarizing and responding, either orally or in writing, to ideas expressed in reading.

1W Intermediate - High Writing (4)
(formerly Intermediate Composition)
Prerequisite: ESL 280W with a grade of “C” or better, or placement through assessment process
Advisory: Concurrent enrollment in other ESL skills at the student’s assessed level
Transfer Credit: Accepted for credit: UC, CSU
Hours: 72 hours lecture
This course further develops the ability to respond to a variety of essay assignments. Class discussions and written responses to readings and prompts will exercise critical thinking skills. Control of a range of sentence structures will be refined.

2G Advanced - Low Grammar (4)
Prerequisite: ESL 1G with a grade of “C” or better, or placement through assessment process
Advisory: Concurrent enrollment in other ESL skills at the student’s assessed level

2L  Advanced - Low Listening and Speaking  (formerly Advanced Pronunciation Skills)  
Prerequisite: ESL 1L with a grade of "C" or better, or placement through assessment  
Advisory: Concurrent enrollment in an ESL Reading and Writing skill course  
Transfer Credit: Accepted for credit: CSU  
Hours: 72 hours lecture  
This course focuses on practice in the forms and meanings of major structures used in listening with an emphasis on clause structure at the advanced-low level. Oral practice reinforces the structures studied. Assignments emphasize sentence structure in the context of longer written work.

2R  Advanced - Low Reading  (formerly Advanced Reading and Vocabulary)  
Prerequisite: ESL 1R with a grade of "C" or better, or placement through assessment  
Advisory: Concurrent enrollment in other ESL skills at the student's assessed level  
Transfer Credit: Accepted for credit: CSU  
Hours: 72 hours lecture  
This course focuses on refining academic reading skills with an emphasis on speed, vocabulary development, and analytical comprehension. It also will include practice in research and synthesizing skills and extensive writing based on critical analysis of readings.

2W  Advanced - Low Writing  (formerly Advanced Composition)  
Prerequisite: ESL 1W with a grade of "C" or better, or placement through assessment process  
Advisory: Concurrent enrollment in other ESL skills at the student's assessed level  
Transfer Credit: Accepted for credit: UC (unit limitation), CSU  
Hours: 72 hours lecture  
This course exercises analytical and logical skills in the production of focused, developed and organized essays on a variety of topics. The course emphasizes sentence variety and the mechanics of English in the context of the essay. Essays will incorporate outside sources as well as personal experience.

5R  Advanced Reading Skills Through Literature  
Prerequisite: ESL 2R with a grade of "C" or better, or placement through assessment  
Advisory: Concurrent enrollment in an ESL Listening and Speaking and Writing course at the student's assessed level  
Transfer Credit: Accepted for credit: CSU  
Hours: 72 hours lecture  
This course is designed to improve vocabulary and reading skills for the advanced ESL learner. Readings will include various forms of literature from a variety of cultural groups. It covers a wide variety of selections including essays, poetry, drama, short stories and novels. This course emphasizes critical thinking and reading skills needed for academic performance: (1) vocabulary development (2) analysis and comprehension skills (3) flexibility of reading rate. It also emphasizes the comparison contrast of universal and metaphorical themes, as applied in various cultures.

5W  Advanced Composition  (formerly ESL 5, Composition and Reading)  
Prerequisite: ESL 2W with a grade of "C" or better, or placement through assessment  
Advisory: Concurrent enrollment in an ESL Listening and Speaking and Reading course at the student's assessed level  
Transfer Credit: Accepted for credit: UC (unit limitation), CSU  
Hours: 72 hours lecture  
This college composition course applies critical thinking skills to writing. Writing assignments include expository and argumentative prose (8,500 words minimum) based on analysis of a variety of readings. Students will refine summarizing and paraphrasing skills. The course requires writing a research paper with citations and bibliography. AA/AS area 3D1 & 4A; CSU area A2

6  Advanced Composition and Literature  
Prerequisite: ESL 5W and 5R with a grade of "C" or better  
Transfer Credit: Accepted for credit: UC (unit limitation), CSU  
Hours: 72 hours lecture  
This course covers reading and interpreting major types of literature, including poetry, drama and fiction. It includes study in critical thinking and essay writing and emphasizes reading, oral, and written analysis of major literary works. Attendance at a live theatre production is encouraged. Students will be required to write at least 6,500 words. AA/AS area D2 & 4B; CSU area A3

46  ESL Teacher's Aide  
Prerequisite: ESL 5W or English 1A with a grade of "B" or better  
Advisory: ESL 5G or English 2  
Transfer Credit: Accepted for credit: CSU  
Hours: 27 hours lecture; 36 hours laboratory  
This course is designed to prepare tutors to work with ESL learners. Lectures cover ESL theory, methodology and tutoring techniques. Laboratory sessions permit tutors to apply what they learn in the classroom while working with ESL students.

63L  Advanced Career Listening and Speaking  (formerly ESL 66L, Career Listening/Speaking)  
Prerequisite: ESL 2L with a grade of "C" or better, or placement through assessment  
Advisory: Concurrent enrollment in an ESL Reading and Writing course at the student's assessed level  
Hours: 72 hours lecture
This course covers listening/speaking skills concentrating on understanding and being understood in the workplace as well as developing insight into cross-cultural conflict that interferes with management and employee relations. To further develop pronunciation skills, the courses will help students think critically, solve problems, and develop oral communication skills for the business community.

63R Advanced Career Reading
(formerly ESL 66R, Career Reading Skills)
(4)
Prerequisite: ESL 2R with a grade of "C" or better, or placement through assessment
Advisory: Concurrent enrollment in an ESL Listening and Speaking and Writing course at the student's assessed level
Hours: 72 hours lecture
This course covers reading of English related to business topics, concentrating on analysis of business issues, as well as developing inferential and evaluative comprehension skills. In order to reinforce paragraph and business correspondence organizational skills, the course will include written responses to readings.

63W Advanced Career Writing
(formerly ESL 63, Career Writing Skills)
(4)
Prerequisite: ESL 2W with a grade of "C" or better or placement through assessment
Advisory: Concurrent enrollment in an ESL Listening and Speaking and Reading course at the student's assessed level
Hours: 72 hours lecture
This course presents methods of organizing ideas, writing, and interpreting writing for career and college, including memos, reports, resumes and business correspondence (6,500 words). It also includes an intensive review of paragraph and essay structure, punctuation, and mechanics. AA/AS area D1

65 ESL Center: Skills in ESL
(Formerly ESL Center)
(.5-1.5)
Prerequisite: ESL 1R, 1L, and 1 W with a grade of "C" or better or placement through the assessment process
Advisory: Concurrent enrollment in at least one ESL course at the 2, 63, or 5 level
Hours: 27-81 hours laboratory
Coursework consists of a variety of self-study modules on such topics as grammar, composition, reading, vocabulary, listening, pronunciation, study skills, and work place skills and is designed to develop and reinforce English language skills at advanced levels. Independent work on complex assignments will be required. Credit/No Credit grading only. May be taken for a maximum of 6 units.

260L Novice - High Listening and Speaking
(formerly Introductory Listening and Speaking)
(4)
Prerequisite: Placement through assessment
Advisory: Concurrent enrollment in an ESL Reading and/or Writing course at the student’s assessed level
Hours: 72 hours lecture
This is a course in listening comprehension and practical conversation for non-native English speakers who plan to take college courses. The sounds of American English, stress, rhythm, and intonation patterns will be introduced. Credit/no credit grading only. May be taken twice for credit.

260R Novice - High Reading
(formerly Introductory Reading and Vocabulary)
(4)
Prerequisite: Placement through assessment
Advisory: Concurrent enrollment in an ESL Listening and Speaking and Writing course at the student's assessed level
Hours: 72 hours lecture
This course is an introduction to reading words, phrases, and sentences in short texts for non-native speakers who plan to take college courses. It will cover core vocabulary, literal comprehension, and grammar necessary to understand short readings. Credit/no credit grading only. May be taken twice for credit.

260W Novice - High Writing
(formerly Introductory Writing and Grammar)
(4)
Prerequisite: Placement through assessment
Advisory: Concurrent enrollment in an ESL Listening and Speaking and Reading course at the student's assessed level
Hours: 72 hours lecture
This course is an introduction to writing in English for non-native speakers who plan to take college courses. It covers simple sentences and paragraph structures. Credit/no credit grading only. May be taken twice for credit.

265 ESL Center: Skills in ESL
(formerly ESL Center)
(.5-1.5)
Prerequisite: ESL 1R, 1L, and 1 W with a grade of "C" or better or placement through the assessment process
Advisory: Concurrent enrollment in at least one ESL course at the 2, 63, or 5 level
Hours: 27-81 hours laboratory
Coursework consists of a variety of self-study modules on such topics as grammar, composition, reading, vocabulary, listening, pronunciation, study skills, and work place skills and is designed to develop and reinforce English language skills at advanced levels. Independent work on complex assignments will be required. Credit/No Credit grading only. May be taken for a maximum of 6 units.

270L Intermediate - Low Listening and Speaking
(formerly Basic Listening and Speaking)
(4)
Prerequisite: ESL 260L with a grade of "C" or better, or placement through assessment
Advisory: Concurrent enrollment in an ESL Reading and Writing course at the student’s assessed level
Hours: 72 hours lecture
This is a course that develops the listening and speaking skills needed to succeed in college courses. Activities will focus on developing phrases and sentences to communicate ideas in familiar situations. The course includes group and individual listening and speaking activities, an overview of American English sounds, and practice in stress, rhythm, and intonation. May be taken twice for credit.

270R Intermediate - Low Reading
(formerly Basic Reading and Vocabulary)
(4)
Prerequisite: ESL 260R with a grade of "C" or better or placement through assessment
Corequisite: Concurrent enrollment in an ESL Listening and Speaking and Writing course at the student's assessed level
Hours: 72 hours lecture
This course focuses on developing reading skills with an emphasis on building vocabulary, literal comprehension, and fluency. Students will discuss and write about readings.

270T  ESL Through Computer Technology  (2)
Prerequisite: ESL 260L, 260R & 260W with a grade of “C” or better, or placement through assessment
Corequisite: ESL 270L, 270R, & 270W
Hours: 48 hours lecture; 36 hours laboratory
This course is designed to introduce intermediate-low ESL students to the basic vocabulary patterns connected with computer usage. It includes use of student email, the American River College web site, basic word processing, and the internet. Credit/no credit only. May be taken twice for credit.

270W Intermediate - Low Writing  (formerly Basic Writing and Grammar)  (4)
Prerequisite: ESL 260W with a grade of “C” or better, or placement through assessment
Advisory: Concurrent enrollment in an ESL Listening and Speaking and Reading course at the student’s assessed level
Hours: 72 hours lecture
This course provides practice in writing focused paragraphs with a clear beginning, middle and end. Critical thinking skills and correct grammar in writing will be stressed.

280G Intermediate - Mid Grammar  (4)
Prerequisite: ESL 270W with a grade of “C” or better, or placement through assessment
Advisory: Enrollment in an ESL Listening and Speaking, Reading, and/or Writing course at the student’s assessed levels
Hours: 72 hours lecture
This course concentrates on the fundamental grammatical structures of English at the intermediate-mid level. It focuses on grammatical structures in appropriate contexts. Oral and written practice with an emphasis on sentence structure and verb tenses is included.

280L Intermediate - Mid Listening & Speaking  (formerly Beginning Listening and Speaking)  (4)
Prerequisite: ESL 270L with a grade of “C” or better, or placement through assessment
Advisory: Concurrent enrollment in an ESL Reading and Writing course at the student’s assessed level
Hours: 72 hours lecture
This is a course to help students understand and be understood in both familiar and unfamiliar situations. Class activities will introduce academic listening and speaking activities and will continue to work on pronunciation skills. May be taken twice for credit.

280R Intermediate - Mid Reading  (formerly Beginning Reading and Vocabulary)  (4)
Prerequisite: ESL 270R with a grade of “C” or better, or placement through assessment
Advisory: Concurrent enrollment in an ESL Listening and Speaking and Writing course at the student’s assessed level
Hours: 72 hours lecture
This course focuses on the introduction of academic reading skills, with an emphasis on vocabulary development, literal comprehension, and dictionary skills. Course activities will include understanding, analyzing, discussing and writing responses to ideas expressed in readings.

280T Introduction to Online Instruction for ESL Students  (2)
Prerequisite: ESL 270T with CR
Corequisite: None
Advisory: ESL 280L, 280R and 280W
Hours: 18 hours lecture; 54 hours laboratory
This course is designed to introduce the language and skills needed to enroll in and successfully complete an online course in a sheltered computer classroom. Emphasis will be on practicing communication skills in a computer classroom which mirrors an online environment. Using email, bulletin boards, and chat rooms to practice communication skills and web sites, to practice reading skills, and to critically evaluate web sources. Credit/no credit only. May be taken twice for credit.

280W Intermediate - Mid Writing  (formerly Beginning Composition)  (4)
Prerequisite: ESL 270W with a grade of “C” or better, or placement through assessment
Advisory: Concurrent enrollment in an ESL Listening and Speaking and Reading course at the student’s assessed level
Hours: 72 hours lecture
This course covers techniques essential to essay writing. Control of sentence structure in longer pieces of writing will continue to be developed.

288F Parts of Speech  (2)
Prerequisite: ESL 270W with a grade of “C” or better, or placement through assessment
Hours: 36 hours lecture
This course covers the most important parts of speech in English. Course activities focus on identifying and using nouns, pronouns, adjectives, adverbs, prepositions, and conjunctions in basic sentences. May be taken twice for credit.

288P Pronunciation  (2)
Prerequisite: ESL 270L with a grade of “C” or better, or placement through assessment
Hours: 36 hours lecture
This course is designed to improve pronunciation. It offers intensive practice in the pronunciation and recognition of American English sounds. This course will introduce intonation patterns of English, syllables, and stress. May be taken twice for credit.

288S Spelling  (2)
Prerequisite: ESL 270R and 270W with a grade of “C” or better, or placement through assessment
Hours: 36 hours lecture
This course is designed for students who need to improve their spelling. It includes an introduction to the basic spelling rules and patterns of English. Activities will provide practice with homophones, suffixes and plurals. The course will foster competence in spelling. May be taken twice for credit.
Family and Consumer Science focuses on consumerism and the relationships and processes involved in the establishment of a strong home and community environment for individuals and families.

**Career Opportunities**

Students may choose a broad program or select specific courses to prepare themselves for careers as a foods consultant, market consultant, family and consumer science educator, public utility field representative, extension service advisor, consultant in consumer economics or researcher.

Many students complete their studies at a four-year institution, whether in family and consumer science or a related field. If this is your goal, be sure to talk with a counselor in order to prepare an educational plan—particularly if you plan to work toward a teaching credential in family and consumer science or home economics.

By careful selection of required and elective units a student can develop a broad family and consumer science major or specialize in child development, or foods and nutrition.

Additional units may be chosen from other family and consumer science courses, as well as from the college's programs in early childhood education, interior design, hospitality management, or nutrition and foods.

In fact, the diversity of these related offerings is one more reason why students find the ARC program so attractive. The program also offers practical experience in various situations at cooperating establishments in different specialty areas.

**Requirements for Degree Major:** 21-25 units

- Family and Consumer Science 3, 33, Nutrition and Food 10, 16
- Fashion 20
- Early Childhood Education 34
- choice of one: Fashion 22, 23, 24 or 28; and one course in Interior Design.

**Recommended Electives**

Additional units may be chosen from Family and Consumer Science, Early Childhood Education, Interior Design or Hospitality Management or Nutrition and Foods.

**General Education Graduation Requirements:**

Students must also complete the general education graduation requirements for an A.A. degree. See graduation requirements.

3  Life Management  (3)

*Prerequisite: None.*  
*Transfer Credit: Accepted for credit: CSU.*  
*Hours: 54 hours lecture.*

A broad based introductory core class teaching life survival skills including effective functioning in changing family structures and societal pressures in the work place. Major topics include: values identification, goals, skills for decision-making, time, money, energy and conflict management, and techniques for improving self-understanding and interpersonal relationships.

4  Consumer Power  (3)

*Prerequisite: None*  
*Transfer Credit: Accepted for credit: CSU*  
*Hours: 54 hours lecture.*

This course explores role of the consumer in today's marketplace. It is designed to develop knowledge, techniques, and attitudes necessary to become wise consumers. Information to develop skills for purchasing goods and services is provided. The course includes promotional devices, credit and contracts, complaint procedures and consumer protection.
35  The Child in the Family and Community  
(Same as Early Childhood Ed 35)  

Prerequisite: None  
Advisory:  English 58 or 60, and 78 or ESL 2R & 2W, or placement through assessment  
Transfer Credit: Accepted for credit: UC, CSU  
Hours: 54 hours lecture  
This course will cover the child within the family and within the community. The focus will be on the impact of parenting style, marriage and transitions within the family, culture, school, and media on the child's development. Students will have an opportunity to research and review the diverse community resources available to support the child and the family. Not open to students who have completed Early Childhood Education 35. AA/AS area C2; CSU area D3

46  Teachers Aide  

Prerequisite: Department interview and appropriate Family and Consumer Science course with a grade of "C" or better  
Transfer Credit: Accepted for credit: CSU (6 units maximum)  
Hours: 9-36 hours lecture, 27-108 hours laboratory  
This course provides opportunities to develop in-depth understanding of some facet of Family and Consumer Science, and to learn to work with individual and small groups of students. The student will work closely with the instructor in classroom activities, audio-visual set-up and the recording of grades. May be taken four times for a maximum of six units.

48  Work Experience  

Prerequisite: None  
Transfer Credit: Accepted for credit: CSU  
Hours: 18 hours lecture, 60-300 hours laboratory  
This course provides practical experience in various situations for Family and Consumer Science Majors. Students work in cooperating establishments in different areas in Family and Consumer Science. Recommended for those needing practical experience before employment. May be taken four times for credit up to a maximum of six units.
Fashion and fashion-related industries are the nation’s largest employer.

Fashion design involves work with the design and production of clothing, whether with a large manufacturer, a small specialty firm or in a one-person business.

Fashion merchandising refers to the large task of in-store promotion and the display of various types of fashion merchandise.

ARC follows industry needs by offering two program options: Fashion Design and Fashion Merchandising.

Fashion Design prepares the student with those skills necessary to coordinate original design concepts with manufacturing and merchandising techniques.

Fashion Merchandising provides training for jobs in fashion coordinating, promotion, visual presentation, management, merchandising or ready-to-wear garments.

Career Opportunities

Careers in fashion design include designer, pattern maker and custom dressmaker.

Careers in fashion merchandising include buyer, store owner, manufacturer’s sales representative, fashion coordinator, fashion illustrator or visual merchandiser.

Fashion Design

Fashion Design prepares the student with those skills necessary to coordinate original design concepts with manufacturing, marketing and merchandising techniques.

Requirements for Degree Major:

Core Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>Fashion 10</td>
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<td>Fashion 20</td>
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<td>Fashion 21</td>
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<td>Fashion 25</td>
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<td>Fashion 30</td>
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Concentration Requirements

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<thead>
<tr>
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<tr>
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<td>Fashion 27</td>
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<td>Fashion 31</td>
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<td>Fashion 33</td>
<td>3</td>
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<tr>
<td>Art 14</td>
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</table>

Recommended Electives

Fashion 32, 37, 72, 98; Marketing 20, 26; Accounting 60; CIS 1

Requirements for Certificate: 21 units

Fashion 10, 20, 21, 25, 26, 27, 33

General Education Graduation Requirements: Students must also complete the general education graduation requirements for an A.A. degree. See graduation requirements.

Fashion Merchandising

Fashion merchandising provides training for jobs in the retail market including: fashion coordination, promotion, visual presentation, management, merchandising.

Requirements for Degree Major: 29 units

Core Requirements

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<th>Course</th>
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<tbody>
<tr>
<td>Fashion 10</td>
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Concentration Requirements

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<tr>
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<td>Marketing 24</td>
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<td>Management 24</td>
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Recommended Electives

Art 14, Business 62, Fashion 98, Management 21, Marketing 50

Requirements for Certificate: 20 units

Course Required

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<th>Course</th>
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<td>Marketing 20</td>
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<td>Marketing 24</td>
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</table>

General Education Graduation Requirements: Students must also complete the general education graduation requirements for an A.A. degree. See Graduation requirements.
10 Introduction to the Fashion Industry
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2L, 2W, or placement through assessment
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture
This course is a survey of the complex diversity of today's fashion industry. It introduces the process of how the fashion business works in sequential order from the concept to the consumer. It provides an overview of fashion design, production, distribution, and merchandising and will give an understanding of the fashion industry as a whole. Field trips are required.

20 Textiles
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2L, 2W, or placement through assessment
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This course is a study of natural and man-made fibers, methods of fabrication and finishes. Topics include modern fabrics in relation to their selection, use and care of clothing and home furnishings.

21 Fashion Analysis
Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture
In this course influences on fashion (social, political, cultural, technological and environmental) will be analyzed and compared with current fashion trends. The function, aesthetics and attitude of dress including image projection, perceptions and gender roles will be explored as a form of silent communication. A generational approach to consumer buying behavior and response towards fashion will be examined. Other aspects of fashion analysis will include identifying apparel details, styles and elements of design.

25 Fashion Illustration
(formerly Fashion 73)
Prerequisite: None
Hours: 36 hours lecture; 54 hours laboratory
This course is an introduction to computer-based fashion illustration and offers a simple, efficient and effective way of communicating design ideas. Illustration techniques unique to fashion will be explored using Artworks software by Gerber. Application of design elements and principles will include color, texture, style and apparel details with an emphasis on the flat sketch.

26 Patternmaking and Design
Prerequisite: None
Advisory: English 58 or 60 and 78 or ESL 2R, 2L, 2W, or placement through assessment
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture; 54 hours laboratory
This course is an introduction to the flat pattern method of apparel design. Students will draft slopers from measurements. These slopers will be used to create original designs. Construction techniques will be introduced for the completion of these original designs. A field trip will be required.

27 Advanced Pattern Making and Design
Prerequisite: Fashion 26
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory
This course includes advanced patternmaking techniques to include: drafting, draping and grading. It focuses on industry methods of duplicating ready-to-wear apparel. Industry fit specifications and construction techniques will be refined. A field trip will be required.

30 History of Western World Fashion
Prerequisite: None
Advisory: English 58 or 60, and 78; or ESL 2R, 2L, and 2W; or placement through assessment
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture
This course provides a comprehensive survey of how fashion has been influenced by major world historical events. Selected eras of history are viewed within a cultural, political, and economical context as expressed in dress. Emphasis will include cross cultural influences on major fashion trends throughout selected historical periods of the western world from the time of the Egyptians to the present. AA/AS area 3B, CSU area C1

31 Production Patternmaking and Design
Prerequisite: Fashion 27
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory
This is an advanced pattern drafting class introducing industry computer software such as Artworks by Gerber. The course makes comprehensive use of pattern making skills acquired in previous pattern classes. Working from a designer's sketch, patterns will be drafted and completed. A production pattern will then be made according to industry requirements and a muslin sample of the garment will be constructed.

32 Fashion Promotion
Prerequisite: Fashion 10
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory
This course is a comprehensive study of promotion and presentation unique to the fashion industry. Techniques, applications, and customer appeal related to fashion merchandising concepts are analyzed. Functions and distinctive uses of fashion advertising, publicity and visual merchandising will be explored. The focus will be on special events such as, fashion shows, trunk shows, and the use of promotional videos. Basic media strategy, the role it plays, and its relationship with fashion merchandisers will be examined. Planning and technical skills will be developed through the activity of producing a fashion show. Field trips will be required.

33 Apparel Line Development
(formerly Fashion 63, Apparel Design & Production)
Prerequisite: Fashion 73
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory
This course applies the skills used in computer based fashion illustration. Emphasis will be placed on the principles and elements of design to develop a line of apparel: researching fashion trends, determining a target market, selecting colors and fabrics and designing a line using Artworks software by Gerber.
Fashion

37  Vintage Costuming  (.5-2)
   (Same as Theatre Arts 37)

Prerequisite:  None
Advisory:  English 256 and 270, or ESL 1W and 1R; or placement through assessment
Transfer Credit:  Accepted for credit:  UC, CSU
Hours: 9-18 hours lecture, 27-54 hours laboratory
This course covers the factors that influence historical costume design and production. It also includes the principles and techniques involved in developing and constructing a period costume. Costumes will be fabricated for both theatrical productions and individual projects. The historical period will change each semester. May be taken four times for credit on different topics. Not open to those who have completed Theatre Arts 37.

52  Special Topics in Fashion Design &
    Merchandising  (.5-3)

Prerequisite:  None
Advisory:  English 58 or 60 and 78 or ESL 2R, 2L, 2W, or placement through assessment
Hours: 9-54 hours lecture
This course is designed to give students an opportunity to study topics in fashion design and/or fashion merchandising not included in current course offerings. May be taken four times up to a maximum of 6 units providing there is no duplication of topics.

59  Fashion Industry Internship  (1.5-3)

Prerequisite:  One of the following:  Fashion 53, 54, 55, 56, 57 or 58
Hours: 81-168 laboratory
This course provides a supervised internship in the fashion field. Student gains on-the-job practical experience in apparel retail or manufacturing. Student’s skills are matched with the industry needs. Job placement assistance is provided by the coordinator to find appropriate jobs. May be repeated for up to 3 units.

72  Visual Merchandising  (2)

Prerequisite:  None
Transfer Credit:  Accepted for credit:  CSU
Hours: 18 hours lecture; 54 hours lab
This course introduces current visual merchandising techniques, equipment, lighting, and materials. The application of principles and practices in arranging and displaying fashion merchandise for single store and chain organization usage are covered. This practical experience with showcases, window, and on-floor displays will provide familiarity with professional fashion promotional presentations. A field trip is required.

98  Work Experience  (1-4)

Prerequisite:  Current employment or voluntary position
Hours:  See Work Experience
This course reflects supervised work experience in apparel merchandising. Students work in cooperating fashion apparel firms. Class enrollment is dependent upon student being in a paid or volunteer work experience learning environment. May be repeated for credit for a maximum of sixteen units.
Fire technology is the science of fighting and preventing fires through an organized team effort. Firefighters must have a thorough understanding of the physical and chemical laws of combustion, a working knowledge of firefighting and safety equipment, and ability to administer emergency medical aid.

The fundamental principles and underlying causes for destructive fires are coupled with basic fire prevention techniques, fire behavior and control and fire hydraulics as a background for advanced training. This includes a study of fire chemistry and physics, firefighting equipment and extinguishing agents, solution to fire hazards and an introduction to the organization of various firefighting units.

Advanced training includes fire safety and safety equipment, sprinkler and alarm systems, portable fire extinguishing equipment.

**Career Opportunities**

Employment opportunities in the fire service are expected to increase in the next ten years. Nine of ten firefighters are employed by municipal fire departments, and there is opportunity for employment in agencies such as the California Department of Forestry & Fire Protection, and the U.S. Forest Service.

The best career opportunities are expected to be found in small but growing municipalities. Salaries for beginning firefighters are excellent with opportunity for advancement. Most fire department also provide good fringe benefits and retirement plans.

**Requirements for Degree Major:**

- **Core Requirements**
  - Fire Technology 1, 2, 3, 4, 5, and 77,
  - 15 units chosen from these courses:
    - Fire Technology 6, 7, 61, 62, 63, 65, 66, 68, 69, 73.

- **General Education Graduation Requirements:**
  Students must also complete the general education graduation requirements for an A.A. degree. See graduation requirements.

**Requirements for Certificate:**

A certificate of achievement in Fire Technology will be awarded to students who complete 20 units in the Fire Technology CORE courses: Fire Technology 1, 2, 3, 4, 5, and 77. Fifteen (15) additional units must be chosen from the following recommended electives: Fire Technology 6, 7, 61, 62, 63, 65, 66, 68, 69, and 73.

1. **Fire Protection Organization**

   - **Prerequisite:** None
   - **Transfer Credit:** Accepted for credit: CSU
   - **Hours:** 54 hours lecture

   This course provides an introduction to fire protection; career opportunities in fire protection and related fields; philosophy and history of fire protection; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; introduction to fire strategy and tactics.

2. **Fire Prevention Technology**

   - **Prerequisite:** None
   - **Corequisite:** Fire Technology 1 or 90
   - **Transfer Credit:** Accepted for credit: CSU
   - **Hours:** 54 hours lecture

   This course provides fundamental information regarding the history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use of fire codes, identification and correction of fire hazards and the relationship of fire prevention with fire safety education and detection and suppression system.

3. **Fire Protection Equipment and Systems**

   - **Prerequisite:** None
   - **Corequisite:** Fire Technology 1 or 90
   - **Transfer Credit:** Accepted for credit: CSU
   - **Hours:** 54 hours lecture

   This course provides information relating to the features of design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection, and portable fire extinguishers.
4 Building Construction for Fire Protection (formerly FT 64)

Prerequisite: None
Corequisite: Fire Technology 1 or 90
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture
This course is the study of the components of building construction that relate to fire safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, pre-planning fire operations and operating at fires. The development and evolution of building and fire codes will be studied in relationship to past fires in residential, commercial, and industrial occupancies.

5 Fire Behavior and Combustion

Prerequisite: None
Corequisite: Fire Technology 1 or 90
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture
This course provides the student with the theories and fundamentals of and why fires start, spread and are controlled; an in-depth study of fire chemistry and physics, fire characteristics of materials, extinguishing agents and fire control techniques.

6 Hazardous Materials

Prerequisite: None
Advisory: FT 1 or FT 90
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture
This course is an Introduction to the world of hazardous chemicals, including physical properties, uses in industry, and characteristics when involved in spills, fires, and accidents. This course also provides basic hazardous materials information regarding emergency procedures, legal requirements, and compliance to regulations.

7 Fire Service Hydraulics

Prerequisite: None
Advisory: FT 1 or FT 90
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture
This course provides information on obtaining water from various sources of supply, properly routing it through the pump, and discharging it through various devices with the proper pressures for fire suppression.

53 Incident Command System (I-300)

Prerequisite: Fire Technology 52
Hours: 24 hours lecture, 2 hours laboratory
Intermediate ICS provides expanded description and detail of the organization and operation of the Incident Command System, management of resources, position descriptions (including the Air Operations organization), and essential principles for incident and event planning.

55 Wildland Fire Behavior (S-190)

Prerequisite: None
Hours: 6 hours lecture
This course provides fire behavior familiarization, to promote safe and effective control of wildland fires.

61 Fire Company Organization and Management

Prerequisite: None
Advisory: FT 1 or FT 90
Hours: 54 hours lecture
This course provides a review of fire department organization, planning, organizing and supervising to meet the needs of the fire department, with emphasis on the company officer's role.

62 Fire Service Records and Reports

Prerequisite: None
Advisory: FT 1 or FT 90
Hours: 54 hours lecture
This course covers fire department records systems, principles of report writing, applications in the area of pre-fire survey, and post-fire reporting.

63 Related Codes and Ordinances

Prerequisite: None
Advisory: FT 1 or FT 90
Hours: 54 hours lecture
This course includes familiarization and interpretation of national, state and local codes, ordinances and laws which influence the field of fire prevention.

65 Fire Investigation

Prerequisite: None
Advisory: FT 1 or FT 90
Hours: 54 hours lecture
This course includes determining the cause of fires (accidental, suspicious and incendiary); types of fires, related laws; introduction to incendiary fires; recognizing and preserving evidence; interviewing witnesses and suspects, arrest, detention, and court procedures.

66 Fire Tactics and Strategy

Prerequisite: None
Advisory: FT 1 or FT 90
Hours: 54 hours lecture
This course includes principles of fire control through the utilization of manpower, equipment, and extinguishing agents on the fireground.

68 Rescue Practices

Prerequisite: None
Advisory: FT 1 or FT 90
Hours: 54 hours lecture
This course focuses on rescue problems and techniques, emergency rescue equipment; toxic gases, chemicals, diseases, and radiation hazards. Also included are the care of victims including emergency childbirth, resuscitation, extraction and other emergency conditions.

69 Wildland Fire Control

Prerequisite: None
Advisory: FT 1 or FT 90
Hours: 54 hours lecture
This course covers all aspects of wildland fire fighting and introduces new advances in technology for wildland fire suppression.
**Fire Apparatus**

Prerequisite: None
Advisory: FT 1 or FT 90
Hours: 54 hours lecture

This course covers fire apparatus design, specifications and performance capabilities. It also includes the effective utilization of apparatus in fire service emergencies.

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**Emergency Medical Technician 1** *(same as Paramedic 77)*

Prerequisite: Health Education 10 or current Cardiopulmonary Resuscitation certification
Hours: 72 hours lecture; 72 hours laboratory

This course is designed to instruct a student to the level of Emergency Medical Technician 1. This includes all skills necessary for the individual to provide emergency medical care at a basic life support level with a fire, ambulance or other specialized service. This course is conducted in compliance with Title 22, Division 9, Chapter 2 of the California Code of Regulation and Emergency Medical Technician 1. A grade of “C” or better is required for certification as EMT-1. Not open to students who have taken Paramedic 77. May be repeated by students whose EMT certification has lapsed.

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**Emergency Medical Technician IFS Refresher Course**

Prerequisite: Valid EMT certificate
Hours: 20 hours lecture; 4 hours laboratory

Persons who hold a valid Emergency Medical Technician 1 certificate, or a certificate that has been expired for less than one year, shall be admitted. Consists of classroom instruction, simulation and supervised field instruction. May be taken four times for credit.

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**Fire Command 1A**

Prerequisite: None
Hours: 40 hours lecture

This course has been designed to introduce the in-service student to the problems of commanding a fire or other hazardous incident. It satisfies entry requirements to the Command Academy at Asilomar. The content is geared for the “First In” officer at emergency scenes. Topics emphasize the managerial and decision making skills required for command.

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**Fire Command 1B**

Prerequisite: Fire Technology 82A
Hours: 40 hours lecture

This course has been designed to take the student into the critical emergencies of handling hazardous materials and the inherent problems of commanding the scene and safely controlling and disposing of the material. It also completes the required requisite to the Command Academy at Asilomar.

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**Fire Prevention 1A** *(same as Fire Protection 83)*

Prerequisite: None
Hours: 40 hours lecture

This course provides a broad, technical overview of fire prevention codes and ordinances, inspection practices and key hazards. Some areas of discussion include flammable and combustible liquids and gases, explosives, fireworks, extinguishing systems and others.
This course includes instructional techniques: the occupational analysis, course outline, concepts of learning, levels of instruction, behavioral objectives, lesson plan development, psychology of learning and instructor evaluation. Student teaching demonstrations are required. This course applies to California Fire Service Training and Education System Certification.

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<th>Course Title</th>
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<td>Fire Instructor 1B - Instructional Techniques</td>
<td>(2)</td>
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<tr>
<td>Prerequisite: Fire Technology 86A&lt;br&gt;Hours: 40 hours lecture</td>
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<td>This is a continuation of Fire Technology 86A. The topics include: developing instructional aids, fundamentals of testing, evaluation techniques and instruments. Student teaching demonstrations are required. This course applies to California Fire Service Training and Education System's Certification.</td>
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<tr>
<td>87A</td>
<td>Fire Apparatus Driver/Operator IA - Pump Operations</td>
<td>(2)</td>
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<tr>
<td>Prerequisite: Current, valid California driver's license&lt;br&gt;Hours: 40 hours lecture</td>
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<td>This course is designed to provide the student with information on driver techniques for emergency vehicles and techniques of basic inspection and maintenance of emergency vehicles, including actual driving exercises under simulated emergency conditions.</td>
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<tr>
<td>87B</td>
<td>Fire Apparatus Driver/Operator IB - Pump Operations</td>
<td>(2)</td>
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<tr>
<td>Prerequisite: None&lt;br&gt;Hours: 40 hours lecture</td>
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<tr>
<td></td>
<td>This course provides the theory, methods and techniques for operating fire service pumps. Subjects include: types of pumps, engine and pump gauges, maintenance, unsafe pumping conditions, pressure relief devices, cooling systems, water supplies, drafting, field hydraulics and pumping operations.</td>
<td></td>
</tr>
<tr>
<td>88A</td>
<td>Rescue Systems 1 - Basic Heavy Rescue</td>
<td>(2)</td>
</tr>
<tr>
<td>Prerequisite: Fire Technology 90 and Firefighter 1 Certification&lt;br&gt;Hours: 40 hours lecture</td>
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<tr>
<td></td>
<td>This course provides heavy rescue team organization, subsurface rescue techniques and rescue considerations including blocked assess, structural damage and environmental situations. Day and night simulated rescue exercises are required.</td>
<td></td>
</tr>
<tr>
<td>88B</td>
<td>Rescue Systems 2 - Advanced Rescue Skills</td>
<td>(2)</td>
</tr>
<tr>
<td>Prerequisite: Fire Technology 88A &amp; Basic Incident Command Systems (ICS)&lt;br&gt;Hours: 40 hours lecture</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>This course provides advanced heavy rescue system techniques, key topics include structural building types, wood and mechanical shores, crib capacities, floor weight calculations, building search, confined space considerations, damaged structure hazard assessment, the use of small power and hand tools, air bags and USAR ICS.</td>
<td></td>
</tr>
<tr>
<td>90</td>
<td>Basic Firefighter Recruit Academy</td>
<td>(17.5)</td>
</tr>
<tr>
<td>Prerequisite: Acceptance into the Basic Firefighter Recruit Academy&lt;br&gt;Hours: 215 hours lecture; 405-435 hours laboratory</td>
<td></td>
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<tr>
<td></td>
<td>This course provides new fire service recruits the necessary training to be able to work effectively and safely with the fire service environment as well as within a company in the fire department in all functions of that company.</td>
<td></td>
</tr>
</tbody>
</table>
Foreign Languages

Chinese

11A Elementary Mandarin (4)
Prerequisite: None
Transfer Credit: Accepted for credit: UC, CSU
Hours: 72 hours lecture
This beginning course in Mandarin Chinese emphasizes pronunciation drill, sentence pattern analysis, and the development of language skills in listening, speaking, reading, and writing. Character reading and writing are introduced. Students will gain proficiency in understanding and speaking Mandarin in everyday situations. AA/AS area 3B; IGETC area 6

11B Elementary Mandarin (4)
Prerequisite: Chinese 11A with a grade of “C” or better
Advisory: Chinese 20
Transfer Credit: Accepted for credit: UC, CSU
Hours: 72 hours lecture
This course is the continuation of Chinese 11A. Further acquisition of language skills in listening, speaking, reading, and writing will be emphasized. Additional character reading and writing skills will be developed. Students will gain proficiency in understanding and speaking Mandarin in everyday situations. AA/AS area 3B

20 Chinese Characters (1)
Prerequisite: Chinese 11A
Transfer Credit: Accepted for credit: UC, CSU
Hours: 18 hours lecture
This is a beginning course in the study of Chinese characters. Fundamentals of the Chinese written language will be taught with an emphasis on reading and writing Chinese characters common in daily usage. This course may be taken twice.

50A Conversational Mandarin, Elementary (3)
Prerequisite: None
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This beginning course in conversational Mandarin emphasizes the development of oral language skills essential for understanding and speaking elementary Mandarin useful for everyday communication.

50B Conversational Mandarin, Elementary (3)
Prerequisite: Chinese 50A with a grade of “C” or better
Hours: 54 hours lecture
This course is a continuation of Chinese 50A. Further acquisition of language skills in understanding and speaking will be emphasized. Additional vocabulary and sentence patterns will be introduced. Students will gain proficiency in understanding and speaking Mandarin in everyday situations.

French

1A Elementary French (4)
Prerequisite: None
Transfer Credit: Accepted for credit: UC, CSU
Hours: 72 hours lecture
This course is an introduction to the language and culture of the French-speaking people. It includes the fundamentals of French pronunciation and grammar, as well as the development of listening, speaking, reading and writing with emphasis on the communicative skills. (CAN FREN SEQ A - FREN 1A+1B; CAN FREN 2) AA/AS area 3B; IGETC area 6

1B Elementary French (4)
Prerequisite: French 1A with a grade of “C” or better or two years of high school French
Transfer Credit: Accepted for credit: UC, CSU
Hours: 72 hours lecture
This course is a further development of the four basic skills: listening, speaking, reading, and writing. It is a continued study of pronunciation, fundamentals of French grammar and French culture. (CAN FREN 4) AA/AS area B

2A Intermediate French (4)
Prerequisite: French 1B with a grade of “C” or better or three years of high school French
Transfer Credit: Accepted for credit: UC, CSU
Hours: 72 hours lecture
This course includes speaking, listening, and writing practice at the intermediate level; review of French grammar; reading of various texts and further study of historical and cultural background. (CAN FREN SEQ B - FREN 2A+2B; CAN FREN 8) AA/AS area B; CSU area C2; IGETC area 3

2B Intermediate French (4)
Prerequisite: French 2A with a grade of “C” or better or four years of high school French
Transfer Credit: Accepted for credit: UC, CSU
Hours: 72 hours lecture
This course continues development of the four basic skills through reading and interpreting various works of French literature, writing summaries, reports and short compositions, and studying the historical and cultural background of French-speaking world. (CAN FREN 10) AA/AS area B; CSU area C2; IGETC area 3

11A Conversational French Elementary (3)
Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture
This course is designed for students at the elementary or 1A level in French. Conversations and discussions, both controlled and spontaneous, are used to develop basic conversational skills in French. Emphasis will include oral proficiency and development of French cultural awareness.
Foreign Languages

1B Conversational French Elementary (3)
Prerequisite: French 1A with a grade of “C” or better or two years of high school French
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture
This course is designed for students at the elementary or 1B level in French. Students will continue the development of oral-aural skills in French through conversations and discussions, both controlled and spontaneous. Emphasis will include oral proficiency and development of French cultural awareness.

12A Conversational French-Intermediate (3)
Prerequisite: French 11B with a grade of “C” or better or three years of high school French
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture
Students will continue the development of oral-aural skills in French through small group conversations and class discussions, both directed and open-ended. Grammar structures, idiomatic expressions, and verb usage will be reviewed. Reports, discussions on current events, assigned readings, and personal interest topics will be used in individual and group presentations.

12B Conversational French-Intermediate (3)
Prerequisite: French 12A with a grade of “C” or better or four years of high school French
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture
Students will continue to develop oral proficiency through emphasis on individual and small group presentation. Simple French readings will be used as a vehicle to continue the study and appreciation of the French culture and folklore through discussions and debates.

46 Teachers Aides (1-2)
Prerequisite: French 2A or four years of high school French with a grade of “C” or better
Transfer Credit: Accepted for credit: CSU
Hours: 9-18 hours lecture; 27-54 hours laboratory
This course provides an opportunity for French-speaking students to work with individuals or small groups of students enrolled in the French program. Students work with the instructor in record keeping; and correcting simple tests, journals, workbooks, and reports. They also prepare classroom materials such as charts, visual aids, and hand-outs. Open entry and exit. May be taken 4 times for credit up to a maximum of 4 units.

GERMAN

1A Elementary German (4)
Prerequisite: None
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 72 hours lecture.
This course is an introduction to the language and culture of German-speaking people. It includes the fundamentals of German pronunciation and grammar, as well as the development of listening, speaking, reading and writing with emphasis on the communicative skills. (CAN GERM SEQ A - GERM 1A+1B; CAN GERM 2) AA/AS area B; IGETC area 6

1B Elementary German (4)
Prerequisite: German 1A with a grade of “C” or better or two years of high school German.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 72 hours lecture.
This course is a further development of the four basic skills: listening, speaking, reading, and writing. It is a continued study of pronunciation, fundamentals of German grammar and German culture. (CAN GERM 4) AA/AS area B

2A Intermediate German (4)
Prerequisite: German 1B with a grade of “C” or better or three years of high school German.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 72 hours lecture.
This course includes speaking, listening and writing practice at the intermediate level; review of German grammar; reading of varied texts and further study of historical and cultural background. (CAN GERM SEQ B - GERM 2A+2B; CAN GERM 8) AA/AS area B; CSU area C2; IGETC area 3

2B Intermediate German (4)
Prerequisite: German 2A with a grade of “C” or better or four years of high school German.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 72 hours lecture.
This course continues the development of the four basic skills through reading and interpreting various works of German literature, writing summaries, reports and short compositions, and studying the historical and cultural background of the German-speaking world. (CAN GERM 10) AA/AS area B; CSU area C2; IGETC area 3

11A Conversational German - Elementary (3)
Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course is designed for students at the elementary or 1A level in German. Conversations and discussions, both controlled and spontaneous, are used to develop basic conversational skills in German. Emphasis will include oral proficiency and development of German cultural awareness.

11B Conversational German - Elementary (3)
Prerequisite: German 11A with a grade of “C” or better or two years of high school German.
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course is designed for students at the elementary or 1B level in German. Students will continue the development of oral-aural skills in German through conversations and discussions, both controlled and spontaneous. Emphasis will include oral proficiency and development of German cultural awareness.

46 Teachers Aide (1-2)
Prerequisite: German 2A or four years of high school German with a grade of “C” or better
Transfer Credit: Accepted for credit: CSU
Hours: 9-18 hours lecture; 27-54 hours laboratory
This course provides an opportunity for German-speaking students to work with individuals or small groups of students enrolled in the German program. Students work with the instructor in record keeping and correcting simple tests, journals, workbooks, and reports. They also prepare classroom materials such as charts, visual aids, and hand-outs. Open entry and exit. May be taken 4 times for credit up to a maximum of 4 units.

ITALIAN

A Elementary Italian (4)
Prerequisite: None
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 72 hours lecture.
This course introduces basic essentials of elementary grammar, sentence structure and conversation. It also introduces the Italian character, tradition, and culture. Reading of simple prose will be included. (CAN ITAL 2) AA/AS area B; IGETC area 6

1B Elementary Italian
Prerequisite: Italian 1A with a grade of “C” or better or two years of high school Italian.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 72 hours lecture.
This course is a continuation of Italian 1A. It includes grammar essentials, further practice in conversation and composition and a continued study of Italian culture. (CAN ITAL 4) AA/AS area B

1A Conversational Japanese - Elementary
Prerequisite: None
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 72 hours lecture.
This class teaches pronunciation, intonation, basic vocabulary, idioms, and grammar of spoken Japanese. The grammar emphasizes word order, postpositions and some conjugation in simple sentences. The course includes introduction to Japanese culture. This course may be taken twice.

1B Conversational Japanese - Elementary
Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 72 hours lecture.
This course is designed for students at the elementary or 1A level in Italian. Conversations and discussions, both controlled and spontaneous, are used to develop basic conversational skills in Italian. Emphasis will include oral proficiency and development of Italian cultural awareness.

JAPANESE

1A Elementary Japanese
Prerequisite: None
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 72 hours lecture
This class teaches pronunciation, intonation, basic vocabulary and grammar of spoken Japanese. The grammar emphasis is word order, postpositions and some conjugation in simple sentences. Students are required to learn Hiragana script. The course includes introduction to Japanese culture. AA/AS area B; IGETC area 6

1B Elementary Japanese
Prerequisite: Japanese 1A with a grade of “C” or better.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 72 hours lecture.
This course continues teaching vocabulary, idioms, and grammar including more complex subordinate phrases and clauses. In addition to Hiragana, students are required to learn Katakana and simple Kanji ideographs. Discussions on Japanese culture continue. AA/AS area B

20 Japanese Writing
Prerequisite: Japanese 1A
Transfer Credit: Accepted for credit: UC, CSU
Hours: 18 hours lecture.

1A Elementary Spanish
Prerequisite: None
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 72 hours lecture.

SPANISH

0A Conversational Japanese - Elementary (3)
Prerequisite: None
Hours: 54 hours lecture.
This class teaches pronunciation, intonation, basic vocabulary, idioms, and grammar of spoken Japanese. The grammar emphasizes word order, postpositions and some conjugation in simple sentences. The course includes introduction to Japanese culture. (CAN ITAL 2) AA/AS area B; IGETC area 6

Russian

1A Elementary Russian
Prerequisite: None
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 72 hours lecture.
This course is designed for students at the elementary or 1A level in Italian. Conversations and discussions, both controlled and spontaneous, are used to develop basic conversational skills in Italian. Emphasis will include oral proficiency and development of Italian cultural awareness.

1B Elementary Russian
Prerequisite: Russian 1A with a grade of “C” or better, or two years of high school Russian.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 72 hours lecture.
Continuation of Russian 1A. Further development of listening, speaking, reading, and writing skills. Continued study of Russian grammar fundamentals. Further exposure to Russian character and customs. AA/AS area B

2A Intermediate Russian
Prerequisite: Russian 1B with a grade of “C” or better, or three years of high school Russian.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 72 hours lecture.
Intermediate level listening and speaking practice. Further development of grammatical structures. Reading of modern prose. (CAN RUSS 8) AA/AS area B; CSU area C2; IGETC area 3

2B Intermediate Russian
Prerequisite: Russian 2A with a grade of “C” or better, or four years of high school Russian.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 72 hours lecture.
Continuation of Russian 2A. Reading and interpreting major types of Russian literature (short story, novel, drama, poetry). Practice in speaking and writing. Studying the historical and cultural background. AA/AS area B; CSU area C2; IGETC area 3

American River College 2002-2003
This course is an introduction to the language and culture of the Spanish-speaking world. It includes the development of listening, speaking, reading, and writing Spanish with emphasis on the communicative skills, as well as the fundamentals of Spanish pronunciation and grammar. (CAN SPAN SEQ A - SPAN 1A+1B; CAN SPAN 2) AA/AS area B; IGETC area 6

1B Elementary Spanish
Prerequisite: Spanish 1A with a grade of "C" or better or two years of high school Spanish.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
This course is a further development of the four basic skills: listening, speaking, reading, and writing Spanish. It includes emphasis on pronunciation and the fundamentals of Spanish grammar and understanding the diverse cultures of the Spanish-speaking world. (CAN SPAN 4) AA/AS area B

2A Intermediate Spanish
Prerequisite: Spanish 1B with a grade of "C" or better or three years of high school Spanish.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 72 hours lecture.
This course includes listening and speaking practice at the intermediate level and review of the fundamentals of Spanish grammar. Students begin writing short paragraphs in Spanish. Further study of cultural and historical background is included. (CAN SPAN SEQ B - SPAN 2A+2B; CAN SPAN 8) AA/AS area B; CSU area C2; IGETC area 3

2B Intermediate Spanish
Prerequisite: Spanish 2A with a grade of "C" or better or four years of high school Spanish.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 72 hours lecture.
This course continues the development of the four basic skills through reading and discussion of major types of Spanish literature (short story, drama, poetry). Writing of paragraphs and short compositions is included. Students read and discuss historical and cultural background of the Spanish speaking world. (CAN SPAN 10) AA/AS area 3B; CSU area C2; IGETC area 3

11A Conversational Spanish: Elementary
Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course is designed for students at the elementary or 1A level in Spanish. Conversations and discussions, both controlled and spontaneous, are used to develop basic conversational skills in Spanish. Emphasis will include oral proficiency and development of Hispanic cultural awareness.

11B Conversational Spanish: Elementary
Prerequisite: Spanish 11A with a grade of "C" or better or two years of high school Spanish.
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course is designed for students at the elementary level in Spanish. Students will continue the development of oral-aural skills in Spanish through conversations and discussions, both controlled and spontaneous. Emphasis will include oral proficiency and development of Spanish cultural awareness.

12A Conversational Spanish-Intermediate
Prerequisite: Spanish 11B with a grade of "C" or better or three years of high school Spanish.
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
Students will continue the development of oral-aural skills in Spanish through small group conversations and class discussions, both directed and open-ended. Grammar structures, idiomatic expressions, and verb usage will be reviewed. Reports, discussions on current events, assigned readings, and personal interest topics will be used in individual and group presentations.

12B Conversational Spanish-Intermediate
Prerequisite: Spanish 12A with a grade of "C" or better or four years of high school Spanish.
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
Students will continue to develop oral proficiency through emphasis on individual and small group presentation. Simple Hispanic readings will be used as a vehicle to continue the study and appreciation of the Hispanic culture and folklore through discussions, and debates.

14 Spanish for Professionals - Intermediate
(formerly Spanish 52A and 52B)
Prerequisite: Spanish 2A with a grade of "C" or better or four years of high school Spanish.
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This is an intermediate course designed for persons in law enforcement, business and finance, social services and medical personnel. The emphasis of the course is on acquiring verbal facility in interviewing, collecting and analyzing data, giving instructions, and general courtesies. The course will help students to acquire language proficiency while reviewing and broadening the grammar foundation attained in elementary Spanish. It will introduce specific vocabulary necessary for professionals to successfully communicate in a professional situation, such as an interview. Cultural and behavioral attitudes appropriate for relating to persons of Hispanic heritage will be compared with other cultures. This course may be taken twice.

42A Conversational Spanish: Intermediate
Prerequisite: Spanish 1B with a grade of "C" or better or two years of high school Spanish.
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture.
This course is designed at the intermediate level in Spanish with focus on further development of oral-aural skills through conversations and discussions, both directed and spontaneous. Emphasis will be on fostering oral proficiency and further development of Hispanic cultural awareness.

42B Conversational Spanish: Intermediate
Prerequisite: Spanish 42A with a grade of "C" or better or three years of high school Spanish.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 36 hours lecture.
This course is designed at the intermediate level in Spanish with focus on further development of oral-aural skills through conversations and discussions, both directed and spontaneous. Emphasis will be on fostering oral proficiency and further development of Hispanic cultural awareness.

46 Teachers Aides
Prerequisite: Spanish 2A or four years of high school Spanish with a grade of "C" or better.
Transfer Credit: Accepted for credit: CSU.
Hours: 9-18 hours lecture, 27-54 hours laboratory.
This course provides an opportunity for Spanish-speaking students to work with individuals or small groups of students enrolled in the Spanish program. Students work with the instructor in record keeping and correcting simple tests, journals, workbooks, and reports. They also prepare classroom materials such as charts, visual aids, and hand-outs. Open entry and exit. May be taken four times for credit to a maximum of four units.
Funeral Service Education

Degree: A.S. - Funeral Service Education
Area: Health & Education
Dean: Sheryl Gessford
Director, Allied Health: Lucille Rybka
Phone: (916) 484-8254
Counseling: (916) 484-8572

The ARC Program

The Funeral Service Education program at American River College prepares students to work with the bereaved providing sensitive and effective intervention during a time of need. The goal of the Funeral Service Education program is to prepare a graduate who is eligible for licensure to practice as a funeral service practitioner. Students are prepared for employment as funeral service practitioners and embalmers through courses in funeral service management, embalming, anatomy, restorative art, funeral service fundamentals, funeral service counseling and mortuary law.

The Funeral Service Education Program consists of a combination of general education and funeral service education courses with related laboratory experience in local funeral service agencies. Successful completion of the program qualifies the student to take the California Board examination to become a licensed embalmer and eligible for employment. Completion of this program enables students to take the national board examination in addition to the California Board examination.

NOTE: A person convicted of any offense other than a minor traffic violation will be required to declare this on the application to take the licensing exam. This may affect eligibility for the written exam.

Career Opportunities

According to the Occupational Outlook handbook published by the U.S. Department of Labor, employment opportunities for funeral directors are expected to be excellent. One reason is that the number of graduates in funeral service education is likely to continue to be less than the number of job openings in the field. The nature of funeral service is changing more rapidly than at any point in American history. The opportunities available for graduates are greater and more expansive than at any other time. Funeral service professionals can elect to specialize in embalming and cosmetic techniques, counseling, pre-need or at-need advising. Funeral service education also provides an excellent background for pursuits in many rapidly growing areas. Available opportunities in allied fields include the sales of merchandise such as caskets, vaults and memorial monuments, involvement in coroner's and medical examiners's offices, and marketing.

Requirements for Pre-enrollment to the program:
Graduation from an accredited high school or G.E.D.
A grade of C or better in the following courses: Biology 60 and 60L; Chemistry 21; Funeral Service Education 50

Pre-Enrollment Deadlines:
Pre-enrollment forms are available from the Allied Health office. Applications are due to the Allied health office by May 17. Only completed application packets will be considered. Completed applications must include high school transcript or G.E.D. and all official college transcripts. Refer to current information sheet. Grades in progress will be accepted.

Enrollment

Only students who meet the pre-enrollment requirements and follow the pre-enrollment procedure will be considered for the program.

The student admitted to the Funeral Service Education program is required to have a physical examination and required inoculations prior to the start of the semester. Selection is based on a random selection process should the number of applicants exceed available spaces in the program.

Requirements for Degree Major: 58 units

Core Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology 60, 60L</td>
<td>4</td>
</tr>
<tr>
<td>Biology 6</td>
<td>4</td>
</tr>
<tr>
<td>Chemistry 2A</td>
<td>5</td>
</tr>
<tr>
<td>Computer Information Science</td>
<td>1</td>
</tr>
<tr>
<td>Funeral Service Education 50</td>
<td>2</td>
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<tr>
<td>Speech 1 or 15</td>
<td>3</td>
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<tr>
<td>Psychology 9</td>
<td>3</td>
</tr>
<tr>
<td>Accounting 60</td>
<td>3</td>
</tr>
<tr>
<td>English 60 or ESL 63W or Business 8</td>
<td>3</td>
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</table>

Concentration Requirements: 25 Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funeral Service Education 51</td>
<td>2</td>
</tr>
<tr>
<td>Funeral Service Education 52</td>
<td>3</td>
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<td>Funeral Service Education 53</td>
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<td>Funeral Service Education 61</td>
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<td>Funeral Service Education 62</td>
<td>2</td>
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<tr>
<td>Funeral Service Education 71</td>
<td>3</td>
</tr>
<tr>
<td>Funeral Service Education 72</td>
<td>3</td>
</tr>
<tr>
<td>Funeral Service Education 73</td>
<td>3</td>
</tr>
</tbody>
</table>

General Education Graduation Requirements

Students must also complete the general education graduation requirements for an A.S. degree. See Graduation requirements.
<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>Introduction to Funeral Service</td>
<td>(2)</td>
</tr>
<tr>
<td></td>
<td><strong>Prerequisite:</strong> None</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Hours:</strong> 36 hours lecture</td>
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<tr>
<td></td>
<td>This course is a survey of the history and comprehensive overview of the field of funeral service. Emphasis is on the role and skills of the funeral service practitioner. It provides an understanding of the funeral service industry and its career opportunities.</td>
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</tr>
<tr>
<td>51</td>
<td>Embalming I</td>
<td>(2)</td>
</tr>
<tr>
<td></td>
<td><strong>Prerequisite:</strong> Enrollment in the Funeral Service Education Program</td>
<td></td>
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<tr>
<td></td>
<td><strong>Corequisite:</strong> FSE 53</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Hours:</strong> 36 hours lecture</td>
<td></td>
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<tr>
<td></td>
<td>This course is an introduction to the phenomenon of death in the human body. It includes the processes of preservation, restoration and sanitation in treating the dead human body.</td>
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<tr>
<td>52</td>
<td>Funeral Directing I</td>
<td>(3)</td>
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<tr>
<td></td>
<td><strong>Prerequisite:</strong> Enrollment in the Funeral Service Education Program</td>
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<tr>
<td></td>
<td><strong>Hours:</strong> 54 hours lecture</td>
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<td></td>
<td>This course is designed to introduce the general practices of funeral directing. It introduces the sociological phenomena that affect all the elements of funeral service including ethnic groups, family structures, and factors of change that relate to funeralization. It also includes notification of death, transfer and disposition of bodies, arrangement conferences, pre-planned funerals and post-arrangement follow-up.</td>
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<tr>
<td>53</td>
<td>Restorative Art</td>
<td>(3)</td>
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<tr>
<td></td>
<td><strong>Prerequisite:</strong> Enrollment in the Funeral Service Education Program</td>
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<tr>
<td></td>
<td><strong>Hours:</strong> 54 hours lecture</td>
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<td></td>
<td>This course introduces the techniques of creating an acceptable physical appearance of the deceased for the benefit of the survivors. Included are the study of facial features, cosmetics, and restorative treatment for a variety of situations faced by the practitioner.</td>
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<tr>
<td>54</td>
<td>Pathology</td>
<td>(1)</td>
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<tr>
<td></td>
<td><strong>Prerequisite:</strong> Enrollment in the Funeral Service Education Program</td>
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<tr>
<td></td>
<td><strong>Corequisite:</strong> Biology 6, Funeral Service Education 51</td>
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<td></td>
<td><strong>Hours:</strong> 18 hours lecture</td>
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<td></td>
<td>This course offers a study of pathological disease conditions and how they affect various parts of the body. Particular conditions that relate to or affect the embalming or restorative art process are emphasized.</td>
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<tr>
<td>61</td>
<td>Embalming II</td>
<td>(2)</td>
</tr>
<tr>
<td></td>
<td><strong>Prerequisite:</strong> Funeral Service Education 51 &amp; 53 with a grade of &quot;C&quot; or better</td>
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<tr>
<td></td>
<td><strong>Hours:</strong> 36 hours lecture</td>
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<td></td>
<td>This course is a continuation of Embalming I. It is the study of vascular anatomy, case analysis, the selection and injection of embalming fluids, and treatment of specific conditions requiring special attention.</td>
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<tr>
<td>62</td>
<td>Funeral Directing II</td>
<td>(2)</td>
</tr>
<tr>
<td></td>
<td><strong>Prerequisite:</strong> Funeral Service Education 52 with a grade of &quot;C&quot; or better</td>
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<td></td>
<td><strong>Hours:</strong> 36 hours lecture</td>
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<td></td>
<td>This course introduces the basic philosophies of a cross-section of religious and ethnic funeral practices and the role of the funeral practitioner in directing each type. Also included are procedures for fraternal, military, and celebrity funerals.</td>
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<tr>
<td>63</td>
<td>Merchandising in the Funeral Service Industry</td>
<td>(3)</td>
</tr>
<tr>
<td></td>
<td><strong>Prerequisite:</strong> Funeral Service Education 52 with a grade of &quot;C&quot; or better</td>
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<td></td>
<td><strong>Corequisite:</strong> Funeral Service Education 62</td>
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<td></td>
<td><strong>Hours:</strong> 54 hours lecture</td>
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<td></td>
<td>This course introduces the student to merchandising as it applies to the funeral profession. The curriculum is divided into two main sections. The first covers construction and features of caskets, outer burial containers, and other funeral related products. The second section examines methods of pricing, display, presentation, and control of funeral merchandise.</td>
<td></td>
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<tr>
<td>71</td>
<td>Funeral Services Counseling</td>
<td>(3)</td>
</tr>
<tr>
<td></td>
<td><strong>Prerequisite:</strong> Funeral Service Education 62 with a grade of &quot;C&quot; or better</td>
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<td></td>
<td><strong>Corequisite:</strong> Psychology 9</td>
<td></td>
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<td></td>
<td><strong>Hours:</strong> 54 hours lecture</td>
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<td></td>
<td>This course examines communication skills and the role of the funeral director as facilitator, counselor, and caregiver. Included are specific communications and counseling techniques as they are applied in funeral service practice.</td>
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<tr>
<td>72</td>
<td>Funeral Service Management</td>
<td>(3)</td>
</tr>
<tr>
<td></td>
<td><strong>Prerequisite:</strong> Funeral Service Education 62 with a grade of &quot;C&quot; or better</td>
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<td></td>
<td><strong>Hours:</strong> 54 hours lecture</td>
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<td></td>
<td>This course introduces the basic principles of management as they apply to the practice of the funeral profession. The role and function of an effective manager are explored. Emphasis is placed on the management functions of planning, organizing, motivating, directing, and controlling. Specific areas of funeral service practice and managerial guidelines for those areas are covered. Additionally, theory as it relates to funeral service practice is addressed.</td>
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<tr>
<td>73</td>
<td>Funeral Service Law and Ethics</td>
<td>(3)</td>
</tr>
<tr>
<td></td>
<td><strong>Prerequisite:</strong> Funeral Service Education 62 with a grade of &quot;C&quot; or better</td>
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<tr>
<td></td>
<td><strong>Hours:</strong> 54 hours lecture</td>
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<tr>
<td></td>
<td>This course introduces law and the judicial system as they pertain to businesses in general and to funeral service specifically. Further, this course covers personal and professional ethics that guide decisions and actions in the proper treatment of the dead.</td>
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<tr>
<td>74</td>
<td>Funeral Service Education Internship</td>
<td>(5)</td>
</tr>
<tr>
<td></td>
<td><strong>Prerequisite:</strong> Funeral Service Education 61 and 62 with a grade of &quot;C&quot; or better</td>
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<tr>
<td></td>
<td><strong>Corequisite:</strong> Funeral Service Education 71, 72, 73</td>
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<tr>
<td></td>
<td><strong>Hours:</strong> 18 hours lecture; 216 hours laboratory</td>
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<td></td>
<td>This course provides an opportunity to apply classroom instruction in funeral service education to real-world practice in the community. Interns participate in a on-site lab experience program at an approved off-campus preceptor site.</td>
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</tbody>
</table>
The study of geography investigates the spatial variation in natural and human phenomena, such as climate, landforms, vegetation, cultural diversity, and resource utilization. Geographers use this understanding to explain the character of regions; to ascertain the ways in which humans—historical and contemporary—have utilized and shaped the earth’s surface; and to predict future patterns and interactions between humans and the natural environment.

Geographic Information Systems (GIS)

Geographic Information System (GIS) is an emerging, powerful technology used to capture, store, transform, manage, analyze, and display spatial information. This technology has a wide range of applications in planning decisions by government agencies, business, and industry. According to an Environmental Sciences Research Institute survey, over 80 percent of the data used for decision-making in government and industry has a spatial component. New areas of rapid growth are in criminal analysis, marketing, real estate, and retail site location, banking, health-care planning, insurance, and real estate.

Career Opportunities

Most local, state, and federal government agencies use GIS, as do businesses, planners, architects, foresters, geologists, archeologists, and so on. The growth of GIS has been a marketing phenomenon of amazing breadth and depth and will remain so for many years to come. It is likely that all students, regardless of their particular field of interest, will at least come across and probably use a GIS in some way in the years ahead. The purpose of this program is to prepare students for careers in this expanding technology.

Mathematics - Physical Science

Requirements for Degree Major
18 units of transfer level course work in addition to other graduation requirements. Courses may be selected from astronomy, chemistry, engineering, geology, mathematics, physical geography, physical science, physics, and statistics. See graduation requirements.

General Science

Requirements for Degree Major
18 units of transfer-level work in science in addition to other graduation requirements.

Social Science

Requirements for Degree Major
18 units of transfer-level work in addition to other graduation requirements.

Courses taken must be in at least four of the following areas: Anthropology, Economics, Geography, History, Philosophy, Political Science, Psychology (except Psychology 4), and Sociology.

Geographic Information Systems

Two certificates in GIS are offered. The GIS certificate is offered for students interested in traditional analysis of spatial phenomena using GIS with applications in geography, forestry, natural resource management, economics, marketing, criminology, etc. The GIS-Web Applications and Programming certificate emphasizes the computer science aspects of GIS, including database design, database management, programming, web-page design, and internet applications.
Requirements for Degree Major: 35-39 units

Core Requirements
- Geography 9 3
- Select 2 of the following:
  - Anthropology 3 3
  - Biology 5 4
  - Biology 12 3
  - Biology 16 4
  - Biology 18 3
  - Business 59 3
  - Chemistry 7 4
  - Fire Technology 1 3
  - Geography 1 3
  - Geography 2 3
  - Geogoraphy 7 3
  - Geology 1 3
  - Geology 5 3
  - Geology 8 3
  - Marketing 20 3
  - Natural Resources 1 3
  - Natural Resources 2 3
  - Natural Resources 3 3
  - Natural Resources 5 3
  - Physical Science 1 3
  - Real Estate 19 3

Concentration Requirements
- Geography 14 1
- Geography 20 3
- Geography 22 3
- Geography 23 3
- Geography 25A 2
- Geography 25B 2
- Geography 27A 2
- Geography 27B 2
- Geography 28A 2
- Geography 28B 2
- Geography 48 1-3

Recommended Electives
- CIS 12A, 12B, 13A, 13B, 15A, 37, 38, 39; Design Technology 66

Requirements for Certificate: 27-29 units

Courses Required
- Geography 9 3
- Geography 14 1
- Geography 20 3
- Geography 22 3
- Geography 23 3
- Geography 25A 2
- Geography 25B 2
- Geography 26 3
- Geography 27A or 27B 2
- Geography 28A 2
- Geography 48 1-3

Geographic Information Science:
Web Applications and Programming Certificate

Requirements for Certificate: 43-45 units

Courses Required
- Geography 9 3
- Geography 23 3
- Geography 25A 2
- Geography 25B 2
- Geography 27A 2
- Geography 27B 2
- Geography 28A 2
- Geography 28B 2
- Geography 29 4
- Geography 48 1-3
- Computer Information Science 3 3
- Computer Information Science 13A 1
- Computer Information Science 13B 1
- Computer Information Science 14A 1
- Computer Information Science 22 3
- Computer Information Science 23 4
- Computer Information Science 37 3
- Computer Information Science 38 4

Prerequisite: None
Advisory: English 78, 256 or ESL 1W, Mathematics 215 or placement through assessment.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.

This course presents a systematic survey of the physical earth and the natural processes that influence humankind. The course provides an introduction to the use of maps and other tools employed in the analysis of patterns of weather, climate, soils, landforms, and vegetation. (CAN GEOG 2) AA/AS area A; CSU area B1; IGETC area 5A

Requirements for Degree Major - Science General

18 units of transfer level course work in science in addition to other graduation requirements

Two laboratory courses must be included, one in a physical science and one in a biological. Courses may be selected from anatomy, astronomy, bacteriology, biology, botany, chemistry, geology, physical anthropology, physical geography, physical science, physiology, physics and zoology. See ARC graduation requirements.

1 Physical Geography: Exploring Earth's Environmental Systems (3)

Prerequisite: None
Advisory: English 78, 256 or ESL 1W, Mathematics 215 or placement through assessment.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.

This course presents a systematic survey of the physical earth and the natural processes that influence humankind. The course provides an introduction to the use of maps and other tools employed in the analysis of patterns of weather, climate, soils, landforms, and vegetation. (CAN GEOG 2) AA/AS area A; CSU area B1; IGETC area 5A

2 Human Geography: Exploring Earth's Cultural Landscapes (3)

Prerequisite: None
Advisory: English 78 or ESL 2R, English 256 or ESL 1W, Mathematics 215; or placement through assessment.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.

This course considers the diverse patterns of human development, attitudes and movement on Earth. People's various societal and economic systems and their different levels of interaction with nature are studied and com-
pared. World population and world food systems are surveyed and analyzed. The growth of cities and urban areas are considered, as are aspects of regional planning. The goal is to gain an understanding of people's place on Earth and, thus, improve human relations and also people’s relationship on Earth. (CAN GEOG 4) AA/AS area C2 & F; CSU area D3; IGETC area 4

6 Weather and Climate (3)

Prerequisite: None
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
This course is an introduction to atmospheric processes including energy and moisture exchanges, atmospheric pressure, winds and global circulation. Severe weather conditions such as hurricanes and tornadoes are studied. World, regional and local climates are investigated. Student work will include weather observations and analysis using charts, weather maps and instruments for obtaining atmospheric data.

7 Introduction to Oceanography (same as Geology 5) (3)

Prerequisite: None
Advisory: Geology 1 or Geography 1
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture.
This course is an integrated study of water on earth emphasizing physical oceanography, ocean and shoreline processes, plate tectonics, sea floor morphology, ocean chemistry, marine resources, and environmental concerns. Students will gain familiarity with regional physical shoreline features and processes through a field trip, completion of a paper, and class discussions. Not open to students who have completed Geology 5.

7L Introduction to Oceanography Lab (same as Geology 5L) (1)

Prerequisite: None
Corequisite: Geography 7 or Geology 5
Advisory: Geology 1 or Geography 1
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours laboratory.
This course is a laboratory investigation of water on earth, emphasizing the shape of the sea floor, marine navigation, plate tectonics, sea floor materials and their utilization, the physical and chemical nature of sea water, currents, tides, and marine weather. Not open to students who have completed Geology 5L.

9 Introduction to Geographic Information Systems (3)

Prerequisite: None
Advisory: Computer Information Science 1, (Windows Operating System)
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture.
A Geographic Information System (GIS) is a computer-based data processing tool used to manage and analyze spatial information. Applications of GIS include environmental assessment, analysis of natural hazards, site analysis for business and industry, resource management and land-use planning. This course introduces students to the concepts, techniques, and tools of GIS including data acquisition, management, manipulation and analysis, and cartographic output. Through hands-on exercises and/or projects, students will acquire skills and a conceptual base on which they can build further expertise in GIS.

10 World Regional Geography (3)

Prerequisite: English 78 or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture.

This course is a global survey of the world's cultural regions. Basic geographic concepts and ideas are used to study and compare people, resources, landscapes, livelihood and economics, and origins across eight major geographic regions. The interaction of countries and regions, their global roles, and the conflicting pressures of cultural diversity versus globalization are presented. The widening gap between more developed and less developed countries is integrated throughout the course. Cultural and ethnic diversity, as it pertains to the expanding population of the United States, is evaluated throughout the course. AA/AS area C2; 3F; CSU area D3; IGETC area 4

11 Physical Geography Laboratory (1)

Prerequisite: None
Corequisite: Geography 1
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours laboratory.
This course is a laboratory study of basic principles and concepts involved in understanding Earth's physical systems. Units feature observation, measurement, and analysis in energy, weather and climate, vegetation, soils, landforms, and environmental hazards. In addition to computer applications, construction of maps and interpretation of remote sensing data are integral activities. AA/AS area A; CSU area B1; IGETC area 5A

13 Environmental Hazards and Natural Disasters (same as Geology 13) (3)

Prerequisite: None
Transfer Credit: Accepted for credit: CSU, UC.
Hours: 54 hours lecture.
This course covers the environmental effects and applications of Earth-related processes. It focuses on earthquakes, volcanic eruptions, landslides, and flooding; availability and exploitation of natural resources; waste disposal; and global climate change. Humans as a force in environmental change will be emphasized. The course addresses geology, engineering, environmental studies, geography, and science education. One field trip is required. Not open to students who have completed Geology 13. AA/AS area A; CSU B1

14 Introduction to the Global Positioning System (GPS) (1)

Prerequisite: None
Advisory: Geography 1, Geography 11
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture.
This course will introduce the Global Positioning System (GPS), including the conceptual basis for GPS and hands-on operation of the technology, including computer interfaces, GIS software, and real-world applications. Recommended for anyone needing to acquire, process, or display location information.

20 Cartographic Design for GIS (3)

Prerequisite: Geography 9 (or Geog/Envt 19 at CRC) with a grade of “C” or better.
Advisory: CIS 1, IBM Compatible Computers and Microsoft Windows.
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course provides a comprehensive study of GIS (Geographic Information System) - applicable cartography including cartographic principles, data acquisition methods used in map production, and methods of base map development. The course will include the study of cartography to include history, principles, map projections, map scale, types of thematic maps, and map accuracy. Techniques used in GIS base map development (scanning, digitizing and coordinate geometry) will be introduced using hands-on exercises. The course will include the production and presentation techniques of professional quality maps. The course will include hands-on work in computer-assisted mapping projects.
21  Geography of California  (3)

Prerequisite: None
Corequisite: English 256 or ESL 1W, English 78 or ESL 2R, Mathematics 215, or placement through assessment.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.

This course is a study of the various natural and cultural environments of California, with special emphasis on the interaction of landforms, climate, natural vegetation, soils and resources with people. Historical, political and economic development within this diverse environment is presented. The diversity of cultures which make up the state's expanding population are studied and compared. Analysis of relevant issues of the day including those based on ethnic and cultural differences form an integral part of the course. CSU area D3, IGETC area 4

22  Database Design and Management in GIS  (3)

Prerequisite: Geography 9 with a grade of "C" or better.
Advisory: GIS 1, 13A, 13B.
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.

This course examines the principles of database management and design including conversion fundamentals, modeling techniques and strategic planning. The needs, alternatives, and pitfalls of database development and conversion are discussed. In addition, this course also includes the examination of various types of data applicable to GIS and examines relevant issues including hardware and software requirements. Particular attention is paid to determining the appropriate methodology, developing a conversion plan, and data quality assurance. This course includes hands-on practical exercises in database management skills.

23  Spatial Analysis and Modeling in GIS  (3)

Prerequisite: Geography 9 with a grade of "C" or better.
Advisory: CIS 1; IBM compatible Computers and Microsoft Windows; Statistics 1.
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.

This course provides a general survey of the fundamentals of spatial information systems and a survey of quantitative techniques applicable to spatial data. This course is focused on the functionality of GIS as an effective tool for modeling and analyzing complex spatial relationships. Quantitative methods, to include measures of central tendency, dispersion, and density are discussed. Applications of such methods will be presented using empirical data.

24  Field Studies in Geography  (0.5-4)

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 3-24 hours lecture, 18-144 hours laboratory.

This course involves field study of selected locations of geographic interest. Course content will vary according to field destination but may include topics in physical geography (e.g., plant and animal communities, climate and weather, geology and geomorphology, natural hazards, environmental impacts, etc.), human geography (e.g., cultural landscapes, economic activities, transportation issues, land use patterns, etc.), and/or introduction to tools and techniques used for geographic field research (e.g., map and compass, the Global Positioning System (GPS), Geographic Information Systems (GIS), etc.). Field excursions are required. May be taken 4 times for a maximum of 6 units.

25A  Introduction to Desktop GIS  (2)

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 30 hours lecture, 18 hours laboratory.

This course provides the foundation for and experience with using desktop geographic information system software (such as ArcView 3.2). It also provides the conceptual overview and practice needed to take advantage of the software's display and attribute querying functions. Emphasis is placed on basic software functionality, database construction, and management. This course is the first of a 2 part series. This course may be taken four times on a different software package or version.

25B  Intermediate Desktop GIS  (2)

Prerequisite: Geography 25A on a corresponding version of desktop GIS software with a grade of "C" or better.
Transfer Credit: Accepted for credit: CSU
Hours: 30 hours lecture, 18 hours laboratory.

This course builds on the material presented in Geography 25A using desktop GIS software (such as ArcView 3.2) and focuses on spatial analysis/querying and cartographic presentation. It provides the opportunity to utilize GIS software's advanced querying capabilities in analyzing spatial relationships in GIS. Spatial analysis and network analysis will also be introduced using available software. This course may be taken four times on a different software package or version.

26  Data Acquisition in GIS  (3)

Prerequisite: None.
Hours: 54 hours lecture.

This course provides students with the knowledge and practical experience necessary to develop skills in the acquisition, conversion, and creation of spatial data. Topics include acquisition of existing data, metadata, conversion in format of digital data, creating digital data utilizing digitizers and scanners, the utilization of remote sensing data, and the Global Positioning System.

27A  Introduction to GIS Programming  (2)

Prerequisite: Geography 25B
Transfer Credit: Accepted for credit: CSU
Hours: 30 hours lecture, 18 hours laboratory.

This course introduces students to programming in GIS utilizing ArcView's proprietary programming language, Avenue. GIS programming allows the user to modify and customize ArcView's graphic user interface (GUI). Students will utilize this programming language to modify GIS tools and commands, create new GIS tools, automate GIS operations, and integrate ArcView with other software applications.

27B  Intermediate GIS Programming  (2)

Prerequisite: Geography 27A, or Geography 9 and CIS 38
Transfer Credit: Accepted for credit: CSU
Hours: 30 hours lecture, 18 hours laboratory.

This course provides the necessary foundation to become a Geographic Information Systems (GIS) applications developer with MapObjects software. MapObjects is a collection of mapping and GIS components that lets application developers add dynamic mapping and GIS capabilities to other software application. This course will concentrate on building MapObjects functionality into the Visual Basic application environment. Students will learn how to embed GIS functionality into powerful programming languages such as Visual Basic, C++, Oracle FORMS, and Delphi. MapObjects comprises several geographic functions including geographic query, spatial analysis, geocoding, thematic display, and data integration.
28A Advanced Desktop GIS (2)

Prerequisite: Geography 9 and one of the following: Geography 20, 22, 23, or 26 with a grade of "C" or better.
Transfer Credit: Accepted for credit: CSU
Hours: 27 hours lecture, 27 hours laboratory.
This course provides a conceptual overview of a full-feature, powerful desktop GIS software (such as ARC/INFO 8.0). Through instruction and practice, the software's topological data model and geodatabase model will be introduced. Topics include creating and editing spatial data producing map displays, working with attribute data, and the basics of grid processing. This course is the first of a 2-part series.

28B Advanced Desktop GIS with Applications (2)

Prerequisite: Geography 28A with a grade of "C" or better
Transfer Credit: Accepted for credit: CSU
Hours: 27 hours lecture, 27 hours laboratory.
This course provides a knowledge of a full-featured, powerful desktop GIS software (such as ARC/INFO 8.0). Software will be used to apply geoprocessing concepts to solving geographic problems. Topics will include creating and editing spatial data, production of maps, working with attribute data, and the basics of grid processing.

29 Introduction to Web-based GIS Application Development (4)

Prerequisite: Geography 9 and CIS 22
Advisory: CIS 23
Transfer Credit: Accepted for credit: CSU
Hours: 63 hours lecture; 27 hours laboratory
This course introduces the development of web-based GIS solutions. Web-authoring tools and Internet map servers (such as ArcIMS) will be used to teach the techniques of Internet mapping and interactive user interface design for GIS applications. Focus will be on the theories and principles behind Internet mapping to perform spatial analysis, on GIS application development, and on web design for Internet mapping systems.

48 GIS Work Experience (1-3)

Prerequisite: A written confirmation of placement in an agency.
Corequisite: Geography 9
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture; and 75-225 paid or 60-180 non-paid laboratory.
A directed field study program providing students with an opportunity to apply classroom instruction in geographic information systems to real-world GIS projects in the community. Students will be under the supervision of an advisor from the college while participating in a short-term work experience program in a business or government agency.

49 Special Studies in Geography ()

Prerequisite: None
Field trips to selected locations of geographic interest. This course provides a general geographic understanding of a particular region of California. Course content may include plant and animal communities; climate and weather; plate tectonics; earthquakes and seismicity; geomorphology; recent volcanic activity; glacial features; and cultural, historical, and economic elements. Intended for those with a general interest in geography, earth science, environmental studies, science education, or the outdoors. Field trip(s) required.
Geology is the study of the origin and evolution of the earth, using the principles of mathematics, chemistry, physics, and biology. Geologists study rocks, minerals, and fossils in an effort to draw conclusions about the Earth’s observable surface processes, as well as those processes taking place inside the Earth.

General Science

Requirements for Degree Major
18 units of transfer level course work in science in addition to other graduation requirements

Two laboratory courses must be included, one in a physical science and one in a biological. Courses may be selected from anatomy, astronomy, bacteriology, biology, botany, chemistry, geology, physical anthropology, physical geography, physical science, physiology, physics and zoology. See ARC graduation requirements.

Mathematics - Physical Science

Requirements for Degree Major
18 units of transfer level course work in addition to other graduation requirements Courses may be selected from astronomy, chemistry, engineering, geology, mathematics, physical geography, physical science, physics and statistics. See graduation requirements.

1 Physical Geology (3)

Prerequisite: None
Advisory: Mathematics 215, English 78, 256 or ESL 1W; or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.

This is an in-depth course designed to give students an understanding of the dynamic nature of the Earth through the study of earth processes (plate tectonics, plate boundary events and features, the ocean basins, earthquakes and the Earth’s interior, mineral and rock systems, ground water, development and destruction of landforms, glaciers, deserts and examples of environmental geology). One field trip experience is required. May be taken separately from the physical geology laboratory. (CAN GEOL 2 - GEOL 1+2) AA/AS area A; CSU area B1; IGETC area 5A

2 Physical Geology Laboratory (1)

Prerequisite: None
Corequisite: Geology 1
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours laboratory.

This course is the study of common rocks and minerals, topographic maps, geological maps and air photographs and first-hand field observations of the local geology. (CAN GEOL 2 - GEOL 1+2) AA area A; CSU area B1; IGETC area 5A

3 Historical Geology (3)

Prerequisite: None
Advisory: Geology 1
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.

This course covers geologic history of Earth, as shown by the changing pattern of land and sea and by the succession of fauna and flora. Stratigraphic and other techniques for interpreting the sequence of past geological events are studied. CSU area B1

3L Historical Geology Laboratory (1)

Prerequisite: None
Corequisite: Geology 3
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours laboratory.

This course covers geologic history of the earth as shown by the changing patterns of land and sea and by the succession of fauna and flora. Stratigraphic and other techniques for interpreting the sequence of past geological events are studied.

5 Introduction to Oceanography (3) (same as Geography 7)

Prerequisite: None
Advisory: Geology 1 or Geography 1
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.

This course is an integrated study of water on earth emphasizing physical oceanography, ocean and shoreline processes, plate tectonics, sea floor morphology, ocean chemistry, marine resources, and environmental concerns. Students will gain familiarity with regional physical shoreline features and processes through a field trip, completion of a paper, and class discussions. Not open to students who have completed Geography 7.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>5L</td>
<td>Introduction to Oceanography Lab (same as Geography 7L)</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Introduction to Mineralogy</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>Earth Science</td>
<td>3</td>
</tr>
<tr>
<td>8L</td>
<td>Earth Science Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>Geology of California</td>
<td>3</td>
</tr>
<tr>
<td>13</td>
<td>Environmental Hazards and Natural Disasters</td>
<td>3</td>
</tr>
<tr>
<td>18</td>
<td>Geology of the National Parks</td>
<td>3</td>
</tr>
<tr>
<td>24</td>
<td>Field Studies in Geology</td>
<td>0.5-4</td>
</tr>
</tbody>
</table>

**5L. Introduction to Oceanography Lab (same as Geography 7L)**

Prerequisite: None  
Corequisite: Geography 7 or Geology 5  
Advisory: Geography 1 or Geology 1  
Transfer Credit: Accepted for credit: UC, CSU  
Hours: 54 hours laboratory.  

This course is a laboratory investigation of water on earth, emphasizing the shape of the sea floor, marine navigation, plate tectonics, sea floor materials and their utilization, the physical and chemical nature of sea water, currents, tides, and marine weather. Not open to students who have completed Geography 7L.

**6. Introduction to Mineralogy**

Prerequisite: Geology 1  
Advisory: Chemistry  
Transfer Credit: Accepted for credit: UC, CSU  
Hours: 36 hours lecture; 108 hours laboratory.  

This course is an introduction to crystal structure and determination of minerals by crystal form, hardness and cleavage. Techniques of spectroscopic and wet chemical analysis, stereogram methods and beginning optical mineralogy.

**8. Earth Science**

Prerequisite: None  
Advisory: Mathematics 215 and English 78, English 256 or ESL 1W; or placement through assessment.  
Transfer Credit: Accepted for credit: UC (unit limitation), CSU  
Hours: 54 hours lecture.  

This is an introductory science course covering major topics in geology, oceanography, meteorology, astronomy, scientific method and philosophy of science. Course is not designed for science and/or geology majors. This course may not be taken with Geology 2. AA area A; CSU area B1, IGETC area 5A

**8L. Earth Science Laboratory**

Prerequisite: None  
Corequisite: Geology 8  
Advisory: English 58 or 60, English 78, or ESL 63 and ESL 2R; with a grade of “C” or better, or placement through assessment process.  
Transfer Credit: Accepted for credit: UC, CSU  
Hours: 54 hours laboratory.  

This course emphasizes scientific methods and systematic laboratory procedures. Includes weather analysis, rock and mineral identification, study of geologic concepts by means of topographic maps, and exercises in astronomy and oceanography. One field trip is required. Not available for credit to students who have completed Geology 1 or 2. CSU area B1; IGETC area 5A

**12. Geology of California**

Prerequisite: English 58 or 60, English 78 or ESL 63 and ESL 2R, Mathematics 51, or placement through assessment.  
Transfer Credit: Accepted for credit: UC, CSU  
Hours: 54 hours lecture.  

A survey of the physical and historical aspects of California geology, emphasizing the linkage of geology and people through economic and social impacts. Recommended for non-majors and majors in geology. Of particular value to science, engineering, environmental studies, education, and economics majors. One field trip is required. AA/AS area A; CSU area B1

**13. Environmental Hazards and Natural Disasters**

Prerequisite: None  
Transfer Credit: Accepted for credit: UC, CSU  
Hours: 54 hours lecture.  

This course covers the environmental effects and applications of Earth-related processes. It focuses on earthquakes, volcanic eruptions, landslides, and flooding; availability and exploitation of natural resources, waste disposal and global climate change. Humans as a force in environmental change will be emphasized. The course is designed to address interests in geology, engineering, environmental studies, geography, and science education. One field trip is required. Not open to students who have completed Geography 13. AA/AS area A, CSU area B1

**18. Geology of the National Parks**

Prerequisite: None  
Transfer Credit: Accepted for credit: CSU  
Hours: 54 hours lecture.  

This course is designed to introduce Earth’s geologic story as revealed by the rocks and landscapes in our National Parks. Attention will focus on how natural earth processes have formed our National Parks and National Monuments. Surface shaping processes such as volcanism, plutonism, deformation, sedimentation, glaciation, and fluvial activity will be studies as displayed in our western parks and monuments. One field trip is required. AA/AS area A, CSU area B1

**24. Field Studies in Geology**

Prerequisite: None  
Transfer Credit: Accepted for credit: CSU  
Hours: 3-24 hours lecture, 18-144 hours laboratory.  

This course involves field trips to selected locations of geologic interest. Course content will vary according to field trip destination but may include topics in physical geology, environmental geology, economic geology, and/or introduction to tools and techniques used for geosciences field research (e.g. map and compass, the Global Positioning System (GPS), Geographic Information Systems (GIS), etc). Field trip(s) are required. May be taken 4 times for a maximum of 6 units.
Gerontology

Gerontology is the study of human growth and development during adulthood. It includes the psychological and physiological changes that touch each individual as well as the social implications of these changes.

The ARC gerontology program blends classroom instruction and student interaction with older adults in a variety of non-classroom situations. This provides students with the knowledge and experience required for employment in business and agencies that provide services for the elderly, and/or preparation for upper-division work in gerontology at a four-year institution. The result may be an associate of arts degree or a certificate in gerontology.

Concentrations: There are six concentrations from which students must select one: business, case management/social services, environmental design, health care, recreation, and social policy/advocacy.

In addition, the college offers an Activity Coordinator Program that meets the requirements for the State of California’s Title 22 Certificate for Activity Coordinator. Students may also work toward a Certificate of Completion for Social Service Designee, In-Home Support Service Worker, or Program Assistant.

Continuing Education: The program at American River College also offers continuing education courses for RNs, LVNs, CNAs, RCFE administrators, MFTs, LCSWs, and Nursing Home Administrators.

ARC has gained a reputation as a leader in gerontology studies and is co-host for the Alzheimer’s Society annual conference, and the UCD Center for Aging and Health Annual Caregiver Conference. This leadership has enriched its offerings and enhanced the career value of an ARC gerontology degree or certificate.

Requirements for Degree Major: 39 units

<table>
<thead>
<tr>
<th>Core Requirements</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gerontology 22/Sociology 22</td>
<td>3</td>
</tr>
<tr>
<td>Gerontology 26/Psychology 26</td>
<td>3</td>
</tr>
<tr>
<td>Gerontology 31</td>
<td>1</td>
</tr>
<tr>
<td>Gerontology 41</td>
<td>3</td>
</tr>
<tr>
<td>Gerontology 42A</td>
<td>3</td>
</tr>
<tr>
<td>Gerontology 43/Family Consumer Science 43</td>
<td>3</td>
</tr>
<tr>
<td>Gerontology 46A</td>
<td>.5</td>
</tr>
<tr>
<td>Gerontology 46B</td>
<td>.5</td>
</tr>
<tr>
<td>Gerontology 46D</td>
<td>.5</td>
</tr>
<tr>
<td>Gerontology 46E</td>
<td>.5</td>
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<tr>
<td>Gerontology 48</td>
<td>6</td>
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<tr>
<td>Business 8, English 60, or English 1A</td>
<td>3</td>
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<tr>
<td>Psychology 1</td>
<td>3</td>
</tr>
</tbody>
</table>

Requirements for Certificate: 39 units

Core requirements 30

Plus 9 units from one of the following concentrations:

Recommended General Education Electives

Anthropology 1, 11; English 1A; Human Services 14; Management 21; Philosophy 5; Psychology 18

General Education Graduation Requirements:
Students must also complete the general education graduation requirements for an A.A. degree. See general education requirements.

Business Concentration and Certificate

Preparation for entry-level business positions with private industry, government and non-profit agencies providing goods and services to senior adults.

Certificate Requirements 39 units

9 units from Concentration and Gerontology Core Requirements of 30 units
### Recreation Concentration and Certificate

Preparation for entry-level position with private industry, government and non-profit agencies providing recreational services for senior adults.

**Certificate Requirements**: 39 units

9 units from Concentration and Gerontology Core Requirements of 30 units

<table>
<thead>
<tr>
<th>Choose 9 units from the following courses:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting 60 or Accounting 1A</td>
<td>3-4</td>
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<tr>
<td>Business/Economics 14</td>
<td>3</td>
</tr>
<tr>
<td>Business 15</td>
<td>3</td>
</tr>
<tr>
<td>Business 18A</td>
<td>3</td>
</tr>
<tr>
<td>Business 59 or Business 60</td>
<td>3</td>
</tr>
<tr>
<td>Human Services/Gerontology 15</td>
<td>3</td>
</tr>
<tr>
<td>Management 1 or Management 24</td>
<td>3</td>
</tr>
<tr>
<td>Management 19</td>
<td>3</td>
</tr>
<tr>
<td>Psychology 9</td>
<td>3</td>
</tr>
</tbody>
</table>

### Environmental Design Concentration and Certificate

Preparation for entry-level and paraprofessional positions with private industry, government and non-profit agencies providing design services to senior adults.

**Certificate Requirements**: 39 units

9 units from Concentration and Gerontology Core Requirements of 30 units

<table>
<thead>
<tr>
<th>Choose 9 units from the following courses:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 14</td>
<td>3</td>
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<tr>
<td>Interior Design 20</td>
<td>3</td>
</tr>
<tr>
<td>Interior Design 26</td>
<td>3</td>
</tr>
<tr>
<td>Interior Design 35</td>
<td>3</td>
</tr>
</tbody>
</table>

### Health Care Concentration and Certificate

Preparation for entry-level position with private industry, government and non-profit agencies providing health services for senior adults.

**Certificate Requirements**: 39 units

9 units from Concentration and Gerontology Core Requirements of 30 units

<table>
<thead>
<tr>
<th>Choose 9 units from the following courses:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology 60</td>
<td>3</td>
</tr>
<tr>
<td>Human Services /Gerontology 15</td>
<td>3</td>
</tr>
<tr>
<td>Human Services 35 /Psychology 35</td>
<td>3</td>
</tr>
<tr>
<td>Allied Health 54</td>
<td>3</td>
</tr>
<tr>
<td>Nursing 50A</td>
<td>4.5</td>
</tr>
<tr>
<td>Nursing 50B*</td>
<td>1.5</td>
</tr>
<tr>
<td>Physical Education Theory 15</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education Theory 16</td>
<td>1-2</td>
</tr>
<tr>
<td>Psychology 9</td>
<td>3</td>
</tr>
<tr>
<td>Gerontology 45A/Nursing 45A</td>
<td>3</td>
</tr>
</tbody>
</table>

*Prerequisite(s) required

### Case Management/Social Services Concentration and Certificate

Preparation for entry-level positions with private industry, government and non-profit agencies providing social services to senior adults.

**Certificate Requirements**: 39 units

9 units from Concentration and Gerontology Core Requirements of 30 units

<table>
<thead>
<tr>
<th>Choose 9 units from the following courses:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gerontology 30</td>
<td>2</td>
</tr>
<tr>
<td>Gerontology 32</td>
<td>1</td>
</tr>
<tr>
<td>Human Services 14</td>
<td>3</td>
</tr>
<tr>
<td>Human Services/Gerontology 15</td>
<td>3</td>
</tr>
<tr>
<td>Human Services 19/Psychology 19</td>
<td>3</td>
</tr>
<tr>
<td>Human Services 35/Psychology 35</td>
<td>3</td>
</tr>
<tr>
<td>Psychology 9</td>
<td>3</td>
</tr>
</tbody>
</table>

### Social Policy/Advocacy Concentration and Certificate

Preparation for entry-level positions with private industry, government and non-profit agencies and organizations involved in analyzing, influencing, implementing, and/or advocating for social policy affecting senior adults.

Choose 9 units from either Human Services or Public Administration. All 9 units must be from one group.

**Certificate Requirements**: 39 units

9 units from Concentration and Gerontology Core Requirements of 30 units

<table>
<thead>
<tr>
<th>Human Services</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Services 14</td>
<td>3</td>
</tr>
<tr>
<td>Human Services 19/Psychology 19</td>
<td>3</td>
</tr>
<tr>
<td>Speech 1</td>
<td>3</td>
</tr>
<tr>
<td>Human Services/Gerontology 15</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Public Administration</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management 24</td>
<td>3</td>
</tr>
<tr>
<td>Political Science 1</td>
<td>3</td>
</tr>
<tr>
<td>Speech 1</td>
<td>3</td>
</tr>
<tr>
<td>Human Services / Gerontology 15</td>
<td>3</td>
</tr>
</tbody>
</table>

### Certificates of Completion Offered by ARC Gerontology Department

#### Activity Coordinator Certificate of Completion

Activity Coordinator Program meets requirements for State of California, Title 22, Certificate for Activity Coordinator: (6.5 units)

Completion of Gerontology 47 A-M

#### Social Service Designee Certificate of Completion

Certificate of Completion offered by the Gerontology Department for Social Service Designee (4 units): completion of Gerontology 30, 31, 32. Recommend completion of Activity Coordinator Certificate.

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American River College 2002-2003
In-Home Support Service Worker Certificate of Completion

Certificate of Completion offered by the Gerontology Department for In-Home Support Service Worker (9 units): completion of Math 203, English 206, Gerontology 51A-D.

Program Assistant Certificate of Completion

Certificate of Completion offered by the Gerontology Department for Program Assistant (2 units): completion of Gerontology 33.

15 Ethical Issues and Client's Rights (same as Human Services 15) (3)

Prerequisite: None
Corequisite: Human Services 14
Advisory: English 58 or 60, and 78; or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course is a comprehensive exploration of the basic ethical issues involving human services delivery. Topics include: professional ethics, confidentiality, counselor and clients’ rights and other areas involving ethical controversies. Not open to students who have completed Human Services 15.

22 Sociology of Aging (Same as Sociology 22) (3)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course examines the aged and aging process with emphasis on social factors affecting and affected by an aging population. It includes an analysis of demographics, history of aging in America, social conditions, resources and support systems, employment, retirement, social class/cultural differences. Not open to students who have completed Sociology 22. AA/AS area E2; CSU area E1

26 Psychology of Aging: Adult Development and Aging (Same as Psychology 26) (3)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course covers the physical, psychological, and social aspects of the aging process including the interactions between the elderly and the rest of society. Topics include an analysis of stereotypes, social bonds, environment factors, sexuality, physical health, mental health, death, and bereavement. Not open to students who have completed Psychology 26. AA/AS area C2; CSU area E1

30 Social Service Designee: Role and Responsibility (2)

Prerequisite: None
Advisory: English 58 or 60, and 78, or ESL 2R, 2W, or placement through the assessment process. Activity Coordinator Certificate.
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture.

31 Social Services Designee: Legal Issues and End-of-Life Decisions (1)

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture.
This course covers the role of social services designee in long-term care. The focus is on: family, patient adjustment, dementia, and documentation.

32 Social Services Designee: Fieldwork (1)

Prerequisite: Gerontology 30, 31
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture
This course provides supervised fieldwork in the role of social services designee in long-term care facility.

33 Program Assistant (2)

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture
This course provides the training necessary to become a program assistant in adult day care, adult day health care and residential care. Topics include organization and populations of adult day care, personal care, services, communication, responsibilities, ethics, safety, and dementia. Certificate will be issued upon successful completion of course.

36A Emotional Health and Aging (0.5)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture
This course is an overview of the factors involved in emotional health and aging. Topics include social support systems, having a purpose and role, goals, communication, responsibilities, ethics, safety, and dementia. Certificate will be issued upon successful completion of course.

36B Life Review and Reminiscence (0.5)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture
This course is an exploration of the role and techniques of life review and reminiscence in older age and its therapeutic effects. Topics include history of storytelling, group process, facilitating groups, and the art of listening.

36C Creativity and Aging (0.5)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture
This course covers the diversity of creative expression and the changes which may come with age. Topics include differing definitions of creativity, nurturing life-long creativity, opening new creative paths, and creative exercises.

American River College 2002-2003
41 Interviewing, Counseling the Elderly

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment process.
Transfer Credit: Accepted for credit: CSU.
Hours: 9 hours lecture.
This course introduces the basic theory, techniques, and experiences of para-professional counseling with the elderly at different cognitive levels.

42 Techniques of Group Counseling with the Elderly

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment process.
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.
This course introduces the basic theory and techniques of reminiscence therapy and provides experience in planning, facilitating, and evaluating reminiscence groups with the elderly in an institutional setting.

43 Nutrition for Healthy Aging (Same as Nutrition and Foods 43)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment process.
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.
This course is an introduction to nutritional concerns as they apply to the elderly, their implications in the aging process and the environmental, economic and cultural factors affecting the nutritional status. Not open to students who have completed Nutrition and Foods 43.

45 Physical Therapy Aide (Same as Nursing 45)

Prerequisite: None
Advisory: English 58 or 60, and 78, or ESL 2R, 2W or placement through assessment process.
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.
This course is designed to prepare students for the responsibilities of a Physical Therapy Aide and to provide a general introduction to the physical therapy field. Basic skills of range of motion, exercise, positioning, transfers, and ambulation with assistive devices are covered through lecture and hands-on experiences. The course presents basic anatomy, terminology and medical issues associated with the field of physical therapy.

46A Topics in Gerontology: Ethnic Diversity and Aging

Prerequisite: None
Advisory: English 58 or 60, and 78, or ESL 2R, 2W, or placement through the assessment process.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture.
This course is an overview of ethnicity as a factor in the aging process and how values, beliefs and culture must be considered in the design and delivery of service.

46B Topics in Gerontology: Biology of Aging

Prerequisite: None
Advisory: English 58 or 60, and 78, or ESL 2R, 2W, or placement through the assessment process.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture.
This course is an overview of aging health focusing on the health of the older adult, chronic and acute illnesses, normal aging changes, and strategies for good health.

46C Medical World of Elderly: Pharmacology

Prerequisite: None
Advisory: English 58 or 60, and 78, ESL 2R, 2W, or placement through the assessment process.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture.
This course is an overview of drugs commonly prescribed for the elderly. The course examines how the aging process affects medication effects; changes, compliance, and adverse reactions; drug therapy, and interactions.

46D Coping with Death and Related Bereavement

Prerequisite: None
Advisory: English 58 or 60, and 78, or ESL 2R, 2W, or placement through the assessment process.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture.
This course is an exploration of our societal and personal views of death, dying, and bereavement with the focus on the ways in which our Western society treats the subject of death, right-to-die issues, and the theoretical stages of death and bereavement.

46E Topics in Gerontology: Mental Health and Aging

Prerequisite: None
Advisory: English 58 or 60, and 78, or ESL 2R, 2W, or placement through the assessment process.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture.
This course is an examination of mental health as it is impacted by the aging process. Areas of focus include: correlates of mental health, incidence of mental illness, depression, dementia, substance abuse, intervention and resources.

46F Topics in Gerontology: Elder Abuse

Prerequisite: None
Advisory: English 58 or 60, and 78, or ESL 2R, 2W, or placement through the assessment process.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture.
This course is an overview of elder abuse, occurrence, prevention strategies, reporting strategies, and resources.

46G Alzheimer's Workshop

Prerequisite: None
Advisory: English 58 or 60, and 78, or ESL 2R, 2W, or placement through the assessment process.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture.
This course is an overview of current information on all aspects of dementia and caregiving issues. The major focus is on research, legal issues, grief, resources, medication, behavior management and activities.
46H Legislation: Origin and Influence (0.5)
Prerequisite: None
Advisory: English 58 or 60, and 78, or ESL 2R, 2W, or placement through the assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture.
This course is an overview of how the political process affects issues of aging and delivery of services, focusing on means of impact and influence on community resources.

46I Aging and Family Dynamics (0.5)
Prerequisite: None
Advisory: English 58 or 60, and 78, or ESL 2R, 2W, or placement through the assessment process.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture.
This course is an overview of how the aging process affects not only individuals, but also families and relationships. The focus is on changing roles and relationships and strategies for negotiating these transitions and helping families resolve aging issues.

46J Body Mechanics and Safety (0.5)
Prerequisite: None
Advisory: English 58 or 60, and 78, or ESL 2R, 2W, or placement through the assessment process.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture.
This course is an overview of body mechanics emphasizing a problem-solving approach, basic methods and techniques of positioning, transfer, transport, and ambulation. It also covers personal safety, adaptive exercise and assistive devices.

46K Nutrition and Aging (0.5)
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hour lecture.
This course concentrates on the practical aspects of nutrition and aging. Cost-effective directions for meeting nutritional needs will be included. Information regarding environmental factors implicated in the aging process will be discussed.

46L Stress Management: New Approaches (0.5)
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture.
This course examines stress from a communication perspective. The concepts of high-risk messages will be introduced focusing on how stress reactions affect behavior and morale in residential care facilities and other systems. Emphasis is on how a message is translated and how it affects stress, overload, and spill-over effects. Stress management skills will be demonstrated.

46M Contemporary Issues in Aging: Effects on Caring (0.5)
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture.
This course examines issues surrounding the current "Age Wave" in relationship to the historical views of the elderly, ageism, stereotypes and myths, and how these issues affect caregiving. The implications that an aging society has on health care delivery including acute, sub-acute, and community based services are discussed.

46N Strategies for Caregivers: Effectively Caring for the Elderly in the Community (0.5)
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture.
This course covers effective strategies for providing effective care for the elderly, including how it is complicated by dementia, role reversal, and guilt. Common sense strategies for caregiving that not only meet the needs of the elderly but also lessen the caregiving burden will be explained.

46O Interpersonal Relationships (0.5)
Prerequisite: None.
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture.
This course covers listening, communication skills, understanding emotions, family involvement, and adaptive behavior in long-term care settings. Demonstrations with role play will provide practical experience to enhance understanding.

46P Exploring the Field of Gerontology (0.5)
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture.
This course covers aspects of gerontology which relate to marketing oneself and developing a business as a provider of services to the elderly. Topics include: diversity of field, resumes, interviews, marketing, and future projections.

46Q The Gerontologist (0.5)
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture.
This course will examine the field of gerontology. Topics include role/responsibility of the gerontologist and the educational process required to become a gerontologist. Employment and future projections will be covered.
46R  Health of Older Women  (0.5)
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture.
This course analyzes the uniqueness of older women's health needs. Topics will focus on gender differences, activities of daily living, caregiver role, economics, self-care, and long-term care.

46S  End-Stage Life Care  (0.5)
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture.
This course includes effective strategies for assisting the dying patient and his/her family. Topics include concepts of sub-acute care, physician-assisted suicide, euthanasia, and their effect in the elderly society.

46T  HIV/AIDS and the Elderly  (0.5)
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture.
This course examines HIV/AIDS as a disease process and its effect on the aging population. Topics will include: transmission, universal precautions, treatment options, and psychosocial issues.

46U  Illness in Later Life  (0.5)
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture.
This course examines chronic diseases associated with age including osteoarthritis, hypertension, diabetes, coronary artery disease, and stroke. In addition, the impact of lifestyle, management, and prevention will be included.

46V  Spirituality, Religion and the Elderly  (0.5)
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture.
This course examines religion and belief systems practiced by the elderly population in the U.S. the differences between spirituality and religiosity will be discussed as well as how both are integrated and manifested in the lives of the elderly. Spirituality as a coping mechanism and source of strength and hope will be discussed.

46W  Sexuality and Aging  (0.5)
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture.
This course examines basic sexual anatomy and physiology of men and women with emphasis on the changes that occur with aging. Sexuality, menopause, impotence, sexually transmitted diseases, heterosexuality, and homosexuality of the older population will be explored.

46X  Men as Caregivers  (0.5)
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture.
This course is an overview of specific issues of men as caregivers, including difficulties, changing roles, research, future projections, and resources.

46Y  Special Need Seniors: Mentally Ill and Homeless  (0.5)
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture.
This course is an overview of the unique factors involved in caring for the mentally ill and the homeless senior population. Topics covered are types and stages of mental illness, social stereotypes, resources for the mentally ill, effects of homelessness on elders, acceptance of aged homeless, and resources for elderly homeless.

47A  Introduction to Activity Coordinator  (0.5)
Prerequisite: None
Advisory: English 58 or 60, and 78, or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture.
This course is designed for an Activity Coordinator in long term care facilities. Topics will include: roles and responsibility, program planning, utilizing volunteers, budget and working as a team.

47B  Hearing and Speech - Age Changes  (0.5)
Prerequisite: None
Corequisite: Gerontology 47J
Advisory: English 58 or 60, and 78, or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture.
This course is an overview of age-related changes in speech and hearing. The techniques for working with impaired older adults and development of positive communication with seniors will be emphasized.
47C Documentation: State and Federal Regulations Part I (0.5)

Prerequisite: None
Corequisite: Gerontology 47B
Advisory: English 58 or 60, and 78, or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hour lecture.
This course is an overview of Title 22 regulations and required documentation as it relates to activity coordinators. Topics include activity assessments, social histories, monthly updates, care plans, quarterly reviews.

47D Documentation: State and Federal Regulations Part II (0.5)

Prerequisite: None
Corequisite: Gerontology 47F
Advisory: English 58 or 60, and 78, or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hour lecture.
This course is an overview of state and federal regulations governing activity coordinators in a health care facility and the necessary documentation required to comply with these regulations.

47E Activities Development (0.5)

Prerequisite: None
Corequisite: Gerontology 47I
Advisory: English 58 or 60, and 78, or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hour lecture.
This course is an overview of the development of activities for seniors of differing physical and cognitive abilities, different genders, and different cultural backgrounds.

47F Etiology of Illness in Later Life (0.5)

Prerequisite: None
Corequisite: Gerontology 47C
Advisory: English 58 or 69, and 78; or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hour lecture.
This course is an overview of the etiology of major illnesses found in the aging population. The focus will be on indications and contraindications for activities.

47G Dementia: Behaviors and Activity (0.5)

Prerequisite: None
Corequisite: Gerontology 47H
Advisory: English 58 or 60, and 78, or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hour lecture.
This course is an overview of dementia and memory loss. Topics will focus on types, characteristics, communications, behavior management, and caregiving of dementia patients.

47H Social and Psychological Forces of Aging (0.5)

Prerequisite: None
Corequisite: Gerontology 47D
Advisory: English 58 or 60, and 78, or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hour lecture.
This course is an overview of basic psychological and social forces affecting an individual upon entering long-term care. Topics include depression, role loss, myths, and potential benefits and problems of working with families.

47I Effective Leadership Skills (0.5)

Prerequisite: None
Corequisite: Gerontology 47G
Advisory: English 58 or 60, and 78, or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hour lecture.
This course is an overview of the fundamentals of leadership for the activity coordinator. Strategies for information processing, problem solving, and decision making will be included.

47J Interviewing and Counseling Techniques with Elderly (0.5)

Prerequisite: None
Corequisite: Gerontology 47I
Advisory: English 58 or 60, and 78, or ESL 2R, 2W, or placement through the assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hour lecture.
This course is an overview of basic counseling and interviewing techniques when working with older adults. The focus is on communication skills, interviewing techniques, and specific therapeutic approaches to working with impaired older persons.

47K Community Agencies and Resources (0.5)

Prerequisite: None
Corequisite: Gerontology 47L
Advisory: English 58 or 60, and 78, or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hour lecture.
This course is an overview of community resources and how to use them within the health care facility.

47L Implementation of Activities (0.5)

Prerequisite: None
Corequisite: Gerontology 47E
Advisory: English 58 or 60, and 78, or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 9 hour lecture.
This course is an overview of the aging process and the consequences of long-term care placement. The focus will be on developing a specific activity designed to meet patient's requirements.
47M  Directed Fieldwork Experience  

(0.5)

Prerequisite: None
Corequisite: Gerontology 47K
Advisory: English 58 or 60, 78, or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 3 hours lecture, 18 hours laboratory.
This course is an opportunity for the student to acquire practical experience working with an activity coordinator in a health care setting.

48  Work Experience  

(2-4)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment process.
Transfer Credit: Accepted for credit: CSU.
Hours: Lecture hours: See Work Experience.
This course provides supervised practical experience working with the elderly through placement in nursing facilities, day care, respite care, and community agencies. Placement is arranged by the instructor. May be taken more than once for credit for a maximum of six (6) units.

51A  Basic Health Skills for In-Home Supportive Services Worker  

(0.5)

Prerequisite: None.
Corequisite: Mathematics 203 and English 206.
Hours: 9 hours lecture.
This course will prepare the student to provide non-medical personal services to frail adults and adults with disabilities. Topics include basic skin care, alternative methods of acquiring nutrition, bowel and bladder management, respiratory devices and their care, self-administered medications and the concept of comfort care during the end stages of life.

51B  Aspects of Aging - Methods and Techniques of Mobility  

(0.5)

Prerequisite: None.
Corequisite: Mathematics 203 and English 206.
Hours: 9 hours lecture.
This course emphasizes the physical, social and psychological losses and common problems of the aging population. It also examines elder abuse, the need for confidentiality and methods and techniques to increase mobility.

51C  Managing a Household - Shopping for Foods  

(1)

Prerequisite: None.
Corequisite: Mathematics 203 and English 206.
Hours: 18 hours lecture.
This course provides the basic skills necessary for managing a client's home, including: client/household manager relationship, skills for providing food, specialized menus, laundry and shopping.

51D  Directed Field Work - In-Home Supportive Services Worker  

(1)

Prerequisite: Gerontology 51A, 51B, 51C
Hours: 54 hours laboratory.
This course is a comprehensive, on-site experience as an in-home supportive services worker. The student will perform on-site under the supervision of the instructor.
The college program in health education is designed to provide students the essential information for the evaluation and maintenance of individual health.

1 Health Science (3)

Prerequisite: None.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture.
This class focuses attention upon those elements of human behavior which influence the health status of both the individual and the community. Topics are personal fitness including nutrition, population dynamics, sexuality, sexually transmitted disease, drug dependence including alcohol and tobacco, as well as life style disease especially cancer, cardiovascular disease and lung disease. AA/AS are E2; CSU area E1

10 Community CPR (1)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 18 hours lecture.
This course is designed for individuals requiring certification in American Red Cross (Community CPR). The course includes rescue breathing, first aid for choking and CPR for adults, children, and infants as well as heart attack prevention. May be taken four times.

15 Responding to Emergencies (2)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W
Transfer Credit: Accepted for credit: CSU.
Hours: 36 hours lecture.
This course is designed for anyone desiring a general knowledge of first aid procedures (parents, foster parents, child care workers, teachers, etc.). It includes infant, child, and adult CPR as well as the care of critically injured and ill.

20 Emergency Response (3)

Prerequisite: Current Community CPR card.
Advisory: English 58 or 60, and 78 or ESL 2R, 2W
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.
This course meets prerequisites for Emergency Medical Technician (EMT) courses. It is designed for first responders/professional rescuers (i.e., lifeguards, law enforcement, firefighters, search and rescue personnel, etc.), it is recommended for nursing, physical therapy, and athletic training students. This course covers recognition and first aid treatment for: bleeding wounds, fractures, burns, poisoning, respiratory and cardiac emergencies, sudden illnesses as well as primary and secondary victim assessments and emergency rescue and transfer techniques.
The study of history contributes to cultural literacy and develops critical thinking and other useful skills while helping students understand today.

**Social Science**

**Requirements for Degree Major**

18 units of transfer-level work in addition to other graduation requirements.

Courses taken must be in at least four of the following areas: Anthropology, Economics, Geography, History, Philosophy, Political Science, Psychology (except Psychology 4), and Sociology.

4 **History of Western Civilization**

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU.
Hours: 54 hours lecture.

This course is a survey of western civilization from its origins in the Ancient Middle East until the Renaissance, emphasizing the social, political, economic, and cultural influences that have served to shape the modern world. The focus will be on the process of modernization, stressing the secularization of western society and examining how war and revolution have served to create our world. (CAN HIST 4) AA/AS area B or C2; CSU C2 or D3; IGETC area 3B

5H **Honors History of Western Civilization**

Prerequisite: Cumulative GPA of 3.0 or above; English 1A with a grade of "B" or better.
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU.
Hours: 54 hours lecture.

This course is a survey of western civilization from the Renaissance to the present. Emphasis will be on the social, political, economic, and cultural forces that have served to shape the modern world. The focus will be on challenging students to interpret the past by critically analyzing both primary sources and relevant works by leading historians. AA/AS area 3B or C2; CSU C2 or D3; IGETC area 3B

5 **History of Western Civilization**

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU.
Hours: 54 hours lecture.

This course is a survey of western civilization from the Renaissance to the present, emphasizing the interplay of social, political, economic, cultural and intellectual forces in creating and shaping the modern world. The focus will be on the process of modernization, stressing the secularization of western society and examining how war and revolution have served to create our world. (CAN HIST 4) AA/AS area B or C2; CSU C2 or D3; IGETC area 3

6 **Women in Western Civilization**

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.

This course is a survey of women's contributions to the major ideas, institutions and events of Western Civilization. Examines the diversified roles of women from antiquity to the present with emphasis on the interaction of the sexes. Analyzes the effects on the society of the patriarchal structure of the family and consequently the pervasive impact on all institutions of western culture. AA/AS area B or C2; CSU area C2 or D3; IGETC area 3
History

This is a survey of Indian Mexico, the Spanish conquest and fusion of two cultures; the War of Independence; the age of Santa Ana and the loss of North Mexico; the reign of Diaz; the Revolution of 1910; reconstruction and contemporary Mexico. AA/AS area C2; CSU area D3; IGETC area 3

11 History of World Civilization to 1500 (3)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture.
A survey of world civilizations from antiquity to 1500, with particular emphasis on the dynamic interaction and comparison of peoples and cultures. The focus is on the role played by social, political, economic, cultural, and religious forces in shaping the major world civilizations and the legacy of these civilizations for subsequent civilizations and our world today. AA/AS area B or C2 and F; CSU area C2 or D3; IGETC area 4

12 World Civilization, 1500 to the Present (3)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture.
A survey of world civilizations from the 16th century to the present, with particular emphasis on the dynamic interaction of peoples and cultures. The focus is on the role played by social, political, economic, cultural, and religious forces in shaping the major world civilizations and the legacy of these civilizations and our world today. AA/AS area B or C2 and F; CSU area C2 or D3; IGETC area 4

14 History of the United States: African-American Emphasis (3)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours lecture.
This course covers U.S. History from the founding of Jamestown in 1607 through the Civil War. The course begins with a brief overview of the Black Americans African heritage. It continues with the role played by African-American women, as well as men, their relationships to other groups, and their specific contributions in the growth and development of the nation. Partially satisfies the American Institutions requirement. AA/AS area C1 & F; CSU area D1; IGETC area 4

15 History of the United States: African-American Emphasis (3)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours lecture.
This course covers U.S. History from 1865 to present, including coverage of the state and local government with an increased emphasis on the role of black women, as well as men, their relationships to other groups, and their specific contributions in the growth and development of the nation. Partially satisfies the American Institutions requirement. AA/AS area C1 & F; CSU area D1; IGETC area 4

16A History of the United States: The American Indian Experience (3)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours lecture.
This course is a survey of the North American Indian nations. The course covers the effects of European contact, trade, and colonization. It examines the effects of United States political, economic, and social policies on Indians throughout U.S. history. Also, emphasis is placed on American Indian people's attempts to protect their sovereignty and revitalize their societies across time. Partially satisfies the American Institutions graduation requirements. AA/AS area C1 & F; CSU area D1; IGETC area 4

16I Intellectual American History (3)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours lecture.
This course is a survey of American culture from the colonial to the contemporary period. Special emphasis is given to historic, economic, religious, scientific, legal, literary and political developments within America thought to explain this nation's values. This course is designed to partially fulfill American Institutions graduation requirements. AA/AS area C1; CSU area D1; IGETC area 4

16M History of the Chicano/Mexican American (3)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours lecture.
Study of the relationship between the development of American and Mexican civilization in the Western Hemisphere. Focus on the role of the Mexican American experience as it was affected by social, political and economic events in the U.S. Emphasis on socio-cultural contributions of Mexican Americans to American institutions. This course is designed to partially fulfill American Institutions graduation requirements. AA/AS area C1; CSU area D1; IGETC area 4

16P History of Asian/Pacific Americans (3)

Prerequisite: None
Advisory: English 58 or 60, and 78, or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: CSU, UC
Hours: 54 hours lecture
This course is a survey lecture course that examines the history of Asian immigrants and Asian Americans in the United States from 1850 to the present. It includes the process of migration and settlement in the United States by people from east Asia, southeast Asia, south Asia, and the Pacific islands. It examines the historical experience of these groups from a social, political, economic, and cultural perspective, with an emphasis on the following themes: work, family, community formation, government policies, race relations, and ethnic identities. It also addresses the contributions of Asian Americans to the multicultural development of contemporary American society, including the interaction of Asian Americans with people of European, African, Hispanic, and Native descent. CS area D1; AA/AS area C1
16W Women in American History (3)
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours lecture.
A survey course of U.S. History from 1620 to the present, focusing on the contributions of women including Anglo American, Native American, Black American, Mexican American and Asian American. This course is designed to partially fulfill the American Institutions graduation requirements. AA/AS areas C1 & F; CSU area D1; IGETC area 4

17 History of the United States (3)
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours lecture.
This course is a survey of United States History from its European, African, and Native American backgrounds to 1865. The course examines the origin and development of many of this nation's political, social, economic and intellectual institutions including their influences upon contemporary American life. These analyses also emphasize such historical concepts as cause and effect, multiple causation and historical interpretation. (CAN HIST SEQ B - HIST 17+18; CAN HIST 8) AA/AS area C1; CSU area D1; IGETC area 4

17H Honors History of the United States (3)
Prerequisite: Overall grade point average of 3.0; English 1A with a grade of "B" or better.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours lecture.
This course is an in depth study of American history from the Colonial through the American Civil War era. Particular emphasis will be placed on the inter-relationship of developing American political, economic, social, and cultural institutions. This course is designed to partially fulfill the American Institutions graduation requirements. (CAN HIST 8) AA/AS area C1; CSU area D1; IGETC area 4

18 History of the United States (3)
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours lecture.
This course is a survey of United States History from 1665 to present. It examines many of America's political, social, economic, and intellectual institutions, including their influences upon contemporary life. The course also examines this nation's increasing involvement in world affairs. These analyses are set within the context of such historical concepts as cause and effect, multiple causation, and historical interpretation. (CAN HIST 10) AA/AS area C1; CSU area D1; IGETC area 4

18H Honors History of the United States (3)
Prerequisite: Overall Grade Point Average of 3.0; English 1A with a grade of "B" or better.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours lecture.
This course is an intense study of American history from 1865 to the present day. Particular emphasis will be placed on the interrelationships of American political, economic, social and cultural developments. This course is designed to partially fulfill the American Institutions graduation requirements. (CAN HIST 10) AA/AS area C1; CSU area D1; IGETC area 4

19 Asian Civilization (3)
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
This course is a survey of Asian Civilization with emphasis on South and East Asia, beginning with dawn of recorded history through 1800. The cultures of India, China, and Japan will be emphasized. AA/AS area B or C2; CSU C2 or D3; IGETC area 3

20 Asian Civilization (3)
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
This course is a survey of the political, social, economic and cultural transformation of India, China and Japan since 1800. Emphasis will be on how these cultures responded to meet the changes of Western Civilization. AA/AS area B or C2; CSU area C2 or D3; IGETC area 3

29 History of California through 1879 (3)
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
This course is a survey of the discovery and settlement of California by the Spanish, the Mexican period, American conquest and occupation, the Gold Rush, and events through the Constitution of 1879. AA/AS area C2; CSU area D3; IGETC area 3

30 History of California: 1879 to Present (3)
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
This course is a survey of California late Nineteenth and Twentieth century history emphasizing political, economic and cultural development to the present time. This course fulfills California state requirement in state and local government, but does not meet the requirement in United States Constitution. AA/AS area C2; CSU area D3; IGETC area 3

31 The California Mother Lode (3)
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture; 18 hours laboratory.
This course is a history of the Mother Lode with emphasis on the Gold Rush Era and its effect on the natural environment of the region. Lecture-lab activities at selected locations in the Mother Lode region complement the classroom instruction. Each combination of classroom and on-site instruction constitutes one half unit of credit. A student may earn a maximum of 3 units. AA/AS area C2; CSU area D3

33 History of Russia (3)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
This course is a survey of Russian history from 1861 to the present. The course examines the major social, political, and economic developments that have shaped Russian society and culture. Special attention will be given to Russian culture, politics and protest during the 19th century, the revolutions of 1917 and the Bolshevik rise to power, the creation and expansion of the Soviet state under Stalin, and the decline and collapse of Soviet power. AA/AS area C2; CSU area D3; IGETC area 3

40 Sampler: History of Civilization (1-3)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: CSU
Hours: 18-54 hours lecture.
This course is a historical examination of significant ideas, developments and movements which had a major impact in illuminating the historic growth of civilization in the world. Covering topics from a wide range of academic disciplines including anthropology, economics, engineering, fine arts, history, law, life science, literature, mathematics, philosophy, political science, sociology, psychology and will vary in content and scope with the interests and expertise of both the instructors and the students. Modules of one unit each. In any given semester a student may enroll in from one to three modules. AA/AS area C2
The ARC horticulture program prepares students for self-employment or employment with nurseries, landscape contractors, arborists, park departments, fertilizer and insecticide companies, or as maintenance groundskeepers or horticulture consultants. Students receive a formal education in plant identification: their habits, growth, cultural requirements and landscape use in the climates of northern California as well as a basic knowledge of the tools and equipment used in the landscape and nursery industries. After completing the first year of training, students elect an option in either landscape or nursery practices.

The Landscape Industry option builds skills and knowledge in the design and installation of landscape and turf grass systems, irrigation and sprinkler systems, fertilization, pruning, the use of power equipment and the law and regulations for pest control operations.

The Nursery Industry option emphasizes plant propagation techniques, greenhouse management, plant merchandising and installation, maintenance and customer relations. Work experience is required.

**Career Opportunities**

The continued growth of suburban residential areas, the growth of gardening as a major leisure time activity, and the demand for park and recreational greenbelt areas all provide challenging opportunities to those who choose careers in horticulture.

With the growing interest in protecting and enhancing the environment and the increased demand for park and recreation green belts, employment opportunities for horticulturists look bright. Employment opportunities should grow in both industry and government agencies as environmental research leads to new laws and standards for protecting the environment.

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**Horticulture**

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<th>A.S. - Landscape Industry</th>
<th>A.S. - Nursery Industry</th>
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<tbody>
<tr>
<td>Certificates:</td>
<td>Landscape Industry</td>
<td>Nursery Industry</td>
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**Area:** Technical Education  
**Dean:** Gabriel Meehan  
**Phone:** (916) 484-8354  
**Counseling:** (916) 484-8572  
**Website:** www.arc.losrios.cc.ca.us/hort

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### Landscape Industry

**Requirements for Degree Major:** 33-37 units

- Horticulture 1, 2, 51, 52, 55, 76, 79, 86

**Concentration Requirements:**

- Horticulture 75, 78, 81, 98.

**Recommended Electives**

- Accounting 60; Art 16; Biology 21; Business 60, 64; Computer Information Science 1; Design Technology 66; English 13A; Interior Design 20.

**General Education Graduation Requirements:**

- Students must also complete the general education graduation requirements for an A.A. degree. See Graduation requirements.

**Requirements for Certificate:** 31 units

- Horticulture 1, 2, 51, 52, 55, 75, 76, 78, 79, 81, 86.

### Nursery Industry

**Requirements for Degree Major:** 31-35 units

- Horticulture 1, 2, 51, 52, 55, 76, 79, 86.

**Concentration Requirements:**

- Horticulture 60, 70, 98.

**Recommended Electives**

- Accounting 60; Biology 21; Business 60, 64; Computer Information Science 1; Design Technology 66; English 13A; Horticulture 78; Interior Design 20.

**General Education Graduation Requirements:**

- Students must also complete the general education graduation requirements for an A.A. degree. See Graduation requirements.

**Requirements for Certificate:** 29 units

- Horticulture 1, 2, 51, 52, 55, 60, 70, 76, 79, 86.
1 Introduction to Horticulture

Prerequisite: None
Transfer Credit: Accepted for credit: CSU.
Hours: 36 hours lecture.
This course is a survey of principles and practices of horticulture designed to improve knowledge of home gardener as well as those seeking a career. Basic plant structure and function, general knowledge of plant usage, landscape planning and maintenance. AA/AS area A

2 Soils and Plant Nutrition

Prerequisite: None
Corequisite: Horticulture 1
Transfer Credit: Accepted for credit: CSU.
Hours: 36 hours lecture; 54 hours laboratory.
This course is a study of the nature and properties of soils and their relationship to plant needs; water and irrigation problems and erosion control, composition, value and use of fertilizer materials, conditioners and agricultural minerals.

3 Plant Materials I

Prerequisite: None
Corequisite: Horticulture 1
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 36 hours lecture; 54 hours laboratory.
This course is a study of the identification, habits of growth, cultural requirements and uses of ornamental woody and herbaceous plants used in the California landscape. Emphasis will be concentrated on those plants best seen in the fall and winter months and frequently used in the nursery and landscape trade.

4 Plant Materials II

Prerequisite: None
Corequisite: Horticulture 1
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 36 hours lecture; 54 hours laboratory.
This course is a study of the identification, habits of growth, cultural requirements and uses of ornamental woody and herbaceous plants used in the California landscape. Emphasis will be concentrated on those plants best seen in the spring and summer months and frequently used in the nursery and landscape trade.

5 Plant Diseases and Pests

Prerequisite: None
Corequisite: Horticulture 1
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 36 hours lecture; 54 hours laboratory.
This course is a study of local plant diseases and pests including weed problems, recognition of symptoms and causes, learn life cycles, host and habitar relationships and methods of control.

6 Nursery Practices

Prerequisite: Horticulture 1 with a grade of “C” or better.
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory.
This course is an overview of the practices involved in commercial nursery operations, including basic garden practices.

70 Plant Propagation

Prerequisite: Horticulture 1 with a grade of “C” or better.
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory.
This course is a study of the fundamental principles involved in propagating plants including identification of facilities, equipment and techniques utilized in plant production.

75 Landscape Construction

Prerequisite: Horticulture 1 with a grade of “C” or better.
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory.
This course develops the skills and knowledge in carpentry, masonry, concrete and irrigation; plan reading, estimating and bidding in the landscape trades.

76 Landscape Graphics

Prerequisite: Horticulture 1 with a grade of “C” or better.
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory.
This course is the study of technical drafting skills and freehand graphics including line quality, lettering and organization as it relates to landscape design. The use of a variety of graphic skills and media will be developed along with an introduction to three-dimensional sketching.

77 Small Gas Engines

Prerequisite: None
Corequisite: Horticulture 1
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture; 27 hours laboratory.
This course covers trouble shooting, adjusting and maintaining small gas engines.

78 Irrigation Design

Prerequisite: Horticulture 1 with a grade of “C” or better.
Hours: 36 hours lecture.
This course is a study of water hydraulics irrigation equipment inclusive of heads, pipes, pumps, clocks, valves and design which includes preparing plans dealing with measurement, head layout, pipe sizing and specifications.

79 Pest Control Licensing For Certification

Prerequisite: Horticulture 1 with a grade of “C” or better.
Hours: 36 hours lecture.
This course covers the laws and regulations for operators, applicators and advisors including the study of different pests and recommended control.

80 Greenhouse Operations

Prerequisite: Horticulture 1 with a grade of “C” or better.
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory.
This course is a study of problems and practices in the management of greenhouses, including the production of specific greenhouse crops.
81  Landscape Maintenance  (3)

Prerequisite: Horticulture 1 with a grade of "C" or better.
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory.

This course is a study of landscape maintenance of residential and commercial landscapes, parks, highways and public buildings. Development of skills including planting, pruning, watering, fertilizing, pest control and power equipment operation and maintenance.

83  Advanced Student Projects  (2)

Prerequisite: Horticulture 1 with a grade of "C" or better.

Hours: 108 hours laboratory.

This course provides the student with an opportunity for students to pursue advanced projects which are selected by the department. May be taken twice for credit.

85  Turf Grass Management  (3)

Prerequisite: Horticulture 1 with a grade of "C" or better.
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory.

This course is a study of the maintenance and management of turf grass areas including golf greens, athletic fields, parks, as well as for home lawns.

86  Landscape Design  (3)

Prerequisite: Horticulture 76 with a grade of "C" or better.
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory.

This course is a study of the basic principles and elements of landscape design related to the problem solving process; design theory and composition; functional and design uses of landscape materials and client and maintenance criteria.

98  Work Experience  (2-4)

Prerequisite: Horticulture 1
Hours: Lecture hours: See Work Experience.

This course provides the student with supervised work experience with nurseries, landscape contractors, parks, state, county, federal agencies, and other horticultural enterprises. It is designed to provide developmental experience in horticulture.
Hospitality management is a field in which qualified professionals organize and manage food service or lodging facilities.

Culinary arts and restaurant management courses emphasize supervisory and management skills, basic and advanced culinary techniques, an understanding of basic food science, hospitality skills, financing, accounting, and marketing. Courses are demanding, both academically and physically; they require energy, the ability to work under pressure, and a commitment to excellence. The Oak Cafe is a small, fine dining establishment on campus that provides a management training lab for advanced students in the program.

Career Opportunities

There is an increase in demand for cooks, chefs and managers in all types of restaurants and food service operations.

Employment opportunities exist with hotels, motels, inns, motor lodges, resorts, residential hotels, bed and breakfast operations, clubs, theme parks, convention centers and cruise lines.

Hospitality Management: Culinary Arts/Restaurant Management

Preparation for a career in food service industry. All phases of food service operation are covered including career assessment, sanitation, safety, equipment, food science, basic and intermediate culinary skills, purchasing, cost control, supervision and restaurant management and production. Includes courses and testing for certificates and diploma issued by the Educational Foundation of the National Restaurant Association.

Requirements for Degree Major: 47 units

<table>
<thead>
<tr>
<th>Core Requirements</th>
<th>Units</th>
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<tbody>
<tr>
<td>CIS 11A, 12A, 13A</td>
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<tr>
<td>Hospitality Management 40</td>
<td>3</td>
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<tr>
<td>Hospitality Management 51</td>
<td>3</td>
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<tr>
<th>Concentration Requirements</th>
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<tr>
<td>Nutrition and Foods 10</td>
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<tr>
<td>Hospitality Management 16/Nutrition and Foods 16</td>
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<tr>
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<td>Hospitality Management 63B</td>
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Recommended Electives
Hospitality Management 75 1-4

General Education Graduation Requirements:
Students must also complete the general education graduation requirements for an A.A. degree. See Graduation requirements.

Culinary Arts

Requirements for Certificate (40 units)

| Hospitality Management 40        | 3     |
| Hospitality Management 16/Nutrition and Foods 16 | 4 |
| Hospitality Management 48        | 5     |
| Hospitality Management 50        | 3     |
| Hospitality Management 51        | 3     |
| Hospitality Management 52        | 3     |
| Hospitality Management 53        | 2     |
| Hospitality Management 54        | 2     |
| Hospitality Management 56        | 2     |
| Hospitality Management 60A       | 3     |
| Hospitality Management 60B       | 2     |
| Hospitality Management 61        | 2     |
| Hospitality Management 63A       | 2     |
| Hospitality Management 63B       | 2     |

Restaurant Management

Requirements for Certificate (27 units)
(Recommended for students with extensive professional cooking experience.)

| CIS 11A, 12, 13A                 | 3     |
| Hospitality Management 40       | 3     |
| Hospitality Management 48       | 5     |
| Hospitality Management 50       | 3     |
| Hospitality Management 51       | 3     |
| Hospitality Management 53       | 2     |
Hospitality Management 54 2
Hospitality Management 56 2
Hospitality Management 57 2
Hospitality Management 60B 2

**Introductory Baking**

Certificate of completion offered by the Hospitality Management department.

**Requirements for Certificate:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tr>
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<td>Hospitality Management 51</td>
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<tr>
<td>Hospitality Management 63C</td>
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</tbody>
</table>

16 **Food Theory and Preparation** (Same as Nutrition and Foods 16) (4)

**Prerequisite:** None
Corequisite: Mathematics 215 or placement through assessment.
Advisory: English 58 or 60 and 78 or ESL 2R, 2L, and 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU.

Hours: 36 hours lecture; 108 hours laboratory.

This course is a comprehensive study of basic principles of food science and theory and techniques involved in food preparation. A study of the factors that influence foods and the changes which occur in foods during preparation. Emphasis is on basic cooking skills and theory application. Not open to students who have completed Nutrition and Foods 16.

40 **Becoming A Chef** (3)

**Prerequisite:** None
Transfer Credit: Accepted for credit: CSU

Hours: 54 hours lecture.

This course will cover the history of the culinary profession, explore the numerous avenues of opportunity, and study the advantages of continuing education in the field. Field trips provide exposure to different types of kitchens, industry food shows, and produce markets. The course covers the backgrounds and approaches of successful chefs and restaurateurs.

47 **Special Topics in the Hospitality Industry** 1-3

**Prerequisite:** None
Advisory: English 58 or 60 and 78 or ESL 2R, 2L, and 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: CSU

Hours: 18-54 hours lecture.

This course is designed to give students an opportunity to study topics in Hospitality which are job oriented and not included in current offerings. The course may be repeated for up to 6 units of credit provided there is no duplication of topics.

48 **Work Experience in the Hospitality Industry** 2-4

**Prerequisite:** None
Corequisite: Maintain a minimum of 7 units.
Advisory: English 58 or 60 and 78 or ESL 2R, 2L, and 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU

Transfer Credit: Accepted for credit: CSU

50 **Calculations in Foodservice Occupations** (3)

**Prerequisite:** None
Advisory: Mathematics 204 or placement through assessment.

Hours: 18 hours lecture, 60-225 hours laboratory.

This course is a cooperative effort between the college and hospitality employers in the community. Discussion topics include performance based objectives, resume writing, interviewing and career planning. May be taken 4 times for credit up to 12 units.

51 **Sanitation, Safety and Equipment** (3)

**Prerequisite:** None
Advisory: Mathematics 204, English 58 or 60 and 78 or ESL 2R, 2L, and 2W, or placement through assessment.

Hours: 54 hours lecture.

This course covers all phases of food sanitation; cause, control and investigation of illnesses caused by food contamination; sanitary practices in food preparation, proper dishwashing procedures; sanitation of kitchen, dining room, and all equipment; cleaning materials and procedures; garbage and refuse disposal. The course includes general safety precautions, including elementary first aid; maintenance and operation of appropriate food service equipment; and elements of kitchen planning and types of equipment used.

52 **Professional Cooking** (3)

**Prerequisite:** Hospitality Management 16 with a grade of “C” or better
Advisory: Hospitality Management 50 and 51.
Transfer Credit: Accepted for credit: CSU.

Hours: 36 hours lecture; 36 hours laboratory.

This course presents the study of intermediate culinary techniques, production standards, recipe analysis, presentation, stocks, sauces, and major ingredients used in professional cooking. The laboratory component will include use of equipment, skills development and time management in the commercial kitchen.

53 **Management and Supervision in the Hospitality Industry** (2)

**Prerequisite:** None
Advisory: English 58 or 60 and 78 or ESL 2R, 2L, 2W, or placement through assessment.

Hours: 36 hours lecture.

The role of management in supervision including profiles of effective management styles, supervision and leadership is covered. Current theories of management and supervision of the service industry are introduced.

54 **Cost Control in the Food Service Industry** (2)

**Prerequisite:** None
Advisory: Mathematics 204, English 58 or 60 and 78 or ESL 2R, 2L, 2W, or placement through assessment.

Hours: 36 hours lecture.

This course covers accounting and cost control principles in the food service industry. It includes the use of accounting techniques to analyze food and labor cost control, business operations, budgeting, financing and profit and loss statements.
56  Beverage Operation  (2)
Prerequisite: None
Advisory: English 58 or 60 and 78 or ESL 2R, 2L, 2W, or placement through assessment.
Hours: 36 hours lecture.
This course is a study of beverages, both alcoholic and non-alcoholic, used in the food service industry. Topics include: beverage composition, production methods and regions, quality, characteristics, uses in drinks and food, beverage service; wine analysis, service and pairing with food; government regulations and licenses. Field trips are included.

57  Advertising and Sales in Food Service  (2)
Prerequisite: None
Advisory: English 58 or 60 and 78 or ESL 2R, 2L, 2W, or placement through assessment.
Hours: 36 hours lecture.
This course is an introductory presentation of principles involved in advertising for food service establishments. Topics covered include menu planning, design and pricing, marketing plans, market information systems, consumer behavior and internal and external promotions.

58  Catering  (3)
Prerequisite: None
Advisory: English 58 or 60 and 78 or ESL 2R, 2L, 2W, or placement through assessment.
Hours: 18 hours lecture, 108 hours laboratory.
This course covers the business and culinary aspects of catering. Topics include getting started in a catering business; laws and licenses; taxes and insurance; contracting; interviewing clients and organizing catered menus and events; pricing menus and services; staffing, equipping and transporting catered services; culinary techniques; and weddings and receptions.

59  Garde Manager  (3)
Prerequisite: None
Advisory: English 58 or 60 and 78 or ESL 2R, 2L, 2W, or placement through assessment.
Hours: 36 hours lecture; 54 hours laboratory.
This course is an introduction to fancy culinary work. Use of tools, layout and planning; preparation of food decorations, molds, gelées and chaud froids; pates, galantines, aspics and other fancy food used in hotel and quality hospitality operations are included.

60A  Restaurant Management and Production  (3)
Prerequisite: Hospitality Management 16, 50, and 51.
Corequisite: Hospitality Management 48 (To include a minimum of 16 hours per week of work experience in the commercial kitchen of the Oak Cafe at ARC, or other site as assigned - effectively and efficiently producing food for the campus restaurant, campus catering or other commercial use.)
Advisory: English 58 or 60 and 78 or ESL 2R, 2L, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.
The study of restaurant management with the focus on the kitchen. The course includes the study of successful restaurant concepts; food styles and ethnic influences; production methods and standards; menu design, including specific purchasing and cost control; application of sanitation and safety standards; employee scheduling, motivation and supervision; and product marketing.

60B  Dining Room Management  (2)
Prerequisite: Hospitality Management 50, 51 Corequisite: Hospitality Management 48 (To include a minimum of 8 hours per week of work experience in operation of the front of the house for the Oak Cafe at ARC, providing set-up and service in the dining room, internal and external marketing, and daily operating reports.)
Transfer Credit: Accepted for credit: CSU.
Hours: 36 hours lecture.
The study of restaurant management with the focus on service and the dining room. The course includes the study of an historical view of service, quality and exceeding expectations, methods of service, management of service operations and personnel, internal and external marketing, and daily reports and controls.

61  Legal Aspects of the Hospitality Industry  (2)
Prerequisite: None
Advisory: English 58 or 60 and 78 or ESL 2R, 2L, 2W, or placement through assessment.
Hours: 36 hours lecture.
This course provides an explanation of legal aspects of the food service industry. Topics include government regulations, patron safety and rights, liability issues for food, alcohol, property and ownership protection; employee issues of fair hire and termination and forms of business organization.

63A  Breads, Yeast Doughs and Pastry  (2)
Prerequisite: None
Corequisite: Hospitality Management 16.
Advisory: Mathematics 204, English 58 or 60 and 78 or ESL 2R, 2L, and 2W, or placement through assessment.
Hours: 18 hours lecture; 54 hours laboratory.
This course covers theory and principles of doughs, yeast and pastries with emphasis in bread production, sweet and savoury doughs, and egg doughs. Topics include: croissant, puff dough, and pate-a-choux, traditional breakfast pastries and American cookies and teacakes. All lecture and laboratory material is intended for students interested in commercial application in restaurants, bakeries and other food service facilities. Laboratory work allows individual and quantity production of products studied.

63B  Fine Baking and Pastry (European)  (2)
Prerequisite: None
Corequisite: Hospitality Management 16
Advisory: Mathematics 204, English 58 or 60 and 78 or ESL 2R, 2L and 2W, or placement through assessment.
Hours: 18 hours lecture; 54 hours laboratory.
This course covers the theory and principles of fine baking and pastry with emphasis on the European tradition. Concentration is on cakes, fine pastry, chocolate work, decoration, and classic and modern desserts. All lecture and laboratory material is intended for students interested in commercial application in restaurants, bakeries and other food service facilities. Laboratory work allows individual and quantity production of products studied.

63C  Advanced Baking and Pastry  (3)
Prerequisite: Hospitality Management 63A and 63B
Corequisite: Hospitality Management 51
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture, 54 hours laboratory.
This course focuses on commercial production of baked products, pastries, candies, restaurant style desserts and wedding cakes. Lecture emphasizes knowledge and understanding of baking science; laboratory hours are spent in com-
commercial production. Products include European style breads, Grande Buffet presentation, restaurant style plate presentation, frozen desserts, tortes, cakes, sauces, tarts, pulled sugar, piping and chocolate work. Emphasis is placed on production of high quality products and professional presentation.

64 Mediterranean Cuisine (3)

Prerequisite: None
Corequisite: None
Advisory: Hospitality Management 16, 50, and 51
Hours: 36 hours lecture; 36 hours laboratory; 18 hours TBA
This class presents the study of ingredients and culinary techniques used in preparing foods from the Mediterranean including France, Italy, Sicily, Greece, Spain, North Africa and regional focuses within these areas. The laboratory component will include skills development, productions and the use of equipment specific to preparation of Mediterranean foods.

75 Hospitality Management: Internship Program (2-4)

Prerequisite: 15 units in Hospitality Management with a grade of "C" or better.
Advisory: Mathematics 204, English 58 or 60 and 78 or ESL 2R, 2L, 2W, or placement through assessment.
Hours: 18 hours lecture; 60-225 hours laboratory.
This course is a cooperative effort between the college and hospitality industries in the community to provide training through practical on-the-job experience. Internship sponsors/employers assist in the acquisition of skills and application of knowledge learned in the classroom. May be taken 4 times for credit for a maximum of 8 units.
American River College’s counseling and guidance classes are designed to help the student in achieving success in college through a variety of classes, which include study skills, exploration of careers, and field experience in the disabled student services program.

11 Field Experience in Disabled Student Programs and Services (formerly Counseling & Guidance 11)  (3)

Prerequisite: None
Advisory: English 58 or 60 or ESL 2W or 2R; or placement through assessment.
Transfer Credit: Accepted for credit: CSU.
Hours: 162 hours laboratory.
This course provides the student with an in-depth understanding, increased knowledge, and direct application of the techniques and skills required to assist disabled students to be successful in the college setting. The majority of course time will be spent providing support services to students with disabilities. Placement will be determined by the instructor. May be taken three times for credit.

12 Life and Career Planning  (1)
(formerly Counseling & Guidance 10)

Prerequisite: None
Advisory: English 256 or ESL 1W or ESL 1R.
Transfer Credit: Accepted for credit: CSU.
Hours: 18 hours lecture.
This course is a comprehensive approach to life and career planning based on extensive measurement of aptitude, interests, personality type, values, and skills. Personal and career goals will be formulated using career research and decision-making strategies. Course topics will include changing career trends and job search techniques. AA/AS area E2

13 Career and Job Search Strategies  (1)

Prerequisite: None
Advisory: Human/Career Development 12
Transfer Credit: Accepted for credit: CSU.
Hours: 18 hours lecture.
This course is designed to assist in the development of research skills in preparation for future employment in a competitive employment market. Topics include researching career fields, setting specific career/educational goals, and examining employment trends. It also includes resume writing, interview skills, and job search strategies. AA/AS area E2

16 Transfer: Making It Happen  (2)

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture
This course provides the necessary tools and skills to successfully transfer from a community college to a four-year college or university. In addition, it demonstrates the applications of knowledge from college research, self-analysis, and differentiation between college selection and majors.

17 Exploring Health Careers  (1)
(formerly Human/Career Development 62)

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture.
This course will introduce a wide variety of health-related occupations with particular emphasis on educational programs and career opportunities. Through analysis of interests, personality, and research, an individual college and career plan will be developed.

18 Volunteer Experiences in Health Careers  (1.5)
(formerly Human Career Development 64)

Prerequisite: None
Advisory: English 58 or 60 or ESL 2W or 2L, HCD 17
Hours: 9 hours lecture; 54 hours laboratory
This course offers an opportunity to obtain a “hands-on” volunteer health career experience. Placement will be in hospitals, dental offices, physical therapy clinics, animal health centers, or other locations utilizing health professionals. May be taken twice for credit.

21 Specific Learning Skills Assessment  (1)
(formerly Counseling & Guidance 21)

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture.
This course is designed for the student with special learning difficulties who may have a specific learning disability. Individual assessment of learning strengths and weaknesses will be completed to determine eligibility for Learning Disabilities services using criteria mandated by the California Community College system. Offered on a credit/no credit basis only.
22 **Specific Learning Strategies**  
(3)  
*Prerequisite: None*  
*Transfer Credit: Accepted for credit: CSU.*  
*Hours: 54 hours lecture.*  
This course provides learning support related to specific learning disabilities. It will present academic strategies to compensate for learning disabilities in order to provide for success in other college course work. May be taken twice for credit.

30 **Athletic Seminar**  
(formerly Counseling & Guidance 30)  
(1)  
*Prerequisite: None*  
*Transfer Credit: Accepted for credit: CSU*  
*Hours: 18 hours lecture.*  
This course addresses the concerns and issues of student athletes. Course topics include support services at ARC, educational planning, career planning, study skills, two-year and four-year eligibility rules, recruitment rules, and nutrition.

50 **College Discovery Program**  
(formerly Counseling & Guidance 50)  
(1)  
*Prerequisite: None.*  
*Hours: 18 hours lecture.*  
This course is a survey of opportunities and resources relevant to student success at American River College. It will focus on goals and objectives, campus requirements, and skills, techniques, and attitudes compatible with student progress. Examination of student services, instructional area, and campus life. May be taken twice for credit.

53 **Human Potential Seminar**  
(formerly Counseling & Guidance 53)  
(2)  
*Prerequisite: None.*  
*Hours: 36 hours lecture.*  
This course provides an in-depth examination of techniques to be used in enhancing one's chances for success in college. It is designed to meet the needs of students who have experienced difficulty in achieving their goals through a program of higher education. It is required for most dismissed students for re-admission to the college.

56 **Adult Opportunity Program**  
(formerly Counseling & Guidance 51)  
(1)  
*Prerequisite: None.*  
*Hours: 18 hours lecture.*  
This course explores opportunities for adults and assists them with decision making on careers, community service, education and personal enrichment. Includes testing, goal planning and orientation to American River College. Offered on a credit/no credit basis.

57 **College Success/Study Skills**  
(formerly Counseling & Guidance 52)  
(2)  
*Prerequisite: None.*  
*Advisory: English 58 or 60 or ESL 2W or 2R*  
*Hours: 36 hours lecture.*  
This course is designed to assist students in obtaining the skills and knowledge necessary for success in college. A focus will be placed on college resources and regulations, involvement in campus activities, communication skills, goal-setting, critical thinking, learning styles, and effective study skills such as time management, memory enhancement, notetaking techniques, textbook reading, exam preparation and exam anxiety.

63 **Careers and the World of Work**  
(formerly Counseling & Guidance 63)  
(3)  
*Prerequisite: None.*  
*Transfer Credit: Accepted for credit: CSU.*  
*Hours: 54 hours lecture.*  
This course provides career planning based on the measurement of aptitude, interest, personality traits, values, and skills. It develops strategies for a career campaign, including cover letter/resume writing. It concentrates on the physical and emotional demands of work, the study of work among professional, technical, and laboring groups, as well as large and small companies.

65 **Experience in Disabled Student Programs and Services**  
(formerly Counseling & Guidance 65)  
(.5-3)  
*Prerequisite: None.*  
*Advisory: English 58 or 60 or ESL 2W or 2L.*  
*Transfer Credit: Accepted for credit: CSU.*  
*Hours: 27-162 hours laboratory.*  
This course allows students an initial opportunity to provide direct, supervised services to disabled college students, thereby assisting in their adaptation to the physical and academic environment of the community college setting. Placement on campus determined by instructor. Course can be entered up to twelfth (12th) week. May be taken for a maximum of nine (9) units. This is a survey of Indian Mexico, the Spanish conquest and fusion of two cultures; the War of Independence; the age of Santa Ana and the loss of North Mexico; the reign of Diaz; the Revolution of 1910; reconstruction and contemporary Mexico. AA/AS area C2; CSU area D3; IGETC area 3.
The human services program provides preparation for employment as a paraprofessional aide with correctional institutions and parole, probation, welfare, rehabilitation and mental health agencies, as well as schools and child care centers. Students combine coursework in interviewing, counseling, tutoring techniques, psychology and sociology with field work in social services agencies. Training includes experience in recognizing problems and effecting behavior change in people. The human services program also offers an option in chemical dependency studies. This provides preparation for paraprofessional work with public or private agencies dealing with problems of chemical dependency.

**Career Opportunities**

Human services include a broad array of employment fields dealing with the social service needs of both groups and individuals. Such careers include teacher aides, vocational rehabilitation aides, group counselor aides, social service technicians and mental health workers.

Persons employed in human services fields are in essence community counselors who help individuals, families and groups to cope with problems in a complex society.

Of special interest today is the growing concern about chemical dependency, which is addressed by a special program option. Best job opportunities are found in health care fields, programs for the elderly, mental health agencies, child care, and corrections, family and chemical dependency counseling. The ARC programs prepares students for entry-level positions in all these fields.

**Requirements for Degree Major:** 33 units

Human Services 14, 40 (six units), 41, 42; H.Ser/Geron 15, H.Ser/Psyc 19, H.Ser/Psyc 35
Psychology 1 or Psychology 20
Psychology 15
Sociology 1A

**Recommended Electives**

Business 11; Psychology 16, 24, 26, Psyc/ECE 34; Sociology 1B, 22

**Chemical Dependency Studies**

The Human Service option, Chemical Dependency Studies, provides preparation for associate professional with public or private agencies dealing with problems of chemical dependency.

**Requirements for Certificate:** 36 units

Human Services 14, 40 (six units), 41, 42; H.Ser/Geron 15, H.Ser/Psyc 19; Psychology 1 or Psychology 20 Psychology 15 Sociology 1A

**Recommended Electives**

Psychology 2, 3, 4, 16, 21, 24, 26, 34
English 13A
Recreation 38, 43
Sociology 1A, 22

**General Education Graduation Requirements:**

Students must also complete the general education graduation requirements for an A.A. degree. See Graduation requirements.

**Requirements for Certificate:** 33 units

Human Services 14, 15, 40 (six units), 41, 42, H.Ser/Geron 15, H.Ser/Psyc 19, H.Ser/Psyc 35
Psychology 1 or Psychology 20
Psychology 15
Sociology 1A

**Recommended Electives**

Psychology 2, 3, 4, 16, 21, 24, 26, 34
English 13A
Recreation 38, 43
Sociology 1A, 22

**General Education Graduation Requirements:**

Students must also complete the general education graduation requirements for an A.A. degree. See Graduation requirements.

**Requirements for Degree Major:** 36 units

Human Services 14, 40 (six units), 41, 42; H.Ser/Geron 15, H.Ser/Psyc 19; Psychology 1 or Psychology 20 Psychology 15
Sociology 1A

**Recommended Electives**

Psychology 2, 3, 4, 16, 21, 24, 26, 34
English 13A
Recreation 38, 43
Sociology 1A, 22

**General Education Graduation Requirements:**

Students must also complete the general education graduation requirements for an A.A. degree. See Graduation requirements.

**Requirements for Certificate:** 36 units

Human Services 14, 40 (six units), 41, 42; H.Ser/Geron 15, H.Ser/Psyc 19; Psychology 1 or Psychology 20 Psychology 15
Sociology 1A

**13 Introduction to the Principles of Psychiatric Rehabilitation** (3)

**Prerequisite:** None

**Corequisite:** Human Services 15 or Gerontology 15.

**Advisory:** English 58 or 60, and 78 or ESL 2R, 2W; or placement through assessment.

**Transfer Credit:** Accepted for credit: CSU

**Hours:** 54 hours lecture

This course is an introduction to the principles and practices of psycho-social rehabilitation (PSR) used for working with individuals who have severe mental illness to live successfully in community-based settings. Emphasis is on the roles and skills of unlicensed mental health workers in hospitals, treatment and social rehabilitation settings.
14 Introduction to Human Services
(3)
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.
This course is a comprehensive overview of the field of Human Services and an introduction to attitudes and methods that enhance communication skills in human relations and enable effective intervention in problem situations. Emphasis is on the roles and skills of associate professionals such as health workers, activity directors with the elderly, and children's welfare assistants, group techniques are emphasized. Required for the Human services and the chemical Dependency Studies majors.

15 Ethical Issues and Client's Rights
(same as Gerontology 15)
(3)
Prerequisite: None
Corequisite: Human Services 14
Advisory: English 58 or 60, and 78, or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course is a comprehensive exploration of the basic ethical issues involving human services delivery. Topics include: professional ethics, confidentiality, counselor and clients' right and other areas involving ethical controversies. Not open to students who have completed Gerontology 15.

19 Issues of Diverse Populations
(Same as Psychology 19)
(3)
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment process.
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course is a study of the values, problems, issues, concerns and counseling needs of special population groups including the elderly, African American, Hispanics, Asians, Native Americans, homosexuals, the poor and terminally ill. Also includes the nature and extent of chemical dependency and other addictive behaviors. Not open to students who have completed Psychology 19. AA/AS areas C2 & F; CSU area E1

35 Introduction to Chemical Dependency
(Same as Psychology 35)
(3)
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment process.
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.
This is a survey course that examines the physiological and psychological effects of chemical dependency on the individual. Included is an analysis of the effects of substance abuse on the family; the sociological, economic conditions contributing to substance abuse; and a description of community efforts at prevention and treatment. Not open to students that have completed Psychology 35. AA/AS area E2; CSU area E1

36 Physiology and Pharmacology: Alcohol & Other Drugs (Same as Psychology 36)
(3)
Prerequisite: Human Services 35/Psychology 35.
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.
A study of the chemical composition of alcohol and mechanism of action in the body of alcohol and other psychoactive drugs, including opiates, stimulants, depressants, psychotherapeutics and psychedelics. Also included are the social and psychological implications of tolerance, habituation and substance abuse of the user and abuser. Not open to students who have completed Psychology 36.

37 Alcoholism: Intervention, Treatment & Recovery (Same as Psychology 37)
(3)
Prerequisite: Human Services 36/Psychology 36.
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.
A study of techniques used in the treatment of chemical dependency and an evaluation of intervention, individual and group counseling, detoxification, twelve step program, therapeutic communities, and aftercare programs. Not open to students who have completed Psychology 37.

40 Practices in Human Services
(3)
Prerequisite: Human Service 14; an intern placement in a social service agency confirmed in writing.
Corequisite: Human Services 15 and 41A or 42.
Transfer Credit: Accepted for credit: CSU.
Hours: 18 hours lecture; 108 hours laboratory.
This course provides advanced study and supervised field experience in public and/or private agencies providing mental health, corrections, chemical dependency and child/adolescent treatment services. Students apply concepts, values and skills acquired in other core courses to the process of helping others. This course may be taken three times for credit.

41 Techniques of Interviewing and Counseling
(3)
Prerequisite: Human Services 14 and Psychology 1 or 20.
Corequisite: Human Services 15
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.
A survey of interview-counseling techniques appropriate for paraprofessionals in mental health, corrections and substance abuse counseling. The survey includes theories of family co-dependency and techniques for counseling the family and significant others of substance abusers.

42 Techniques of Group Counseling
(3)
Prerequisite: Human Services 41A
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.
This course covers the basic assumptions of group counseling and ethical issues are compared, contrasted and analyzed. Primary emphasis is on the use of facilitating skills and group dynamics.
ARC offers courses in classical, modern, American, and Third World humanities.

1 Classical Humanities (3)
Prerequisite: None
Advisory: English 58 or 60 or ESL 2W or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
The student will acquire a knowledge of the culture of the West, including painting, sculpture, architecture, music, literature, philosophies, and beliefs from the Ancients through the Medieval world, with the emphasis on the civilizations of Greece, Rome, and the Middle Ages. The student will learn to identify and analyze works from the various periods, and develop principles of critical judgment. AA/AS area B; CSU area C2; IGETC area 3

1H Honors Classical Humanities (1)
Prerequisite: 3.0 or better cumulative GPA
Corequisite: Humanities 1 and English 1A
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 18 hours lecture.
This honors course supplements Humanities 1. It is an in-depth investigation of seminal works and thought in Western culture from antiquity to the Renaissance. The seminar format requires significant reading and presentation commitments. CSU area C2

2 Modern Humanities (3)
Prerequisite: None
Advisory: English 58 or 60 or ESL 2W or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
The student will acquire a knowledge of the culture of the West, including painting, sculpture, architecture, music, literature, philosophies, and beliefs from the Renaissance to the Modern period. The student will learn to identify and analyze works from the various periods, and develop principles of critical judgment. AA/AS area B; CSU area C2; IGETC area 3

2H Honors Modern Humanities (1)
Prerequisite: 3.0 or better cumulative GPA
Corequisite: Humanities 2 and English 1A
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 18 hours lecture.
This honors course supplements Humanities 2. It is an in-depth investigation of seminal works and thought in Western culture from the Renaissance to the present. The seminar format requires significant reading and presentation commitments. CSU area C2

3 Eastern Humanities (3)
Prerequisite: None
Advisory: English 58 or 60 or ESL 2W or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
This course is a survey of the traditions, literature, art, and film of India, China and Japan from ancient times to the present. Field trips to museums, a tea ceremony, and other events are an integral part of the course. AA/AS areas B & F; CSU area C2; IGETC area 3

8 Humanities of the Ancient Near East (3)
Prerequisite: None
Advisory: English 58 or 60 or ESL 2W or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
A study of the arts, cultures, and philosophies of the ancient civilizations of Mesopotamia, Egypt, and Palestine, from the development of writing (c. 3100 B.C.) to the Roman Empire (c. 30 B.C.). Emphasis on the literature, art, and architecture of each, as products of technological and political achievements. AA/AS area B; CSU area C2; IGETC area 3

9 Humanities of the Americas (3)
Prerequisite: None
Advisory: English 58 or 60 or ESL 2W or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
Fine arts of the Western Hemisphere from antiquity to contemporary times, with an emphasis on an awareness of and a sensitivity to the literature, philosophy, sculpture, art, architecture, and music of the past and present, and a special attention to the distinctively American aspects of those arts and their differences from the European tradition. AA/AS areas B & F; CSU area C2; IGETC area 3
10  **Introduction to the New Testament**  
(3)

*Prerequisite: None*  
*Advisory: English 58 or 60, or ESL 2W or placement through assessment process.*  
*Transfer Credit: Accepted for credit: UC, CSU*  
*Hours: 54 hours lecture.*  
This is a course whose approach is historical and cultural and situates the documents of the early Christian community in relation to both Judaism, out of which it grew, and the Roman world. Important topics include origin of the gospels, the nature of inspiration, origin and development of the early Church and the role of Paul. AA/AS area B; CSU area C2; IGETC area 3

11  **Introduction to the Old Testament**  
(The Hebrew Bible)  
(3)

*Prerequisite: None*  
*Advisory: English 58 or 60 and 78; or ESL 2W or placement through assessment.*  
*Transfer Credit: Accepted for credit: UC, CSU*  
*Hours: 54 hours lecture.*  
This course provides a literary and historical approach to The Hebrew Bible. The course will explore the ancient Israelite society prior to the Common Era through a study of the Old Testament of the Bible, cultural artifacts, and other writings of contemporary societies of the ancient near east. AA/AS area B, CSU area C2, IGETC area 3

40  **Special Topics in the Humanities**  
(0.5-3)

*Prerequisite: None*  
*Advisory: English 58 or ESL 2W or placement through assessment.*  
*Transfer Credit: Accepted for credit: UC (with conditions), CSU*  
*Hours: 9-54 hours lecture.*  
This course will provide the opportunity for concentrated study on specialized topics in the Humanities. Each offering focuses on the integration of arts and ideas in the works of a particular time and place and/or illuminates a selected theme. Refer to class schedule for current topic. Individual field trips may be required. Course may be taken for a maximum of 6 units.
**Interdepartmental Studies**

15  **Urban Environment**  (3)

Prerequisite: None.
Advisory: English 58 or 60 and 78, or ESL 2R and 2W; or placement through assessment.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.

This course will provide a broad overview of some of the critical social, economic, environmental, political, and physical urban problems confronting the citizenry, private enterprise and various governmental agencies. The urban environment is studied from a multi-field approach employing sociology, economics, political science, environmental, business, and others. AA/AS area C2

28  **Current Topics in Science and Technology**  (3)

Prerequisite: None.
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.

This course is designed to provide a broad overview of some of the current topics in natural sciences confronting the citizen. Current topics in science will be studied from a multidisciplinary approach including the earth, life, and physical sciences. Modern applications will be used to illustrate these topics. The relationships among the sciences and the social and political effects on society will be discussed.

40  **Practices in Science Education**  (1)

Prerequisite: Completion of one 3-unit course in any science with a grade of "C" or better.
Advisory: Students should have an interest in working with ten-to twelve-year old students.
Transfer Credit: Accepted for credit: CSU
Hours: 4-10 hours lecture; 45-135 hours laboratory

This course offers students an opportunity to participate in environmental education programs as assistants with a focus on science education. Students will spend 45 hours for each unit earned (TBA) in a leadership role assisting with instructional science-related activities in both classroom and outdoor settings as well as supervising students in related outdoor activities. This course is recommended for students preparing for careers in education or outdoor recreation. This course may be taken three times.
Interior design is a service profession. The interior designer makes a living and working environments attractive and functional by considering the purpose of a space and the needs of its occupants.

Interior Design is a challenging field requiring organizational skills, attention to detail, artistic talents and the ability to visualize spatial relationships. Typically, the designer prepares or supervises the preparation of sketches and detailed plans for the finished interior. This includes the selection of floor and wall coverings, furniture and appropriate equipment and accessories. Building and life safety codes, the ADA and barrier-free designs are also incorporated.

Designers may work as a member of a design firm team or as a private consultant.

**Career Opportunities**

Interior design work may be performed in a variety of environments, including residential design, kitchen and bath, commercial, health care, retail, hospitality, facility management, institutional, education, product design, universal design, and historic preservation.

**Requirements for Degree Major:** 44 units

**Core Requirements**

- Interior Design 20  
- Interior Design 24  
- Interior Design 26  
- Interior Design 28  
- Interior Design 30  
- Interior Design 31  
- Interior Design 33  
- Interior Design 34  
- Interior Design 35  
- Interior Design 36  
- Interior Design 36L  
- Interior Design 37  
- Interior Design 39  

- Art 11A  
- Art 15B  
- Design Technology 54  
- Design Technology 66  

**Concentration Requirements**

- Art 1A  
- Fashion 20  
- One course from the following:  
  - Art 3  
  - Art 3A  
  - Art 4  
  - Art 5  

**Interior Retail/Merchandising Certificate (Level I)**

Preparation for employment in retail home furnishings, materials, accessories and related areas.

**Requirements for Certificate:** 21 Units

**Courses Required**

- Interior Design 20  
- Interior Design 24  
- Interior Design 26  
- Interior Design 28  
- Interior Design 30  
- Art 14  
- Fashion 20  

**Pre-Professional: Interior Design Assistant Certificate (Level II)**

Preparation for employment as a design assistant in the interior design industry.

**Requirements for Certificate:** 44 Units

**Courses Required**

- Level One Certificate  
- and completion of the following courses  
  - Interior Design 31  
  - Interior Design 33  
  - Interior Design 34  
  - Interior Design 35  
  - Interior Design 36  
  - Interior Design 36L  
  - Interior Design 37  
  - Interior Design 39  

- One course from the following:  
  - Art 11A  
  - Art 15B  
  - Design Technology 54  
  - Design Technology 66  

General Education Graduation Requirements: Students must also complete the general education graduation requirements for an A.A. degree. See graduation requirements.
20 Fundamentals of Interior Design (3)

Prerequisite: None
Advisory: English 58 or 60 and 78 or ESL 2R, 2L, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.
This course covers the study and application of design principles and elements; influences of historical, cultural and functional design factors; and the selection and arrangement of interior furnishings and materials. An overview of career options in interior design will be included. Field trips required. (CAN FCS 18)

24 Materials of Interior Design (3)

Prerequisite: None
Corequisite: None
Advisory: English 58 or 60 and 78; or ESL 2R, 2L, 2W; or placement through assessment process.
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.
This course covers the industry, technology, products, and specification issues of interior finish materials. Textiles, floor coverings, paint and wallpaper, window treatments, furnishings and surface materials lighting, plumbing fixtures and appliances will be included. Field trips required.

26 Beginning Interior Design Studio (3)

Prerequisite: None
Corequisite: Interior Design 20.
Transfer Credit: Accepted for credit: CSU.
Hours: 36 hours lecture; 54 hours laboratory.
This course covers basic drawing and presentation techniques for interior designers. Development of floor plans, furniture arrangements, and elevations for interior space planning and presentation will be included. Mechanical drawing will be utilized. Presentation boards and other methods of presentation will be explored.

28 Interior Design Business Practices (3)

Prerequisite: None
Corequisite: None
Advisory: CIS 1
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.
This course covers the business and practical aspects of interior design. It covers ethical practices, methods of compensation, establishing client's budget, estimating costs, purchasing, billing, marketing, and sales. Computer software specific business applications will be discussed.

30 History of Interior Architecture and Furnishings I (3)

Prerequisite: None
Advisory: English 58 or 60 and 78 or ESL 2R, 2L, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.
This course covers the historical relationship between the decorative arts, period furniture and interior architecture from antiquity through the Victorian Era. Emphasis is placed on identification of specific furniture styles and architectural features. AA/AS area B

31 History of Interior Architecture and Furnishings II (3)

Prerequisite: None
Advisory: English 58 or 60 and 78 or ESL 2R, 2L, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.
This course is a study of architecture and interior beginning with late 19th century America and Europe. Emphasis is on style development as it relates to socio-economic and political factors of the times. Asian, African, Mid-Eastern and other non-western styles are included. AA/AS area B

33 Reading Construction Documents (2)

Prerequisite: None
Advisory: English 58 or 60 and 78; or ESL 2R, 2L, 2W; or placement through assessment process; Mathematics 215 or placement through assessment process; CIS 1
Transfer Credit: Accepted for credit: CSU.
Hours: 36 hours lecture.
This course covers the language of construction documents and specifications including: symbols, conventions, scales, nomenclature, contract documents, specifications and uniform building codes.

34 CADD for Interior Design (3)

Prerequisite: None
Corequisite: None
Advisory: CIS 1
Transfer Credit: Accepted for credit: CSU.
Hours: 36 hours lecture; 54 hours laboratory.
This course uses CADD (computer and drafting design) for interior design projects. Floor plans, space planning, elevations and perspectives will be created.

35 Interior Environment and Space Planning (3)

Prerequisite: Interior Design 26
Transfer Credit: Accepted for credit: CSU.
Hours: 36 hours lecture; 54 hours laboratory.
This course covers the analysis and application of the design concepts, and space planning techniques. It includes resources necessary to creatively solve problems relative to the function and quality of human environments. Integrating barrier-free design, resource management and environmental psychology into design reality is explored. Field trips required. There are supply/materials costs associated with this class.

36 Codes and Universal Access for Interior Design (2)

Prerequisite: Interior Design 26
Advisory: English 58 or 60 and 78 or ESL 2R, 2L, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: CSU.
Hours: 36 hours lecture.
This course explores local, state and federal regulations, codes and specifications concerning life-safety issues, and barrier free access (American Disabilities Act universal design requirements) relative to residential and contract design. Special attention is given to performance, health-safety, and barrier free design when estimating and preparing specifications for space planning, materials and furnishings/products.
36L  Codes and Universal Access Lab  (1)

Prerequisite:  Interior Design 26 and Interior Design 36
Corequisite:  None
Advisory:  English 58 or 60 and 78; or ESL 2R, 2L, 2W; or placement through assessment process
Transfer Credit: Accepted for credit:  CSU
Hours: 54 hours laboratory.
This course applies the content and skills from Interior Design 36 to various design scenarios requiring universal design, barrier-free design and ADA (Americans with Disabilities Act) compliance. Projects will be drafted following prescribed criteria.

37  Interior Illustration and Rendering  (3)

Prerequisite:  Interior Design 26
Transfer Credit: Accepted for credit:  CSU
Hours: 36 hours lecture; 54 hours laboratory.
This course covers procedures for developing finished presentation drawings and boards for interior design. It includes methods for illustrating plan views, elevations, mechanically scale constructed perspectives, free hand perspectives, shades, shadows and techniques for color application. There are supply/material costs associated with this class.

39  Practices in Interior Design  (3)

Prerequisite:  Internship placement and Interior Design 20, 24, 28, 30, 31, 33, 35, 36L, and 37 with a grade of “C” or better
Corequisite:  None
Advisory:  CIS 1
Transfer Credit: Accepted for credit:  CSU
Hours: 18 hours lecture, 150 hours of internship.
This course provides opportunity for supervised job internships at an interior design related work site. Skills and knowledge obtained in Interior Design courses will be utilized. Assistance for the internship search is provided by the coordinator, but placement is not guaranteed. Lecture portion only on-line.

46  Teachers Aide  (1-4)

Prerequisite:  Department Interview and Interior Design 20 with a grade of “C” or better.
Transfer Credit: Accepted for credit:  CSU (6 units maximum).
Hours: 9-36 hours lecture, 27-108 hours laboratory.
This course provides for the development of an in-depth understanding and greater knowledge of techniques and skills of some facet of interior design. Work under the direction of the instructor performing such duties as research, developing instructional aids and tutoring students. May be taken four times for credit up to a maximum of six units.

48  Work Experience  (2-4)

Prerequisite:  Interior Design 20.
Transfer Credit: Accepted for credit:  CSU.
Hours: Lecture hours:  See Work Experience.
This course provides supervised work experience in interior design and home furnishings placements. Students work in cooperating furniture stores and decorator and design establishments. Essential aspects of the home furnishings trade are covered. Job placement is not guaranteed but assistance is provided by the coordinator. Field trips to the design centers are included.
Journalism

Journalism is the practice of reporting the news of the day. You could be working for printed media such as newspapers, broadcast outlets such as television, or for an interactive page on the World Wide Web.

Journalism includes interviewing and research, writing and designing, and making decisions. Journalists are curious, think fast, and write well. A bachelor’s degree is almost always required. Modern journalists have a solid liberal arts education and an increasing proportion have been educated in specialties which range from environmental sciences to law.

The community journalism program prepares students for entry-level work in community newspapers and organizational publications. Also prepares students for transfer as mass communication or journalism majors at California State University campuses. The program features the weekly campus newspaper, planned, written and edited by students. A variety of internship positions is available.

Career Opportunities

Journalism is a course of study that can help prepare a student for exciting work in a broad range of fields. These include public relations, corporate communication, and law. It is also a way to begin a career in the news media.

Requirements for Degree Major: 29 units

Art 40
History 18
Journalism 10
Journalism 20A
Journalism 20B or 21
Journalism 30
Journalism 44
Philosophy 5 or 6
Political Science 16/ Business 16

Recommended Electives

Computer Information Science 1; English 1A, 1A, 201;
Geography 2; History 4; Journalism 54; Political Science 1, 10, 15; Speech 1, 15.

General Education Graduation Requirements:
Students must also complete the general education graduation requirements for an A.A. degree. See graduation requirements.

10 Mass Media and Society (3)

Prerequisite: None
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
This course is a survey of the mass media: history, philosophy, structure and trends, as well as the theories which help to explain effects and importance as social institutions. It includes an exploration of economics, technology, law, ethics and social issues, including cultural and ethnic diversity. (CAN JOUR 4) AA/AS area C2; CSU area D3

20A Newswriting and Reporting (3)

Prerequisite: None
Advisory: Ability to keyboard.
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.
This course covers evaluating, gathering and writing news in accepted journalistic style under newsroom conditions. It includes personal interviews, speeches, meetings and other event coverage. The role of the reporter and the legal and ethical issues related to reporting are also examined. (CAN JOUR 2) AA/AS area D2

20B Advanced Newswriting and Reporting (3)

Prerequisite: Journalism 20A with a grade of “C” or better
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.
This course covers the development of advanced skills of reporting, interviewing and writing in the range of work handled by a general assignment reporter, with emphasis on research in depth, critical analysis and story format.

21 Writing for Broadcasting (3)

Prerequisite: Journalism 20A, ability to type
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.
Theory and technique of writing for the broadcast media. Includes reporting for radio and television news, writing and storyboarding commercials and public service programming, and an introduction to production techniques. Recommended for students who plan to work in broadcasting, instructional media and related fields.

30 College Newspaper Production (2)

Prerequisite: Journalism 20A with a grade of “C” or better
Transfer Credit: Accepted for credit: CSU.
Hours: 108 hours laboratory.
This course provides weekly deadline experience in research and analysis, writing, editing, photography and design phases of the campus' student newspaper. It includes desktop publishing and digital photo-imaging. It may be taken four times for credit. Some universities limit transfer credit; see the department adviser or your counselor.

44  Photojournalism  (3)

Prerequisite:  Art 40A
Transfer Credit: Accepted for credit: CSU.
Hours: 36 hours lecture; 54 hours laboratory.
Theory and technique of telling stories with pictures, including the technical aspects of camera and darkroom, composition, lighting and an introduction to the role of the photojournalist and pertinent legal and ethical issues.

54  Public Relations Media Techniques  (3)

Prerequisite:  None.
Hours: 54 hours lecture.
Study of public relations techniques; scientific polling techniques and their practical application to various projects, and the role of public relations in business, education, entertainment, social service and other fields.

COMMUNICATIONS MEDIA

290  Video and Audio Techniques  (1)

Prerequisite:  None.
Hours: 18 hours lecture.
Course designed to enable students to gain skills in the operation and use of video and audio equipment and techniques. Course is intended for noncommunication majors, those interested in cable television. Some of the topics that may be scheduled include: video performance techniques, audio recording and editing, and writing for video.
Legal Assisting

Degree: A.A. - Legal Assisting
Area: Behavioral & Social Sciences
Dean: Whitney Yamamura
Phone: (916) 484-8283
Counseling: (916) 484-8572

The legal assistant works under the supervision of an attorney and aids in preparing pleadings and other documents, obtains information for client interview, maintains complex calendar systems and manages the law office.

The ARC associate of arts degree in legal assisting provides preparation for a career in legal assisting. It includes an introduction to the theory of law, the litigation process, and the law library. It is not a pre-law program, nor does it prepare the student to become an attorney.

Legal assisting courses are taught by practicing attorneys and working legal assistants.

Career Opportunities

Employment is brightest for those who have a combination of course work and job experience in a law office, or a degree.

According to a study done by the Bureau of Labor Statistics, the need for paralegal personnel is expected to continue in the years ahead.

Salaries for legal assistants vary greatly depending upon the size of the law firm and the assistant's experience and level of responsibility. However, wages are generally quite good, even for entry-level positions.

10 Introduction to the Law and Legal Assisting (3)
(formerly Legal Assisting 50)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 63r or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This is an introductory course to the American legal system; its history and function. It provides an overview of several important areas of law such as torts and crimes and the legal assistant's role in the system.

11 Civil Procedure and Litigation (3)
(formerly Legal Assisting 51)

Prerequisite: None
Corequisite: Legal Assisting 12 or 13.
Advisory: English 1A or ESL 5W
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course is an introduction to the California legal system with emphasis on understanding the practical aspects of litigation and the proper procedures required by statutes and rules of court. The phases of California court procedure, including State and Federal constitutional limitations, jurisdiction, venue, pleadings, and motions will be covered. The course also includes the forms by which matters are submitted to the court system from pre-litigation through appeals.

Requirements for Degree Major: 30 units

<table>
<thead>
<tr>
<th>Core Requirements:</th>
<th>Units</th>
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<tbody>
<tr>
<td>Legal Assisting 10</td>
<td>3</td>
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<tr>
<td>Legal Assisting 11</td>
<td>3</td>
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<tr>
<td>Legal Assisting 12</td>
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<td>Legal Assisting 13</td>
<td>3</td>
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<tr>
<td>Legal Assisting 14A</td>
<td>3</td>
</tr>
<tr>
<td>Legal Assisting 14B</td>
<td>3</td>
</tr>
</tbody>
</table>

General Education Graduation Requirements:
To satisfy the Legal Assisting Degree requirements students must also successfully complete the general education graduation requirements for an A.A. degree. The general education courses must include a minimum of 18 semester units of academic general education with courses from at least three major disciplines and must include English 1A. Students should check with a counselor for appropriate courses.
12 Torts and Personal Injury  
(formerly Legal Assisting 52)  
(3)

Prerequisite: None  
Corequisite: Legal Assisting 10 
Advisory: English 1A or ESL 5W  
Transfer Credit: Accepted for credit: CSU 
Hours: 54 hours lecture. 
This course is an overview of substantive tort law as it applies to personal injury (PI) cases. It introduces tort concepts such as negligence, intent, and strict liability, including the elements required to prove liability and defenses available to litigants. This course covers pretrial procedures such as discovery, settlement preparation, and witness and trial preparation.

13 Contract Law for Legal Assistants  
(formerly Legal Assisting 53)  
(3)

Prerequisite: None 
Corequisite: Legal Assisting 10 
Advisory: English 1A or ESL 5W 
Transfer Credit: Accepted for credit: CSU 
Hours: 54 hours lecture. 
This course provides the legal assistant with knowledge of basic contract principles, including formation, validity, defenses, rights of third parties, performance, breach, remedies and damages.

14A Legal Research  
(formerly Legal Assisting 62A)  
(3)

Prerequisite: None 
Corequisite: Legal Assisting 10 
Advisory: English 1A or ESL 5W 
Transfer Credit: Accepted for credit: CSU 
Hours: 54 hours lecture. 
This course is designed to familiarize the legal assistant with the basic tools of legal research in both federal and California law, with emphasis on California materials. Location and use of primary and secondary sources will be studied. The elements of a court decision and how to brief a case will also be studied.

14B Legal Writing  
(formerly Legal Assisting 62B)  
(3)

Prerequisite: Legal Assisting 14A and English 1A, or ESL 5W with grade of "C" or better. 
Transfer Credit: Accepted for credit: CSU 
Hours: 54 hours lecture. 
This course is a continuation of Legal Assisting 14A. It includes the application of research methods to gather information which may be used in a variety of written products. Information will be synthesized into various documents typically used in the law office. Documents created may include interoffice memoranda, court briefs, and letters to clients.

20 Family Law and Procedure  
(formerly Legal Assisting 54)  
(3)

Prerequisite: Legal Assisting 10 with a grade of "C" or better. 
Advisory: Legal Assisting 14A. 
Transfer Credit: Accepted for credit: CSU 
Hours: 54 hours lecture. 
This course is designed to familiarize the legal assistant with California Family Law relating to dissolution procedures; property issues and non-marital relationships. Legal procedures, preparation of necessary forms and their significance will be emphasized.

21 Administrative Law and Procedure  
(formerly Legal Assisting 55)  
(3)

Prerequisite: None 
Advisory: Legal Assisting 10 
Transfer Credit: Accepted for credit: CSU 
Hours: 54 hours lecture. 
This course is designed to familiarize the legal assistant with administrative law and procedure in general with special emphasis on California law and procedure.

22 Techniques of Interview  
(formerly Legal Assisting 66)  
(1)

Prerequisite: Legal Assisting 10 with a grade of "C" or better. 
Transfer Credit: Accepted for credit: CSU 
Hours: 18 hours lecture. 
This course provides general background information about basic communication and relates this information to the skills used by a legal assistant in interviewing clients and witnesses.

23 Criminal Law and Procedure  
(formerly Legal Assisting 67)  
(3)

Prerequisite: None 
Transfer Credit: Accepted for credit: CSU 
Hours: 54 hours lecture. 
This course provides the paralegal with a background in both substantive crimes and criminal procedure. It includes a detailed study of the operation of the criminal justice system, from arrest and filing of charges through trial, conviction and appeal.

24 Evidence  
(formerly Legal Assisting 70)  
(3)

Prerequisite: None 
Advisory: Legal Assisting 11 
Transfer Credit: Accepted for credit: CSU 
Hours: 54 hours lecture. 
This course is designed to familiarize the legal assistant with the rules for the admission of evidence in federal and state courts.

25 Law Office Management  
(formerly Legal Assisting 74)  
(3)

Prerequisite: Legal Assisting 10 with a grade of "C" or better. 
Transfer Credit: Accepted for credit: CSU 
Hours: 54 hours lecture. 
This course covers the legal assistant's role in law office management. Law office accounting, time and records management and communication skills are examined. Legal ethics, career development and coping with stress are also discussed.

26 Corporations Law  
(formerly Legal Assisting 81)  
(3)

Prerequisite: 
Advisory: Legal Assisting 10. English 58 or 60, and 78 or ESL 2R, ESL 63W or placement through assessment. 
Transfer Credit: Accepted for credit: CSU 
Hours: 54 hours lecture. 
This course introduces the legal assistant to corporations terminology and legal requirements governing corporations.
Legal Assisting

27  Estate Planning and Probate Procedure  (formerly Legal Assisting 83)  (3)

Prerequisite: Legal Assisting 10 and 14A with a grade of "C" or better.
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course is an introduction to estate planning and the manner in which property may be held and ways it can be transferred. Testamentary and intestate probate procedures will also be included.

28  Landlord Tenant Law  (formerly Legal Assisting 84)  (3)

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course focuses on the most common types of landlord-tenant disputes. Litigation and non-litigation matters are covered.

29  Basic Bankruptcy Law  (formerly Legal Assisting 85)  (3)

Prerequisite: None
Advisory: Legal Assisting 21. English 58 or 60, and/78 or ESL 2R, ESL 63W, or placement through assessment
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course serves as a basic primer related to the practical aspects of representing debtors or creditors within the bankruptcy system.

30  Workers’ Compensation Law  (formerly Legal Assisting 86)  (3)

Prerequisite: None
Advisory: Legal Assisting 10 and Legal Assisting 12.
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course provides an overview of the Workers’ Compensation Law in California. The focus will be on the procedural aspects of handling a Workers’ Compensation claim from both the applicant’s side and the defense side.

48  Legal Assisting Internship  (formerly Legal Assisting 68)  (2-4)

Prerequisite: Legal Assisting 10, 11 and 14A with a grade of "C" or better.
Corequisite: Maintain a minimum of seven (7) units.
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture, 60-225 hours laboratory.
This is a course of supervised work experience in law firms or public agencies is available to legal assisting students. May be taken twice for credit for a maximum of 4 units.
Library courses provide a general introduction to basic library and research resources.

10 Basic Library Skills (1)

Prerequisite: None
Transfer Credit: Accepted for credit: UC (unit limitation), CSU.
Hours: 18 hours lecture.
This self-paced course will acquaint students with various library services and materials; will introduce students to how libraries are organized, and how books are found through the electronic catalog; and will introduce students to reference and periodicals. Students will also learn how to use the library for class assignments.

15 Library Research and Information Literacy (formerly Library 20) (1)

Prerequisite: None
Transfer Credit: Accepted for credit: UC (unit limitation), CSU.
Hours: 18 hours lecture.
This course will help students acquire the information competency skills necessary to conduct academic or personal research. It provides a step-by-step guide to the research process that is applicable to term papers, course work and life-long learning.

3 Introduction to Internet and Searching Strategies (3)

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course is an introductory survey to the content, use, and the evaluation of electronic information sources. Topics will include Internet resources, CD-ROM and online databases. Database search strategies and techniques will be emphasized. Issues in information technology will be discussed.

35 Internet Research Skills (1)

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture.
This course focuses on using the Internet as a research tool. It will provide strategies in locating, retrieving and evaluating information available over the Internet. It will also give hands-on practice in developing effective research techniques.

45 Special Topics in Library and Information Science (5-3)

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 9-54 hours lecture.
This course will focus on special topics in library and information science. Topics will emphasize accessing and using information and information systems. This course may be taken four times for credit on different topics for a maximum of six units.
Managers are organizational leaders, decision makers and activity coordinators. Management skills are the methods used by these individuals in the selection and education of personnel, the regulation of work flow, planning and the allocation of resources. Resource management theory, selection, and education of employees as well as quality management, are key skills in which every manager must excel. The American River College management program includes a broad cross section of courses designed to develop these skills with options for individuals employed in business, industry and government. The program includes courses in basic management techniques and communication, employee relations, quality management and organizational theory. Specialized courses include a series of classes for the small business entrepreneur. Students may specialize in a particular area of management: Business; Hotel (Hospitality Management); Small Business; Total Quality Management. Certificate programs are available in all options for those who may not desire a full degree program.

Career Opportunities
Employment opportunities in management vary greatly, depending on the type and location of business, industry or public agency. Opportunities are greatest for those already employed in a given field and who seek on-the-job advancement. Keys to managerial promotion continue to be a thorough knowledge of the field and training in management theory and practice.

Management: Business Option

Requirements for Degree Major: 33-35 units

<table>
<thead>
<tr>
<th>Business Core Requirements</th>
<th>15-17 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting 60 or 1A</td>
<td>3-4</td>
</tr>
<tr>
<td>Business 1 (or the passing of a keyboarding competency test)</td>
<td>1-0</td>
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<tr>
<td>Business 18A</td>
<td>3</td>
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<tr>
<td>Business 20</td>
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<tr>
<td>Accounting 6 or 1A</td>
<td>3</td>
</tr>
<tr>
<td>Business 18A</td>
<td>3</td>
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<tr>
<td>Business 20</td>
<td>3</td>
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</tbody>
</table>

Small Business Management

Provides training for the field of small business as owner, manager or employee. The curriculum contains classes in planning, financing and operating a small business as well as training in marketing, business law, accounting and general education.

Requirements for Degree Major: 33-35 units

Business Core Requirements 15-17 units

<table>
<thead>
<tr>
<th>Accounting 6 or 1A</th>
<th>3-4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business 1 (or the passing of a keyboarding competency test)</td>
<td>1-0</td>
</tr>
<tr>
<td>Business 18A</td>
<td>3</td>
</tr>
<tr>
<td>Business 20</td>
<td>3</td>
</tr>
<tr>
<td>Business 59 or Economics 1A</td>
<td>3</td>
</tr>
<tr>
<td>Computer Information Science</td>
<td>3</td>
</tr>
</tbody>
</table>

*Three units selected from CIS classes, Accounting 5, 6, Business 9, 11.
Concentration Requirements  18 Units
Business 60  3
Marketing 20  3
Marketing 24  3
Business 25  3
Management 1 or 24 or 23  3
Select three units from
Business 71A-71K  3

Recommended Electives
Accounting 5, 70, Business 14, 15, Marketing 22, 26; CIS 11A, 12A, 13A, 14A, 15A;
Management 21

Requirements for Certificate:  32-33 units
Courses Required  Units
Accounting 60 or 1A  3-4
Accounting 5  2
Accounting 70  3
Business 15  3
Business 18A  3
Business 25  3
Business 71A-71K  3
Management 1 or 24 or 23  3
Marketing 20  3
Marketing 22  3
Marketing 24 or 26  3

General Education Graduation Requirements:
Students must also complete the general education graduation requirements for an A.A. degree. See graduation requirements.

MODERN MANAGEMENT

Requirements for Degree Major:  37-38 units
Business Core Requirements  10-11 Units
Accounting 60 or 1A  4
Business 1 (or the passing of a keyboarding competency test)  1-0
Business 59 or Economics 1A  3
Management 21, or Business 8  3

Concentration Requirements  27 Units
Management 1  3
Management 3A  3
Management 3B  3
Management 4A  3
Management 4B  3
Management 5A  3
Management 5B  3
Management 6A  3
Management 6B  3

Recommended Electives
Accounting 1B, Economics 1B, English 1A, Management 24,62.

Requirements for Certificate:  27 Units
Management 1  3
Management 3A  3
Management 3B  3
Management 4A  3
Management 4B  3
Management 5A  3
Management 5B  3

MODERN MANAGEMENT CERTIFICATES

MODERN MANAGEMENT CERTIFICATE

Requirements for Certificate  15 units
Courses Required  Units
Management 1  3
Management 3A  3
Management 4A  3
Management 5A  3
Management 6A  3

APPR ECIATION OF SYSTEMS/SYSTEMS THINKING CERTIFICATE

Requirements for Certificate  9 units
Courses Required  Units
Management 1  3
Management 5A  3
Management 5B  3

PSYCHOLOGY AND TEAM FACILITATION CERTIFICATE

Requirements for Certificate  9 units
Courses Required  Units
Management 1  3
Management 4A  3
Management 4B  3

THEORY OF KNOWLEDGE/PREDICTION CERTIFICATE

Requirements for Certificate  9 units
Courses Required  Units
Management 1  3
Management 6A  3
Management 6B  3

VARIATION AND STATISTICS CERTIFICATE

Requirements for Certificate  9 units
Courses Required  Units
Management 1  3
Management 3A  3
Management 3B  3
1 Introduction to Modern Management

Prerequisite: None
Advisory: English 58 or 60 and 78 or ESL 2R and 2W.
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.
This course examines the underlying principles and practices of modern management, and how both individuals and organizations can implement them. Such concepts as Continuous Process Improvement, Total Quality Management, and Customer Focused Management are presented.

2F Total Quality Management, Phase 2

Prerequisite: Management 2E
Transfer Credit: Accepted for credit: CSU.
Hours: 72 hours lecture.
This course continues the development of the student's knowledge and continues the acquisition of "Profound Knowledge," as described by Dr. W. Edwards Deming. The class focuses on the knowledge of the "service model of quality" as initially developed in Europe and now in America, the design and introduction of "empowered teams" into organizations, and the importance of dealing with fear in organizations. Not open to students who have completed Management 2B and 2C.

2G Total Quality Management, Phase 3

Prerequisite: Management 2F
Transfer Credit: Accepted for credit: CSU.
Hours: 72 hours lecture.
This course continues the development of the student's knowledge and continues the acquisition of "Profound Knowledge," as described by Dr. W. Edwards Deming. The class focuses on the knowledge of current economic problems and their root cause being a failure to focus on human vs. economic values, on the real problems of management being those of an ethical nature and what the new TQM model proposes as a solution, on the needs and specific tasks to be undertaken in transforming vs. changing organizations, and on the case studies of both private and public sector efforts to make those changes in today's world. Not open to students who have completed Management 2C and 2D.

3A Modern Management: Variation and Statistics I

Prerequisite: Management 1
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course continues the extension of the basic business statistical knowledge introduced in Management 1, with a focus on understanding variation, variation patterns, and how statistical tools can be used to improve existing processes. It also focuses on the support and use of Statistical Process Control (SPC). Emphasis is placed on the immediate application of the tools to the workplace, emphasizing administrative, white collar environments. Course requires team participation.

3B Total Quality Management: Variation and Statistics II

Prerequisite: Management 1
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course is the second in a series of three integrated courses in Total Quality Management application of variation and statistics. The class focuses on practical application of the knowledge and tools of the design-of-experiments (DOE) using the Taguchi methods and the Taguchi Loss Function in the development and design of administrative and service processes. Emphasis is placed on immediate application in the administrative/service environment. Course requires team participation.

3C Total Quality Management: Variation and Statistics III

Prerequisite: Management 3B
Transfer Credit: Accepted for credit: CSU
Hours: 72 hours lecture.
This class is the third in a series of three integrated classes in the Total Quality Management application of variation and statistics. It focuses on practical application using the process mapping approach of Essential Process Analysis/Synthesis. Emphasis is placed on immediate application in the administrative/service environment in designing and improving a customer focused, value-aided process.

4A Teams and Team Facilitation

Prerequisite: Management 1
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course continues the expansion of the basic knowledge of teams introduced in Management 1. It focuses on practical application of the knowledge and tools of metalinguistics and individual/group psychological character. Emphasis is placed on the immediate application of the tools to the workplace, emphasizing administrative, white collar environments. Course requires team participation outside of class.

4B Team Development

Prerequisite: Management 1
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course focuses on the extension of the basic knowledge of teams, with a focus on practical application of the knowledge and tools of Neuro Linguistic Programming (NLP) and Human Dynamics approach to psychology to assist in the design and delivery of administrative and service products/services. Emphasis is placed on the immediate application of the tools to the workplace, emphasizing administrative, white collar environments. Course requires team participation outside of class.

5A Management and Systems Thinking I

Prerequisite: Management 1
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course focuses on the extension of the basic knowledge of systems. It is based on practical application of the knowledge and tools of Systems Thinking. Essential Process Analysis/Synthesis is used as the tool for appraising and revising the design and delivery of administrative and service products/services. Emphasis is also placed on the tools of Fuzzy Thinking, and the theory of Living Systems in the workplace. The need to recognize/counter the main obstacle to systems change, fear, is also closely examined. Course requires team participation outside of class.

5B Total Quality Management: Management and Systems Thinking II

Prerequisite: Management 1
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course focuses on both individual and organizational system's changes that are essential if the quality model is to properly function. Expanding on the teachings of Management 1, especially the principals of Profound Knowledge (as set forward by Dr. W. Edwards Deming), the set expands the concept of human capabilities of systems members and demonstrates the need for the addition of Emotional Intelligence at Work, as an essential component of any system. The course will make extensive use of the Internet for understanding and sharing state-of-the-art systems thinking. Course requires team participation.

6A Organizational Learning: Theory of Knowledge

Prerequisite: Management 1
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course continues the study of “Profound Knowledge”, as described by Dr. W. Edwards Deming. It focuses on the Theory of Knowledge, customer service, and organization leadership based on integrity. It emphasizes basic team formation/member psychology and the total quality impact in society, the organization, the team, and individual lives.

6B Total Quality Management: Theory of Knowledge II: Organizational Implementation

Prerequisite: Management 1
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This class continues the expansion of the attendees understanding and ability to utilize the concept of “Profound Knowledge” as described by Dr. W. Edwards Deming. The class focuses of the Theory of Knowledge (the ability to make accurate predictions of system activity), the formation of the “New Leadership” in executive teams, and the importance of developing an internal education/training effort using the newest principles of Action Learning as practiced by many Fortune 500 companies.

19 Introduction to Management Functions

Prerequisite: None
Advisory: English 58 or 60 and 78, or ESL 2R and 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This is a basic course in management that introduces a variety of modern management concepts. This course includes the basic management functions of planning, organization, staffing, leadership and control. In addition, such concepts as team development, communication, business ethics, and global management perspectives will be discussed.

21 Management Communication (formerly Management 51)

Prerequisite: None
Advisory: Business 50 or English 58 or 60 and 78 or ESL 2R and 2W or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course provides skill training in coping with communication problems in organizations. It includes the study of the communication process, the analysis of the barriers to effective oral and written communication, and the development of guidelines to improve interpersonal relations within an organization through the effective methods of communication. AA/AS area D2

22 Personnel and Human Resources Management

Prerequisite: None
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.
This course is an introduction to the complex study and analysis of such areas as civil rights, labor law, the “Human Resources” organization and various management theories currently found in both public and private sector organizations.

23 Human Relations and Organizational Behavior

Prerequisite: None
Advisory: English 58 or 60 and 78 or ESL 1R and 1W
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course emphasizes the psychology of human relations management. It covers human interaction principles that build confidence, competence and positive attitudes in work organizations. Topics include the basis for human behavior, perception, communication, motivation, performance improvement, group behavior, ethics and social responsibility.

24 Techniques of Management (formerly Management 50)

Prerequisite: None
Advisory: English 58 or 60 and 78, or ESL 2R and 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course is designed for supervisors and other entry level managers as well as those entering mid-management positions. It focuses on primary management functions of planning, organizing, controlling, and leading. Related skills such as time management, cost control, performance evaluation, motivation, communication techniques, and the social responsibility of managers are also emphasized. The course provides a clear understanding of management tasks as well as skill development in essential management activities.

61 Management of Change

Prerequisite: None
Hours: 54 hours lecture.
This course focuses on the development of effective management response to organizational change. Emphasis is placed on identifying how change affects the lives of organizational members and synthesizing the proper response to reduce stress at all levels. How to facilitate change in an organization and its effect on personal change and growth are explored.

62 Management of Conflicts/IBA

Prerequisite: None
Hours: 18 hours lecture.
This course focuses on the development of skills of dealing with differences and finding ways of reaching mutual agreements amicably. It is based on the work of the Harvard Negotiation Project on improving skills in conflict resolution and agreement making by separating the people from the problem. It is about win-win negotiations, adding a process to address issues in relationships. This course teaches attendees multipurpose process to foster good relationships and better communications.
65A  **Preparing to Join a Team**  (1)

*Prerequisite: None.*
*Hours: 18 hours lecture.*

This course introduces individuals who have had prior working experience in areas that were individual based, and individuals who have not had work experience to team membership. It focuses on team membership, team development processes, ones learning styles, and ones contribution to the development of a team.

65B  **Skills for Team Members**  (1)

*Prerequisite: None.*
*Hours: 18 hours lecture.*

This course introduces individuals who have had prior working experience in areas that were individual based, and individuals who have not had work experience to team development. Topics include beginning stages of team development, team mechanics, and group dynamics of an effective team.

65C  **Adapting to The Team Workplace**  (1)

*Prerequisite: None.*
*Hours: 18 hours lecture.*

This course introduces individuals who have had prior working experience in areas that were individual based, and those who have not had work experience to team workplace. They will learn how to measure the team's performance level, experience the team development stages and develop and use planning and participation tools for teams. Topics will include: how to measure a team performance level, team developmental stage, planning and participation stage, planning and participation stages for teams in a classroom setting.

67A  **Self-Leadership for Personal Excellence, Module A**  (1)

*Prerequisite: None.*
*Hours: 18 hours lecture.*

This course is designed as an introduction for those who are interested in examining the practical application of self-leadership tools. It explores introductory concepts in the areas of the sources of leadership, external and personal factors, the impact of beliefs, the power of self-rewards, imagination and creativity. This course emphasizes the connection between effective self-leadership of others.

67B  **Self-Leadership for Personal Excellence, Module B**  (1)

*Prerequisite: None.*
*Hours: 18 hours lecture.*

This course is designed as a continuation for those who are interested in examining the practical application of self-leadership tools. It expands the areas of the sources of leadership, external and personal factors, the impact of beliefs, the power of self-rewards, imagination and creativity, and introduces the concepts of team self-leadership, and the application of tools to empower change. This course emphasizes the connection between effective self-leadership and effective leadership of others.

67C  **Self-Leadership for Personal Excellence, Module C**  (1)

*Prerequisite: None.*
*Hours: 18 hours lecture.*

This course is the last in a series of courses designed for those who are interested in examining the practical application of self-leadership tools. It further explores the areas of the sources of leadership, external and personal factors, the impact of beliefs, the power of self-rewards, imagination and creativity, team self-leadership, and the application of tools to empower change. This course will validate and reinforce the need for individuals to assist attendees in applying the examined principles to influence their own life and career. This course emphasizes the connection between effective self-leadership and effective leadership of others.

70  **Applying Quality Tools**  (1-3)

*Prerequisite: None.*
*Hours: 18-54 hours lecture.*

This course is designed for those interested in examining the practical application of quality principles. It explores the areas of quality concepts, customer focus, tools and techniques, and the process. This course sets the foundation of a learning organization and provides training that will enable individuals to turn their organizations into an empowered group of motivated, educated, and committed leaders.

72  **Project Management Techniques**  (3)

*Prerequisite: None.*

*Advisory: English 58 or 60 and 78 or ESL 2R and 2W; or placement through assessment.*
*Hours: 54 hours lecture.*

This is an introductory course covering the responsibilities of a project manager. It includes the knowledge needed to manage a project, control costs and schedule resources. It will also introduce the use of project management software to track project resources, tasks and milestones.

80  **Organization of Management**  (3)

*Prerequisite: None.*

*Corequisite: Management 50 or 60.*
*Hours: 54 hours lecture.*

This course defines the historical basis for current management practices, describes important organizational considerations such as structure, process and behavior and traces current trends in organization theory and behavior. Includes qualitative and quantitative methodology used in management of organizations entering the twenty-first century.

87  **Social Responsibility and Ethics in Management**  (3)

*Prerequisite: None.*

*Corequisite: Management 1 or 50.*
*Hours: 54 hours lecture.*

This course examines the new ethical climate, the problems which need to be confronted and analyzed, and the role integrity plays in the survival and productivity of American organizations in both the private and public sectors. Course work and studies will incorporate daily news events as well as text materials. AA/AS area C2

93  **Special Topics in Management**  (5-5)

*Prerequisite: To be determined with each topic.*
*Hours: 9-90 hours lecture and/or 27-270 hours laboratory.*

This is an individualized course developed in cooperation with industry and/or government to meet specialized training needs.
Marketing refers to all business activity involved in the moving of goods from the producer to the consumer, including selling, promotion, distribution, and packaging. Marketing-related occupations account for a third of the nation’s jobs.

The ARC marketing program is a general-concentration program covering all aspects of marketing as well as the general management skills necessary for success in this profession.

**Career Opportunities**

No business field offers as many different career possibilities as marketing. Sales manager, purchasing director, advertising director, public relations manager, customer relations manager and research director are just a few job titles in the field. In addition to course work, experience in sales and marketing is required to obtain management positions.

**Marketing - AA Degree**

<table>
<thead>
<tr>
<th>Requirements for Degree Major:</th>
<th>39-41 units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Business Core Requirements</strong></td>
<td>17-19 Units</td>
</tr>
<tr>
<td>Accounting 60 or 1A</td>
<td>3-4</td>
</tr>
<tr>
<td>Business 1 (or keyboarding competency)</td>
<td>1-0</td>
</tr>
<tr>
<td>Business 8</td>
<td>3</td>
</tr>
<tr>
<td>Business 18A</td>
<td>3</td>
</tr>
<tr>
<td>Business 20</td>
<td>3</td>
</tr>
<tr>
<td>Business 59 or Economics 1A</td>
<td>3</td>
</tr>
<tr>
<td>CIS 11A and 12A</td>
<td>2</td>
</tr>
</tbody>
</table>

| Concentration Requirements    | 22 Units |
| Marketing 20                  | 3         |
| Marketing 22                  | 3         |
| Marketing 24                  | 3         |
| Marketing 26                  | 3         |
| Management 1 or 19            | 3         |

7 units selected from the following:
- Business 14 or 15
- CIS 12A, 13A, 17A, or 21A
- Management 22, 23
- Marketing 20; Psychology 1A; Sociology 1A; Speech 1 or 10.

**Basic Marketing Certificate**

| Requirements for Certificate: | 23 units |
| Courses Required              | Units    |
| Business 15                   | 3        |
| Business 20                   | 3        |
| Business 71I                  | 1        |
| Management 19                 | 3        |
| Marketing 20                  | 3        |
| Marketing 22                  | 3        |
| Marketing 24                  | 3        |
| Marketing 26                  | 3        |
| Computer Information Science 11A | 1    |

**Advertising and Sales Promotion - AA Degree**

The knowledge and skills necessary for advertising work with newspapers, retail and general business organizations, and advertising agencies.

| Requirements for Degree Major: | 34-38 units |
| Business Core Requirements    | 15-17 Units |
| Accounting 60 or 1A           | 3-4         |
| Business 1 or keyboarding competency | 1-0        |
| Business 18A                  | 3          |
| Business 20                   | 3          |
| Business 59 or Economics 1A   | 3          |
| Computer Information Science 1 | 3          |

*Three units selected from CIS classes, Accounting 5, 6, Business 9, 11

**General Education Graduation Requirements:**
Students must also complete the general education graduation requirements for an A.A. degree. See graduation requirements.

American River College 2002-2003 189
Retail Management - AA Degree

Preparation for a variety of retailing occupation careers. Program includes retail organization, location, buying and merchandising, credit, accounting, personnel management, promotion and related topics.

Requirements for Degree Major: 39-41 units

Business Core Requirements 17-19 Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting 1A or 60</td>
<td>3-4</td>
</tr>
<tr>
<td>Business 1 (or the passing of a keyboarding competency test)</td>
<td>1-0</td>
</tr>
<tr>
<td>Business 8</td>
<td>3</td>
</tr>
<tr>
<td>Business 18A or 16</td>
<td>3</td>
</tr>
<tr>
<td>Business 20</td>
<td>3</td>
</tr>
<tr>
<td>Business 59 or Economics 1A</td>
<td>3</td>
</tr>
<tr>
<td>CIS 11A &amp; 12A</td>
<td>2</td>
</tr>
</tbody>
</table>

Concentration Requirements 22 Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing 20</td>
<td>3</td>
</tr>
<tr>
<td>Marketing 22</td>
<td>3</td>
</tr>
<tr>
<td>Marketing 24</td>
<td>3</td>
</tr>
<tr>
<td>Marketing 26</td>
<td>3</td>
</tr>
<tr>
<td>Management 19</td>
<td>3</td>
</tr>
</tbody>
</table>

7 units from the following:

Business 15, 25 or 60; CIS 13A, 17A, or 21A; Management 1, 21, 22, 23, or 24; Marketing 21, 50; Speech 1 or 10

BASIC RETAILING CERTIFICATE

Requirements for Certificate: 23 units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business 20</td>
<td>3</td>
</tr>
<tr>
<td>Business 50</td>
<td>3</td>
</tr>
<tr>
<td>Business 60</td>
<td>3</td>
</tr>
<tr>
<td>Business 71D</td>
<td>1</td>
</tr>
<tr>
<td>Business 71E</td>
<td>1</td>
</tr>
<tr>
<td>Business 71I</td>
<td>1</td>
</tr>
<tr>
<td>Business 71R</td>
<td>1</td>
</tr>
<tr>
<td>CIS 11A</td>
<td>1</td>
</tr>
<tr>
<td>Management 19</td>
<td>3</td>
</tr>
<tr>
<td>Marketing 20</td>
<td>3</td>
</tr>
<tr>
<td>Marketing 24</td>
<td>3</td>
</tr>
</tbody>
</table>

Retail Management Certificate

Requirements for Certificate: 29-30 units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting 60 or 1A</td>
<td>3-4</td>
</tr>
<tr>
<td>Business 60</td>
<td>3</td>
</tr>
<tr>
<td>Business 8, or 50</td>
<td>3</td>
</tr>
<tr>
<td>CIS 11A, and 12A</td>
<td>2</td>
</tr>
<tr>
<td>Management 19</td>
<td>3</td>
</tr>
<tr>
<td>Management 22</td>
<td>3</td>
</tr>
<tr>
<td>Management 23</td>
<td>3</td>
</tr>
<tr>
<td>Marketing 20</td>
<td>3</td>
</tr>
<tr>
<td>Marketing 24</td>
<td>3</td>
</tr>
<tr>
<td>Speech 1 or 10</td>
<td>3</td>
</tr>
</tbody>
</table>

20 Principles of Marketing
(formerly Business 61)

Prerequisite: None
Advisory: English 58 or 60 and 78, or ESL 2R and 2W; or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course will examine in detail the four functions of marketing: product, promotion, price, and place. The marketing concept will be the basis for the entire course. The external marketing factors of environment, competition, government regulation, and consumer behavior will be studied also.

22 Selling Professionally

Prerequisite: None
Advisory: English 58 or 60 and 78, ESL 2R and 2W, Business 60; or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course demonstrates the importance of effective selling techniques. This course will examine and present the qualifications necessary to achieve success in professional selling. This course also emphasizes the development of a business personality and its application to the approach, direction, and closing of a sale. Different types of selling experience such as direct, industrial, wholesale, and retail are covered. This class is recommended for those entering any field of business careers.

24 Retailing

Prerequisite: None
Advisory: English 58 or 60 and 78, ESL 2R and 2W, Business 61; or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course is a study of modern retail store operation with emphasis on consumer behavior, store location and layout, pricing, organization, promotion, merchandising, and pertinent legislation.

25 Advertising on the Internet (Electronic Commerce)

Prerequisite: None
Advisory: English 58 or 60 and 78, ESL 2R and 2W; or placement through assessment.
Hours: 54 hours lecture.
This course addresses the process of advertising in the electronic commerce environment. It focuses on discussing on-line marketing. The effects of electronic commerce on market research, demographics and traditional advertising channels and case studies of successful models will be studied and examined.

26 Advertising

Prerequisite: None
Advisory: English 58 or 60 and 78, ESL 2R and 2W, Business 61; or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course is a study of the marketing promotional mix with special emphasis on the field of advertising. The course will cover the advertising message from initial research through the final advertising message. Different advertising media will be examined and compared.
50  **Survey of International Business**  (3)

*Prerequisite: None*

*Advisory: English 256 and 270 or ESL 1R and 1W or placement through assessment process.*

*Hours: 54 hours lecture.*

This course is a comprehensive overview of international business designed to provide both beginners and experienced business people with a global perspective on international trade including foreign investments, impact of financial markets, international marketing, and operation of multi-national corporations.

54A  **Basics of Exporting**  (1.5)

*Prerequisite: None.*

*Hours: 27 hours lecture.*

This course offers the different aspects of exporting. It affords the student a working knowledge of the various terms and techniques essential to exporting. The topics include international movement of merchandise, and trade patterns by countries and commodities.

54B  **Basics of Importing**  (1.5)

*Prerequisite: None.*

*Hours: 27 hours lecture.*

This course covers the steps involved in importing a product or service. The course includes an introduction to the United States Customs Service, customs brokers, duty rate, basic laws affecting imports, currency exchange, letters of credit, storage and transportation of shipments.
Mathematics & Statistics

Degree: A.S. - Mathematics

Through the study of mathematics, the student develops the ability to think logically and abstractly, as well as developing the problem-solving and computational skills necessary in all fields of study.

Mathematics

Requirements for Degree Major: 25 units

Core Requirements Units
Math 9A 5
Math 9B 5
Math 9C 5
Math 9D 4
Math 35 3

Concentration Requirements
One course selected from:
Stat 1, Math 12/Phil 12 3

Recommended Electives
Physics 4A; One course selected from: CIS 31, 32A, or 33.

General Education Graduation Requirements:
Students must also complete the general education graduation requirements for an A.S. degree. See graduation requirements.

Individualized Mathematics  (3-5)

Prerequisite: None
Students wishing to take Mathematics 215 - Pre-Algebra for 3 units, or Mathematics 51 - Elementary Algebra for 5 units, or Mathematics 53 - Intermediate Algebra for 5 units, may enroll in "Individualized Mathematics." Students enroll in a specific hour; during the first class meeting the student will designate the specific course. Course placement can be determined by either an assessment test through the assessment center before the semester or completion of prerequisites. Immediate advancement from one course to the next is allowed upon successful completion of prescribed work. Credit will be given for the number of units assigned to a course and if the course is completed during the semester. Students who do not complete the course within the semester enrolled and who receive a notation of "In Progress" must reregister in the same individualized course the following semester in order to complete the course and receive full unit credit.

1 Introduction to Mathematical Ideas  (3)

Prerequisite: Mathematics 53 with a grade of "C" or better.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
This course focuses on elements of mathematical systems. It is designed to make fundamental concepts and processes more meaningful to the general student. Its content may include systems, logic, geometry, combinatorics, probability, statistics, sets, matrices, and number theory. Not recommended for students entering elementary school teaching or business administration majors. (CAN MATH 2)

AA/AS area D2 & 4C; CSU area B3

2 Mathematical Discovery  (3)

Prerequisite: Mathematics 52 and 53 with a grade of "C" or better.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
In this course students will explore mathematical patterns and relations, and formulate and prove conjectures. Topics from number theory, probability and statistics, and geometry will be investigated. Recommended for students interested in education. AA/AS area D2 & 4C; CSU area B3

3 Problem-Solving  (3)

Prerequisite: Mathematics 53 with a grade of "C" or better, or placement through assessment process
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture
This course focuses on the problem-solving skills necessary to solve both real-life and nontraditional mathematics problems. Problem-solving strategies presented in this course include: drawing a diagram, eliminating possibilities, making a systematic list, looking for a pattern, guessing and checking, solving an easier related problem, working backward, algebraic representation, finite differences, and other related techniques. Divergent thinking, group work, and the clear presentation of mathematical work will be emphasized throughout the course. AA/AS area D2

4 Computer Supplement to Calculus  (2)

Prerequisite: None
Corequisite: Mathematics 9A
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 36 hours lecture.
In this course students will learn to use a computer algebra system (CAS) to explore some of the fundamental ideas and concepts typically covered in first semester calculus. Basic features and capabilities of the computer algebra system will be discussed as well as the use of the CAS as a
problem-solving and investigative tool. Additional software, such as spreadsheets, data analysis packages, programming languages, or CD-ROM educational media, may be employed in the course to provide students with a range of computer-based solution methods for calculus.

8H Honors Applications of Calculus

Prerequisite: Math 9C with a grade of “B” or better.
Advisory: Mathematics 5.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 18 hours lecture.
Professional applications of mathematics in such fields as biostatistics, economics, political science, computer science, earth science, social sciences and psychology. AA/AS 4C

9A Analytic Geometry and Calculus I

Prerequisite: Mathematics 29 with a grade of “C” or better, or placement through assessment process
Advisory: Mathematics 5.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 90 hours lecture.
This course is an introduction to differential and integral calculus. Its content includes limits, continuity, differentiation, and integration of algebraic and trigonometric, logarithmic, exponential and other transcendental functions. Some applications are also included. (CAN MATH SEQ B, MATH 9A+9B; CAN MATH SEQ C - MATH 9A+9B+9C; CAN MATH 18) AA/AS area D2 & 4C; CSU area B3; IGETC area 2

9B Analytic Geometry and Calculus II

Prerequisite: Mathematics 9A with a grade of “C” or better.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 90 hours lecture.
This course is a continuation of Mathematics 9A. Its content will include techniques of integration, improper integrals, indeterminate forms, applications of integration, infinite series, parametric equations and polar coordinates. (CAN MATH 20); AA/AS 4C; CSU area B3; IGETC area 2

9C Analytic Geometry and Calculus III

Prerequisite: Mathematics 9B with a grade of “C” or better.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 90 hours lecture.
This course is a continuation of Mathematics 9B. Includes calculus of functions of more than one variable, partial derivatives, extreme functions of more than one variable, multiple integration, development of the vector calculus, line integrals, three dimensional analytic geometry and the theorems of Green, Gauss (Divergence), and Stokes. (CAN MATH 22) AA/AS area 4C; CSU area B3; IGETC area 2

9D Advanced Mathematics for Engineers

Prerequisite: Mathematics 9C with a grade of “C” or better.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 72 hours lecture.
This course is a study of ordinary differential equations with emphasis on linear equations and systems of linear equations. It includes infinite series. Laplace transform and matrix methods of solution. It stresses application to engineering problems. It is recommended for electrical, mechanical, industrial, ceramic and petroleum engineers, and for mathematics and physical science majors. (CAN MATH 24) AA/AS area 4C; CSU area B3; IGETC area 2

12 Introduction to Symbolic Logic
(Same as Philosophy 12)

Prerequisite: Philosophy 4 or Mathematics 52, and Mathematics 53 with a grade of “C” or better.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
This course covers an introduction to symbolic logic including the logic of sentences (the statement calculus) and the logic of classes and relations (the predicate calculus), together with an introduction to the nature and development of deductive systems. Applications include examples of logic used in elementary mathematics and the analysis of verbal arguments. Not open to students who have completed Philosophy 12. AA/AS area D2 & 4C; CSU area B3

15 Trigonometry

Prerequisite: Mathematics 52 and 53 with a grade of “C” or better or placement through assessment process.
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.
This course focuses on the fundamental concepts of trigonometry and the relationships between them. Applications involve right and oblique triangles, circular motion, graphing, vectors and complex numbers. (CAN MATH 8) AA/AS area D2 & 4C; CSU area B3

16A Calculus for Life and Social Sciences I

Prerequisite: Mathematics 15 with a grade of “C” or better or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours lecture.
This course covers the concepts and techniques of functions, limits, analytic geometry and differential calculus. Applications from business, social and biological sciences will be emphasized. (CAN MATH SEQ D - MATH 16A+16B; CAN MATH 30) AA/AS area D2 & 4C; CSU area B3; IGETC area 2

16B Calculus for Life and Social Sciences II

Prerequisite: Mathematics 16A with a grade of “C” or better.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours lecture.
This course is the continuation of Mathematics 16A. It covers integration and differentiation of commonly used functions, and applications of analytic geometry and calculus. (CAN MATH 32) AA/AS area 4C; CSU area B3; IGETC area 2

28 Introduction to Scientific Graphing Calculators

Prerequisite: Mathematics 15 with a grade of “C” or better or placement through assessment process.
Transfer Credit: Accepted for credit: CSU.
Hours: 18 hours lecture.
This course introduces the basic functions and applications of scientific graphic calculators. It covers plotting, evaluating, and solving functions. It also discusses calculator-based solutions of problems from algebra and trigonometry; introduces techniques that will be useful in subsequent courses like precalculus and calculus. Students will be required to have a calculator; model and type will be specified by instructor.
29 Precalculus Mathematics
Prerequisite: Mathematics 15 with a grade of “C” or better or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 90 hours lecture.
This course includes application and graphing of polynomial, logarithmic, exponential and trigonometric functions; systems of linear and non-linear equation and inequalities, analytic geometry including straight lines, conic sections, graphing and curve sketching. (CAN MATH 16) AA/AS area D2 & 4C; CSU area B3; IGETC area 2

35 Introduction to Linear Algebra
Prerequisite: Mathematics 9A with a grade of “C” or better.
Advisory: Mathematics 9C.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
This course provides an introduction to linear algebra including matrices, determinants, vector spaces, linear transformations, eigenvectors. It is intended for majors in mathematics, engineering, computer science, and related fields. (CAN MATH 26) AA/AS area 4C; CSU area B3; IGETC area 2

42 Finite Mathematics
Prerequisite: Mathematics 53 with a grade of “C” or better.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture, 18 hours laboratory.
This course covers sets, probability and combinatorics, expected value, matrix theory, systems of equations and inequalities, linear programming, and mathematics of finance with emphasis on applications in business administration, biological sciences, and social science. It also includes computer applications. (CAN MATH 12) AA/AS area D2 & 4C; CSU area B3; IGETC area 2

43 Calculus for Business and Economics
Prerequisite: Mathematics 53 with a grade of “C” or better, or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours lecture.
This course includes analytic geometry, differential and integral calculus with applications in the fields of business, economics, social science and biological science. Not recommended for mathematics and physical science majors. (CAN MATH 34) AA/AS area D2 & 4C; CSU area B3; IGETC area 2

44 Modern Business Mathematics
Prerequisite: Math 53 with a grade of “C” or better, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course is designed around applications of mathematics in economic and business contexts. Specific topics will include functions and related business formulas, tables and graphs, finance (interest and exponential models in economics), rates of change including applications and optimization, and linear programming, AA/AS area D2 & 4C; CSU area B3

46 Teachers Aide
Prerequisite: Mathematics 53 with a grade of “B” or better.
Transfer Credit: Accepted for credit: CSU (6 unit maximum).
Hours: 9 hours lecture; 27 hours equals one unit.

This course in intended for students who want to develop an in-depth understanding of the fundamentals of mathematics and to learn to work with individual students and small groups of students. Open entry and exit. May be taken twice for credit.

51 Elementary Algebra
Prerequisite: Mathematics 215 with a grade of “C” or better or placement through assessment process.
Hours: 90 hours lecture.
This course includes the fundamental concepts and operations of algebra with problem solving skills emphasized throughout. Topics include properties of real numbers, linear equations and inequalities, integer exponents, polynomials, factoring polynomials, rational expressions and equations, radical expressions and equations, rational exponents, systems of linear equations and inequalities, the rectangular coordinate system, graphs and equations of lines, and solving quadratic equations. AA/AS area 4C

52 Elementary Geometry
Prerequisite: Mathematics 51 or one year of high school algebra with a grade of "C" or better or placement through assessment process.
Hours: 90 hour lecture.
This course covers elementary geometry with emphasis on plane geometry but with some spatial geometry. Problem solving techniques and logical thinking will be emphasized. AA/AS area 4C

53 Intermediate Algebra
Prerequisite: Mathematics 51 with a grade of “C” or better, or placement through assessment.
Hours: 90 hours lecture.
This course reviews and extends the concepts of elementary algebra with problem solving skills emphasized throughout. Topics which are reviewed and extended include linear and quadratic equations, factoring polynomials, rational expressions, radicals, equations of lines, and system of equations. New topics include graphs and their translations and reflections, functions, exponential and logarithmic functions, graphs of quadratic and polynomial functions, nonlinear systems of equations, polynomial and rational inequalities, and an introduction to conic sections. AA/AS area D2 & 4C

61 Mathematics for Forestry and Horticulture
Prerequisite: Mathematics 51 with a grade of “C” or better, or placement through assessment process.
Hours: 54 hours lecture.
This course focuses on problem solving strategies to meet the horticulture and forestry student. Practical applications in growth, decay, measurement, surveying and data interpretation involving basic mathematics, algebra, geometry, trigonometry and statistics. AA/AS area D2 & 4C

202 Overcoming Math Anxiety
Prerequisite: None.
Advisory: Concurrent enrollment in a math course.
Hours: 18 hours lecture.
The course will help students to recognize their fear of mathematics and overcome their math anxiety and avoidance. The students will learn strategies to achieve success in mathematical situations. This course is also useful for tutors, counselors and teachers interested in helping others overcome their math anxiety. Credit/No Credit.
203  Mathematics for the Home and Workplace  (2)

Prerequisite: None.
Hours: 36 hour lecture.
This course will use a variety of realistic consumer-oriented applications to refresh, reinforce, and extend students’ mastery of basic mathematics concepts. The applications will include earned wages, buying and maintaining a car, working with food, budgeting, banking, and other consumer and job-related activities. Calculator use will be an integral part of the course.

204  Computational Arithmetic  (3)

Prerequisite: None
Hours: 54 hour lecture.
This course covers fundamentals of arithmetic with an emphasis on computational skills. Topics to be studied will include whole numbers, fractions and decimals, problem solving, and applications.

215  Prealgebra (formerly Math 210 A/B)  (3)

Prerequisite: Math 204 with a grade of "C" or better, or placement through assessment
Hours: 54 hours lecture
This course will briefly review the fundamentals of arithmetic, including whole numbers, fractions, and decimals. Course content will include order of operations, signed numbers, concepts of variables, exponents, ratios and proportions, area/perimeter/volume of geometric figures, and solving equations.

Statistics

1  Introduction to Probability and Statistics  (3)

Prerequisite: Mathematics 53 with a grade of "C" or better
Advisory: English 78
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hour lecture
This course will introduce basic concepts of probability and statistics. It will include analysis of data, probability, distributions, tests of hypothesis, estimation, regression and correlation, and analysis of variance. Related application to psychology, social science, natural science, business and engineering will be explored. A scientific calculator that has a stat package (2-variable) is used throughout the course. (CAN STAT 2) AA/AS area D2 & 4C; CSU area B3; IGETC area 2

1H  Honors Introduction to Probability and Statistics  (3)

Prerequisite: Cumulative GPA of 3.0 or better; Math 53 with a grade of "B" or better, and English 1A with a grade of "B" or better or Honors English 1A with a grade of "C" or better.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hour lecture.
This course is an introduction to the concepts of statistics with a strong emphasis on the understanding and appreciation of the role of statistics in real life situations including computer analysis of real data. In addition to the topics presented in Statistics I, this honors course will include either additional topics of non-parametric statistics, design-of-experiment issues ensuring validity, analysis of variance and multiple regression or an applied research term paper using statistical methods and data collected from a work environment. AA/AS area D2; CSU area B3
Music

Degrees:  
A.A. - Music  
A.A. - Jazz Studies*  
A.A. - Commercial Music - Business  
A.A. - Commercial Music - Performance  
A.A. - Commercial Music - Recording

Certificates:  
Commercial Music - Audio Production*  
Commercial Music - Music Business*

The music program includes vocal and instrumental components, as well as courses in music, history, and theory. The general program is designed to provide students with a foundation in music theory and history. In addition, ARC provides degrees in commercial music and jazz studies. Performance opportunities in both vocal and instrumental music round out a student's understanding and skill levels.

Music

Requirements for Degree Major  
38 units
Music history, theory, four (4) semesters of group performance in the same field, and four (4) semesters of applied study in the same field. (Instrumental, voice, or keyboard).

Applied Study  
MUFI 38A, 38B, 38C, 38D.  
4 units

Group Performance courses  
Instrumental - MUP 13, 16, 17  
Keyboard - MUP 13, 16, 17, 19, 21  
Voice - MUP 19, 21  
8 units

Music History  
MUFIH 10 and 11  
6 units

Music Theory  
MUFIH 3A, 3B, 4A, 4B  
16 units

Recommended Electives

Art 3, 4, 5, 10; Humanities 1, 2; Philosophy 6; Theatre Arts 1, 2, 3; other Music courses.

Refer to the catalog of the transfer institution of your choice for detailed information. Consultation with ARC music staff and an ARC counselor is recommended.

General Education Graduation Requirement:
Students must also complete the general education graduation requirements for an A.A. degree. See general education requirements.

Jazz Studies

Requirements for Degree Major  
35 units
Jazz history, jazz piano, jazz improvisation or jazz/pop vocal styles, traditional theory, jazz theory, four (4) semesters of group performance in the same field, and four (4) semesters of applied study in the same field (instrumental, voice, or keyboard).

Commercial Music Concentrations  
(Business, Performance and Recording)

Designed to prepare the student for careers in commercial music performance, recording, and music business. Deals with economics, technology, management, and techniques of a commercial music industry career.

Business Concentration

Requirements for Degree Major  
33 units
MUFI 2  
3
MUFIH 9  
3
MUSM 50A  
3
MUSM 50B  
3
MUSM 50C  
3
MUSM 50D  
3
MUSM 51A  
3
Business 18A  
3
Business 20  
3
Business 25  
3

and 3 units from the following modules:
Business 71A-M

*Pending approval from State Chancellor's office
Recommended Electives
MUFHL 3A, 6, 10, 11
MUIVI 22A, 22B
MUP 43C
MUSM 32, 33, 41A, 41B, 41C, 41D, 51B
Accounting 60; Art New Media 5; Business 8; CIS 11A, 17A; Management 21, 23, 24

General Education Graduation Requirements:
Students must also complete the general education graduation requirements for an A.A. degree. See graduation requirements.

Performance Concentration
Requirements for Degree Major: 37 units

Core Requirements
MUFHL 3A, 3B
MUIVI 30A, 30B, 38A, 38B, 38C, 38D
MUSM 41A, 62
8 units from the following performance groups:
MUP 43C, 14, 20

Concentration Requirements
MUFHL 2
MUSM 50A
MUSM 51A

Recommended Electives:
MUFHL 4A, 4B, 9
MUIVI 22A, 22B, 33A
MUSM 41B, 50B, 50C, 50D, 51B, 53, 54
MUP 14, 16, 17, 19, 20, 21, 32
Accounting 60; Art 30A; Business 8, 64; Computer Information Science 1, 11A, 17A; Electronics Technology 30A, 30B

Recording concentration
Requirements for Degree Major: 36 units

Core Requirements
MUFHL 2
MUFHL 9
MUIVI 30A
MUSM 33
MUSM 41A
MUSM 41B
MUSM 41C
MUSM 41D
MUSM 50A
MUSM 50B
MUSM 50C
MUSM 50D
MUSM 51A
MUSM 61
MUP 14, 16, 19, 43C; MUSM 33, 50B, 50C, 50D, 51A, 51B; Business 25; Electronics 30A, 30B

General Education Graduation Requirements:
Students must also complete the general education graduation requirements for an A.A. degree. See graduation requirements.

Commercial Music - Audio Production Certificate
Requirements for Certificate: 31 units

Courses Required
MUFHL 2 3
MUFHL 9 3
MUSM 32 2
MUSM 41A 3
MUSM 41B 3
MUSM 41C 3
MUSM 41D 3
MUSM 50A 3
MUSM 50B 3
MUSM 50C 3
MUSM 50D 3
MUSM 51A 3
MUSM 61 2
Audio Production electives* 6

*Multiply 6 units from the following:
MUP 14, 16, 19, 43C; MUSM 33, 50B, 50C, 50D, 51A, 51B; Business 25; Electronics 30A, 30B

Commercial Music - Music Business Certificate
Requirements for Certificate: 33 units

Courses Required
MUFHL 2 3
MUFHL 9 3
MUSM 50A 3
MUSM 50B 3
MUSM 50C 3
MUSM 50D 3
MUSM 51A 3
MUSM 61 3
Business 18A 3
Business 20 3
Business 25 3

3 units from the following modules:
Business 71A-M

Music Fundamentals/History & Literature

Basic Musicianship

Prerequisite: None
Corequisite: MUIVI 30A or MUIVI 42A
Transfer Credit: Accepted for credit: UC (unit limitation), CSU Hours: 54 hours lecture.
This course includes the basic fundamentals of music notation and performance skills including scales, chords, sight- sings, music dictation, harmonic progression, and form. It is recommended for students with interest in but no knowledge of music and those students planning to enroll in MUFHL 3A. AA/AS area B; CSU area C1; IGETC area 3

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3A  Music Theory

Prerequisite: Knowledge of musical notation.
Corequisite: MUIVI 30A or piano audition.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture; 54 hours laboratory.
This course is a study of scales, intervals, triads, diatonic harmonies, part writing, rhythms, sight singing, ear training, dictation, history and performance. It includes analysis and composition and is required for music majors. (CAN MUSIC 2) AA/AS area B; CSU area C1; IGETC area 3

3B  Music Theory

Prerequisite: MUFHL 3A
Advisory: MUIVI 30B
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture; 54 hours laboratory.
This course is a continuation of MUFHL 3A. It provides a more in-depth study of scales, intervals, triads, diatonic harmonies, part writing, rhythms, sight singing, ear training, dictation, history and performance. It includes analysis and composition and is required for music majors. (CAN MUSIC 4) CSU area C1; IGETC area 3

3C  Beginning Jazz Theory

Prerequisite: MUFHL 3A
Advisory: MUIVI 30C
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 36 hours lecture; 18 hours laboratory.
This course introduces the elements of jazz theory including harmonic, melodic and formal analysis in the jazz idiom.

3D  Advanced Jazz Theory

Prerequisite: MUFHL 3C
Advisory: MUIVI 30C
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 18 hours laboratory.
This course provides a continuation of jazz concepts presented in MUFHL 3C. The emphasis will be advanced elements of jazz theory including harmonic, melodic and formal analysis in the jazz idiom.

4A  Advanced Music Theory

Prerequisite: MUFHL 3B
Advisory: MUIVI 31A
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture; 54 hours laboratory.
This course is a continuation of MUFHL 3B. It includes the study of 16th and 18th century counterpoint, fugue, variation, altered chords, sonata allegro and rondo forms, and late 19th and 20th century writing techniques; practice in rhythmic, melodic, harmonic and contrapuntal sight singing, ear training and dictation. Required for music majors. CSU area C1; IGETC area 3

4B  Advanced Music Theory

Prerequisite: MUFHL 4A
Advisory: MUFHL 31B
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture; 54 hours laboratory.
This course is a continuation of MUFHL 4A. It includes a more in-depth study of 16th and 18th century counterpoint, fugue, variation, altered chords, sonata allegro and rondo forms, and late 19th and 20th century writing techniques; practice in rhythmic, melodic, harmonic and contrapuntal sight singing, ear training and dictation. Required for music majors. (CAN MUSIC 12) CSU area C1; IGETC area 3

6  Introduction to Music

Prerequisite: None
Advisory: English 78 or ESL 2R or placement through assessment.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU.
Hours: 54 hours lecture.
This course is designed for students with no previous knowledge of music. Music will be discussed with historical perspective providing a thorough understanding and ability to define and describe terms, elements and characteristics of music. Units will include basic fundamentals of performance, listening skills development, critique and analysis of significant classic music examples, and differentiation of historical styles. AA/AS area B; CSU area C1; IGETC area 3

6H  Honors Introduction to Music

Prerequisite: MUFHL 2. Cumulative grade point average of 3.0 or higher; English 1A with a grade of “B” or better.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU.
Hours: 54 hours lecture.
This course is designed as a seminar for the student with previous experience with music notation, theory, and/or performance. Included in the course are (1) an analysis of the listening process and recognizing the roles of the composer, the performer and the listener, and (2) an evaluation of the intellectual and emotional elements of listening. This course will also cover the distinctions between the functional and aesthetic purposes of music. Attendance at live musical performances and field trips are required. CSU area C1; IGETC area 3

9  World Music

Prerequisite: None
Advisory: English 58 or 60 and 78, or ESL 2R and 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
This course is a comprehensive, comparative listener survey of the folk, ethnic, dance, and ceremonial music traditions around the world and in the United States. Concepts of ethnicity, ethnocentrism, racism, ageism, class differences, and gender issues will be addressed. Guided listening presentations will show how traditional forms and styles have led to the urban, professional music popular in many countries today know as “World Beat.” Music of the Americas, Africa, Asia, Australia and Europe will be compared. AA/AS area B & F; CSU area C1; IGETC area 3

10  Survey of Music History and Literature

Prerequisite: None
Advisory: English 5, or placement through assessment.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
This course is a survey of the history of music including its composers and most significant works from the beginning of history to the Baroque period. It is required for music majors and also designed for those students having a background in music and who are particularly interested in humanities or arts. AA/AS area B; CSU area C1; IGETC area 3
11 Survey of Music History and Literature (3)

Prerequisite: None
Advisory: English 5, or placement through assessment.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
This course is a survey of the history of music including its composers and most significant works from the Classical period to the present. It is required for music majors and also designed for those students having a background in music and who are particularly interested in humanities or arts. (CAN MUS 11) AA/AS area B; CSU area C1; IGETC area 3

12 Jazz History (3)

Prerequisite: None
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture.
This course is an historical, comprehensive, and comparative listeners’ survey of the traditions of Jazz music from around the world and in the United States, in which concepts of ethnicity, ethnocentrism, racism, ageism, class differences, and gender issues will be addressed. Guided listening presentations will show how African and early African-American musical traditions have led to the development of various improvisational forms and styles, including Ragtime, Swing, Bebop, Free Jazz, Fusion, and Acid Jazz. Jazz styles of the Americas, Asia, Africa, India, and Europe will be covered. AA/AS area 3B & F; CSU area C1; IGETC area 3

57 Music Listening (2)

Prerequisite: None.
Hours: 36 hours lecture.
Development of listening techniques for the student without previous musical involvement by means of lectures, recordings and films. Includes current and historic aspects of the musical experience. AA/AS area B

MUSIC INSTRUMENT/VOICE INSTRUCTION

22A Voice Class (2)

Prerequisite: MUFHL 2 and/or MUIVI 30A
Transfer Credit: Accepted for credit: UC, CSU
Hours: 36 hours lecture; 18 hours laboratory.
This course emphasizes the development of the individual's voice. Solos are learned and performed in class. CSU area C1

22B Voice Class (2)

Prerequisite: MUIVI 22A.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 36 hour lecture; 18 hours laboratory.
This course emphasizes the continued development of the individual's voice. Solos are learned and performed in class.

23A Voice Class, Intermediate (2)

Prerequisite: MUIVI 22B.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 36 hours lecture; 18 hours laboratory.
This course is a study of vocal exercises and intellectual analysis for the development of efficient singing techniques and skills in performing vocal literature. Performance in class is essential.

23B Voice Class, Intermediate (2)

Prerequisite: MUIVI 23A.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 36 hours lecture; 18 hours laboratory.
This course focuses on the practical application of bel canto technique with emphasis on English and Italian diction and literature. Performance in class is essential.

25A Beginning Jazz and Popular Vocal Styles (2)

Prerequisite: MUIVI 22A or audition.
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 18 hours laboratory.
This course offers instruction in the stylistic and performance elements of jazz and popular solo singing styles and repertoire including blues, R & B, pop, rock, and country. This course may be taken twice for credit.

25B Advanced Jazz and Popular Vocal Styles (2)

Prerequisite: MUIVI 25A or audition.
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 18 hours laboratory.
This course offers further instruction in the stylistic and performance elements of jazz and popular solo singing styles and repertoire including the blues, R & B, pop, rock, and country. This course may be taken twice for credit.

26 Brass Instruction (1)

Prerequisite: Ability to play a brass instrument.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 9 hour lecture; 27 hours laboratory.
This course provides specialized instruction including all aspects of applied literature and performance on a brass instrument. This course may be taken four times for credit. CSU area C1

27 Percussion Instruction (1)

Prerequisite: Ability to play a percussion instrument.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 9 hours lecture; 27 hours laboratory.
This course provides specialized instruction including all aspects of applied literature and performance on percussion instruments. This course may be taken four times for credit. CSU area C1

28 String Instruction (1)

Prerequisite: Ability to play a string instrument.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 9 hour lecture; 27 hours laboratory.
This course provides specialized instruction including all aspects of applied literature and performance on a string instrument. This course may be taken four times for credit. CSU area C1

29 Woodwind Instruction (1)

Prerequisite: Ability to play a woodwind instrument.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 9 hours lecture; 27 hours laboratory.
This course provides specialized instruction including all aspects of applied literature and performance on a woodwind instrument. This course may be taken four times for credit. CSU area C1


30A Beginning Piano

Prerequisite: None.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 36 hours lecture, 18 hour laboratory.
This course is designed for students interested in piano as a medium of expression and enjoyment, and for prospective nursery, kindergarten and elementary teachers. It is required for music majors who do not demonstrate equivalent piano proficiency. The course requires at least five hours per week outside preparation. (CAN MUS 22) CSU area C1

30B Beginning Piano

Prerequisite: MUIVI 30A or ability to sight read an eight-measure composition with a single line in each hand; ability to play I-IV-I-V7-I in progression in five easy keys.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 36 hours lecture; 18 hours laboratory.
This course is a continuation of MUIVI 30A and is designed for students interested in piano as a medium of expression and enjoyment, and for prospective nursery, kindergarten and elementary teachers. It is required for music majors who do not demonstrate equivalent piano proficiency. The course requires at least five hours per week outside preparation. (CAN MUS 24)

31A Intermediate Piano

Prerequisite: MUIVI 30B, ability to play all major scales, two octaves, hands separately; ability to play a simple folk tune with basic choral accompaniment in a major or minor key.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 36 hours lecture; 18 hours laboratory.
This course is the second year of piano study. It focuses on the development of insight into music as an artistic means of communication through the study of scales, chords, melodic harmonization and repertoire.

31B Intermediate Piano

Prerequisite: MUIVI 31A
Transfer Credit: Accepted for credit: UC, CSU
Hours: 36 hours lecture; 18 hours laboratory.
This course is the second year of piano study. It is a continuation of MUIVI 31A. The course includes the further development of insight into music as an artistic means of communication through the study of scales, chords, melodic harmonization and repertoire.

33 Beginning Organ

Prerequisite: Keyboarding proficiency. Student must be able to play a composition for piano comparable in difficulty to a Bach Two-Part Invention.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours laboratory.
This course introduces the fundamental skills in organ. Required for organ majors. May be taken twice for credit. CSU area C1

33A Beginning Jazz Piano

Prerequisite: MUIVI 30A
Advisory: MUFHL 3A
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 18 hours laboratory.
This course is an introduction to the fundamentals of jazz piano. Topics include left-hand voicings, tritone substitution, and scale theory applications to the keyboard. Requires at least five hours per week outside preparation.

33B Intermediate Jazz Piano

Prerequisite: MUIVI 33A
Advisory: MUFHL 3A
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 18 hours laboratory.
This course is intermediate studies in jazz piano. Topics include stride voicings, block chords, Salsa and Latin comping and "Fourth" chords. Requires at least five hours per week outside preparation.

34 Intermediate Organ

Prerequisite: Two semesters of MUIVI 33.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours laboratory.
This course is a continuation of MUIVI 33. It includes the further development of skills relative to music written for the organ. Required for organ majors. May be taken twice for credit.

38A Applied Music

Prerequisite: Audition
Corequisite: Enrolled in 2 units from: MUP 13, 16, 17, 19, or 21 and enrolled in 4 units from: MUFHL 3A, 3B, 4A, or 4B.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 7 hours lecture; 191 hours TBA.
This is the first course in a four-part series and offers individualized instrumental or vocal instruction seven hours per semester with a private instructor, two hours per semester of solo performance and recital attendance, and ten and one-half hours monitored practice time per week. It focuses on the development of individual performance skills and solo and ensemble repertoire. Juried performance is also required. Required for all traditional performance and jazz music majors.

38B Applied Music

Prerequisite: MUIVI 38A and audition.
Corequisite: Enrolled in 2 units from MUP 13, 16, 17, 19, or 21 and enrolled in 4 units from MUFHL 3A, 3B, 4A, or 4B.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 7 hours lecture; 191 hours TBA.
This is the second course in a four-part series and offers individualized instrumental or vocal instruction seven hours per semester with a private instructor, two hours per semester of solo performance and recital attendance, and ten and one-half hours monitored practice time per week. It focuses on the development of individual performance skills and solo and ensemble repertoire. Juried performance is also required. Required for all traditional performance and jazz music majors.

38C Applied Music

Prerequisite: MUIVI 38B and audition.
Corequisite: Enrolled in 2 units from MUP 13, 16, 17, 19, or 21 and enrolled in 4 units from MUFHL 3A, 3B, 4A, or 4B
Transfer Credit: Accepted for credit: UC, CSU
Hours: 7 hours lecture; 191 hours TBA.
This is the third course in a four-part series and offers individualized instrumental or vocal instruction seven hours per semester with a private instructor, two hours per semester of solo performance and recital attendance, and ten and one-half hours monitored practice time per week. It focuses on the development of individual performance skills and solo and ensemble repertoire. Juried performance is also required. Required for all traditional performance and jazz music majors.
38D Applied Music
Prerequisite: MUIVI 38C and audition.
Corequisite: Enrolled in 4 units from MUP 13,16,17, 19, or 21 and enrolled in 4 units from MUFHL 3A, 3B,4A, or 4B.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 7 hours lecture; 191 hours TBA.
This is the fourth course in a four-part series and offers individualized instrumental or vocal instruction seven hours per semester with a private instructor, two hours per semester of solo performance and recital attendance, and ten and one-half hours monitored practice time per week. It focuses on the development of individual performance skills and solo and ensemble repertoire. Juried performance is also required. Required for all traditional performance music majors.

38E Applied Music - Jazz
Prerequisite: MUIVI 38B and audition
Corequisite: Enrolled in 4 units from MUFHL 3A, or 3B, or enrolled in 2 units from MUFHL 3C, or 3D, and Enrolled in MUP 14, or 20, or 43C
Transfer Credit: Accepted for credit: UC, CSU
Hours: 7 hours lecture; 191 hours TBA.
This is the third course in a four-part series specializing in individualized jazz instrumental or vocal instruction seven hours per semester with a private instructor, two hours per semester of solo performance and recital attendance, and ten and one-half hours monitored practice time per week. It focuses on the development of individual performance skills and solo and ensemble repertoire. Juried performance is also required. Required for all traditional performance music majors.

38F Applied Music - Jazz
Prerequisite: MUIVI 38E and audition.
Corequisite: Enrolled in 4 units from MUFHL 3A, or 3B, or Enrolled in 2 units from MUFHL 3C, or 3D, and Enrolled in MUP 14, or 20, or 43C.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 7 hours lecture; 191 hours TBA.
This is the third course in a four-part series specializing in individualized jazz instrumental or vocal instruction seven hours per semester with a private instructor, two hours per semester of solo performance and recital attendance, and ten and one-half hours monitored practice time per week. It focuses on the development of individual performance skills and solo and ensemble repertoire. Juried performance is also required. Required for all traditional performance music majors.

42A Beginning Guitar
Prerequisite: None.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 36 hours lecture; 18 hours laboratory.
This course provides instruction on the guitar with emphasis on rudiments of music, note reading, basic guitar chord technique and accompaniment figurations. CSU area C1

42B Intermediate Guitar
Prerequisite: MUIVI 42A.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 36 hours lecture; 18 hours laboratory.
This course is a continuation of MUIVI 42A with emphasis on increased skills in note reading, improvisation, accompanying, and development of personal style.
16A Advanced Concert Band

Prerequisite: MUP 16 (8 units)
Transfer Credit: Accepted for credit: CSU
Hours: 54-108 hours laboratory.
This course is the continuing study and performance of concert band literature. It is designed for a large ensemble of brass, woodwind, and percussion instruments rehearsing a wide variety of music. Additional topics include experience in conducting, rehearsal technique and section leading. Public performances, festivals, field trips, and tours are required. This course may be taken four times for credit.

17 Symphonic Band

Prerequisite: Audition
Advisory: Ability to read musical notation and play a band instrument. Brass and woodwind players should know all basic range fingerings and all major and harmonic minor scales from memory. Percussion players should know ten basic rudiments including single and double stroke rolls, 5, 7, and 9 stroke rolls, flams, paradiddles, and ruffs.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 18 hours lecture; 54 hours laboratory.
This course studies and performs advanced symphonic band literature. It is designed for a large ensemble of brass, woodwinds, and percussion instruments. Rehearsal will include a variety of music. Public performances, festivals, field trips, and tours are required. This course may be taken four times for credit. CSU area C1

17A Advanced Symphonic Band

Prerequisite: MUP 17 (8 units) and audition.
Transfer Credit: Accepted for credit: CSU
Hours: 54-108 hours laboratory.
This course is the continuing study and performance of advanced symphonic band literature. It is designed for a large ensemble of brass, woodwind, and percussion instruments rehearsing a wide variety of music. Additional topics include experience in conducting, rehearsal technique and section leading. Public performances, festivals, field trips, and tours are required. This course may be taken four times for credit.

19 College Choir

Prerequisite: None.
Advisory: Choral experience and/or ability to read music notation.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 18 hours lecture; 54 hours laboratory.
This course is a large choral ensemble performing a wide variety of music. Participation in public performances, festivals, and field trips is required. May be taken four times for credit.

19A Advanced Concert Choir

Prerequisite: MUP 19 (8 units)
Transfer Credit: Accepted for credit: CSU
Hours: 54-108 hours laboratory.
This course is a large choral ensemble performing a wide variety of advanced music. Participation in public performances, festivals, and field trips is required. This course may be taken four times for credit.

20 Vocal Ensemble

Prerequisite: Audition required. The audition will include sight singing, aural skills, improvisation and the preparation of a short musical excerpt.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 18 hours lecture; 54 hours laboratory.
This course is an advanced choral ensemble of limited size with an instrumental accompaniment performing a wide variety of music in the jazz style. Public performances, festivals and field trips required. This course may be taken four times for credit. CSU area C1

20A Advanced Vocal Ensemble - Jazz Choir

Prerequisite: MUP 20 (8 units) and audition. The audition will include sight singing, aural skills, improvisation and the preparation of a short musical excerpt.
Transfer Credit: Accepted for credit: CSU
Hours: 54-108 hours laboratory.
This course is the continuing study of vocal jazz ensemble repertoire. Additional topics include experience in conducting, rehearsal technique and section leading. Public performances, festivals, and field trips required. This course may be taken four times for credit.

21 Chamber Singers

Prerequisite: Audition including sight singing and aural skills assessment.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 18 hours lecture; 54 hours laboratory.
This course is an advanced choral ensemble of limited size performing a wide variety of music. Public performances, festivals, and field trips required. This course may be taken four times for credit. CSU area C1

21A Advanced Chamber Singers

Prerequisite: MUP 21 (8 units) and audition. The audition includes sight singing and aural skills assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 54-108 hours laboratory.
This course is an advanced choral ensemble of limited size performing a wide variety of music. Public performances, festivals, and field trips required. This course may be taken four times for credit.
32 Piano Ensemble
Prerequisite: Advanced keyboard proficiency, advanced technical and sight reading ability required. Audition.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 9 hours lecture; 27 hours laboratory.
This course is limited to advanced students. Emphasis is on artistic interpretation and performance of two-piano music. It is recommended for piano majors. May be taken four times for credit.

43 Special Ensemble Participation
Prerequisite: Audition
Advisory: English 58 or 60 and 78 or ESL 2R and 2W or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54-108 hours laboratory.
This course is open to all students who sing or play musical instruments. Instrumentation of groups will vary, including jazz combo, piano quintet, guitar ensemble, and related music as well as choral groups. This course may be taken four times.

43C Commercial Music Ensemble
Prerequisite: Ability to play at least one instrument or vocalize in a popular style. Performers must also sight read and improvise. Audition required.
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture; 54 hours laboratory.
The Commercial Music Ensemble studies and performs contemporary commercial music. Rock styles, rhythm and blues, country, funk, contemporary jazz, world beat, and other areas associated with popular music will be studied. Public performances and field trips are required. This course may be taken four times for credit. CSU area C1

44 Brass Ensemble
Prerequisite: Ability to play a brass instrument.
Transfer Credit: Accepted for credit UC, CSU
Hours: 9 hours lecture; 27 hours laboratory.
This course is design for small ensemble experience and practice for brass players. Public performance and field trips are required. This course may be taken four times. CSU area C1

45 Woodwind Ensemble
Prerequisite: Ability to play a woodwind instrument.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 9 hours lecture; 27 hours laboratory.
This course is designed for small ensemble experience and practice for woodwind players. Public performance and field trips are required. This course may be taken four times. CSU area C1

46 Percussion Ensemble
Prerequisite: Ability to play percussion instrument.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 9 hours lecture; 27 hours laboratory.
This course is a study of percussion ensemble literature. Public performance and field trips are required. This course may be taken four times for credit. CSU area C1

47 String Ensemble
Prerequisite: Ability to play a string (orchestra) instrument.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 9 hours lecture; 27 hours laboratory.
This course is a study of string literature including duets, trios, quartets or ensembles. Public performance and field trips are required. This course may be taken four times.

MUSIC SPECIALIZATIONS (MUSM)

9 Music for Children
Prerequisite: None
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.
This course focuses on the principles of teaching and using music in nursery school, pre-school, elementary school and recreational programs. Methods and material used in singing, creating, moving, reading and listening are covered. The course is recommended for nursery school workers and Early Childhood credential candidates whose major is not music. It is suggested for recreational leaders and workers and others who use music with groups of children. AA/AS area b; CSU area C1

32 Introduction to Musical Instrumental Digital Interface (MIDI)
Prerequisite: None.
Advisory: MUFHL2 or MUIVI 30A
Transfer Credit: Accepted for credit: CSU.
Hours: 18 hours lecture; 54 hours laboratory.
This course is an introduction to the rapidly evolving use of professional music software and MIDI electronic instruments. Various music hardware options, including keyboards, synthesizers, samplers, computers, and drum machines will be explored. A series of MIDI projects will cover music sequencing, notation, and CAI (computer-assisted instruction) software. Field trips required.

33 Intermediate Musical Instrument Digital Interface (MIDI)
Prerequisite: MUSM 32 with a grade of “C” or better
Transfer Credit: Accepted for credit: CSU.
Hours: 18 hours lecture; 54 hours laboratory.
This course covers techniques in MIDI composition and arranging. Concepts to be covered include film and video scoring, synchronization techniques, integrating MIDI and digital audio, and using sound editing software.

41A Recording Studio Techniques
Prerequisite: None.
Transfer Credit: Accepted for credit: CSU.
Hours: 36 hours lecture; 54 hours laboratory.
This is the first course in a four-part series and covers entry level techniques in audio/music production, studio design, and recording console functions. It also covers microphone fundamentals and applications, multi-track recording, and MIDI concepts. Field trips are required. This course may be taken twice for credit. CSU area C1
41B Recording Studio Techniques (3)  
Prerequisite: MUSM 41A with a grade of "C" or better  
Transfer Credit: Accepted for credit: CSU  
Hours: 36 hours lecture; 54 hours laboratory
This is the second course in a four-part series and covers techniques of audio recording, MIDI fundamentals, and remote recordings. It also focuses on mixdown session techniques, outboard gear application and studio design. This course may be taken twice for credit.

41C Recording Studio Techniques (formerly MUSM 53) (3)  
Prerequisite: MUSM 41B with a grade of "C" or better  
Transfer Credit: Accepted for credit: CSU  
Hours: 36 hours lecture; 54 hours laboratory
This is the third course in a four-part series and covers the techniques and tools for managing a recording studio. Topics include studio design, personnel selection, equipment budgeting, business basics, and operation of 24 track recording equipment.

41D Recording Studio Techniques (formerly MUSM 54) (3)  
Prerequisite: MUSM 41C with a grade of "C" or better  
Transfer Credit: Accepted for credit: CSU  
Hours: 36 hours lecture; 54 hours laboratory
This is the fourth course in a four-part series and covers techniques of engineering live music and audio in recording sessions. It is designed for recording engineers seeking careers in audio and post production. Techniques of analog and digital recording, mixdown, synchronizing audio and video, and management of sessions will be covered.

50A The Business of Music (3)  
Prerequisite: None.  
Hours: 54 hours lecture
This course covers the processes of the music industry. This includes record contracts, record producers and agent/managers. The course also defines the duties of recording and performing artists.

50B The Business of Music (3)  
Prerequisite: MUSM 50A  
Hours: 54 hour lecture
This course covers the fundamentals and organization of the music business. This includes the duties of attorneys, publishers, and radio. The course also defines and analyzes publishing, agreements, merchandising contracts, trademark and servicemark points, radio and record industry relations.

50C The Business of Music/Artist Management (3)  
Prerequisite: None  
Hours: 54 hours lecture.
This course covers definitions, duties and agreements of artist management. Topics include functions of a personal manager and artist, guidelines to career planning, choosing managers, record company relations and other team players. The course will also analyze the personal manager agreement and organize an artist's tour.

50D The Business of Music/Promotion (3)  
Prerequisite: None  
Hours: 54 hours lecture.
This course covers the process of music promotion. Activities include definitions of promotion, developing media/industry fan lists and assembling a promotion packet. The course also discusses current internet strategies and technology for promotion. In addition, a campaign for album release and distribution is discussed and planned.

51A Contemporary Songwriting (3)  
Prerequisite: MUFHL 2  
Hours: 54 hours lecture.
Processes of the songwriting industry in popular music today: instrumental and vocal arrangements, musical styles in jazz, pop, and rock, lyrics, formation of melodies and harmonies, popular music form, notation on paper, and other related topics.

51B Contemporary Songwriting (3)  
Prerequisite: MUSM 51A  
Hours: 54 hours lecture.
This course covers the processes of lyric evaluation, song format and music styles. Production techniques, publishing, and marketing strategies will also be included.

61 Concert Sound Reinforcement (2)  
Prerequisite: None  
Hours: 36 hours lecture; 18 hours laboratory
This course is an overview of live concert sound reinforcement. Topics to be covered include basic sound system theory/applications, and study of individual sound system component operation (microphones, mixers, effects, power amplifiers, speaker systems). Demonstrations, discussions, and a hands-on approach will provide ways to troubleshoot, sound check, and mix sound for live performance, and touring. This course may be taken twice for credit.
The Natural Resource Program offers an AS Degree and a certificate in Natural Resources.

Natural Resources Management is broadly defined as the art, science and business of managing, conserving and preserving renewable and non-renewable natural resources such as air, water, land and their biological resources for the benefit of present and future generations.

Today's natural resource technicians and professionals need a strong foundation in ecological and natural resource science as well as specific technical skills related to natural resource management. The Natural Resource curriculum provides this broad foundation for a wide range of career choices.

The AS Degree and the certificate are designed to train graduates for direct entry into jobs involving extensive fieldwork with State, Federal or Local Agencies as well as the private sector. Students completing the AS Degree can choose to continue their education towards degrees in wildlife biology, forestry, natural resource management or related disciplines.

The Natural Resources 20 unit Core Requirement serves both the degree major and certificate program. The degree major has an additional 18-21 unit concentration requirement in such areas as biological science, physical science, technical writing, statistics and computer information science.

The Natural Resources Department additionally offers the general education student coursework that prepares them to be citizens with a greater appreciation and understanding of our natural resources and current human threats to those resources.

**Career Opportunities**

There are entry-level technician and professional opportunities with private lumber and resource managing companies; city, state and national park systems and other state and federal resource agencies such as The California Department of Fish and Game, The California Department of Forestry and Fire Protection, the United States Forest Service, United States Fish and Wildlife Service, and the United States Bureau of Reclamation.
1  Introduction to Natural Resource Management (3)

Prerequisite: None
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture.
This course is an overview of ecosystems and natural resource management. It considers non-renewable and renewable natural resources such as water, land, soils, air, wildlife and their vegetative communities. Additionally, this course provides a greater appreciation and understanding of the field of natural resource management, current human threats, and the protection and maintenance of natural resource systems. Field trips are required. AA/AS area 3A

2  Principles of Ecology (3)

Prerequisite: None
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 36 hours lecture; 54 hours laboratory.
This course covers basic principles of ecology, including the physical and biological factors of different environments in relation to the distribution of plants and animals. Emphasis will be on the management of ecosystems using ecological principles and the understanding of current ecological issues. Field trips are required. AA/AS area A

3  Introduction to Wildlife Biology (3)

Prerequisite: None.
Transfer Credit: Accepted for credit: CSU.
Hours: 36 hours lecture; 108 hours laboratory.
This course is an introduction to Wildlife Biology and the basic principles and techniques related to the practice of Wildlife Management. Emphasis is based on ecological principles of populations and communities as they relate to the interdependence of wildlife and human populations. This course includes the discussion of the social, political and biological implications of Wildlife Management. Additionally, this course includes habitat and population sampling, radio telemetry and the development of a wildlife management plan. Field trips are required. AA/AS area A

4  Natural Resource Measurements (4)

Prerequisite: None
Transfer Credit: Accepted for credit: CSU.
Hours: 36 hours lecture; 108 hours laboratory.
This course provides basic natural resource measurement and survey skills. Included in this course are elementary surveying, public land survey, distance and direction measurements, topographic map reading and streamflow measurements. This course will also focus on forest sampling techniques such as transects and quadrats. Also included are the fundamental wildlife sampling techniques as well as Global Positioning Systems (GPS) and Geographic Information Systems (GIS). Field trips are required.

4A  Natural Resource Measurements - Land Surveying Methods (1)

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture; 27 hours laboratory
This course provides basic natural resource land survey skills. Included in this course are elementary surveying, public land survey, distance and direction measurements, and topographic map reading. Field trips are required.

4B  Natural Resource Measurements - Field Methods and Study Design (1)

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture; 27 hours laboratory
This course provides basic statistics and study design as well as fundamental wildlife sampling techniques and an introduction to field applications of Global Positioning Systems (GPS) and Geographic Information Systems (GIS). Field trips are required.

4C  Natural Resource Measurements - Vegetation Analysis and Forest Sampling (1)

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture; 27 hours laboratory
This course provides basic forest and vegetation sampling skills. Included in this course are forest sampling techniques such as tree heights, diameters, volume, and age. Vegetation sampling techniques such as quantitative and semi-quantitative analysis, and single species surveys will be covered. Field trips are required.

4D  Natural Resource Measurements - Aquatic Resource Sampling (1)

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture; 27 hours laboratory
This course provides basic aquatic resource sampling skills. Included in this course are streamflow measurements and water quality sampling. Sampling techniques for fisheries and other aquatic organisms will also be addressed. Field trips are required.

5  Introduction to Forestry (3)

Prerequisite: None
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
This course covers basic biological and physical science concepts important to a general understanding in forestry. Topics include forest history, forests of the United States, general tree taxonomy, forest ecology, soils, silvics, insects and diseases of forest trees, role of fire in forest management, forest measurements, multiple use management, forest issues and policies. Field trips are required. AA/AS area A

6  Identification of Native Trees and Shubs (4)

Prerequisite: None
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture; 54 hours laboratory.
This course will focus on the identification of native trees and shrubs of California by means of plant keys. In addition, this course will also include sight identification of some grasses, and other herbaceous and wetland plants. The ecology of vegetative communities and the natural history of native plants will be explored. A collection of at least seventy-five plant specimens is required. Field trips are required.
7  **John Muir “Conservationist”**

*Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture.*

This course covers the life, writings and philosophy of one of the founders of the American Conservation Movement. This course focuses on John Muir's significant contributions to the formation of the National Park System. This course is recommended to Elementary and Secondary Educators and those interested in natural resources, conservation and California history. Some class sessions will be held at the Muir National Historical Site in Martinez, the Muir Redwoods and Yosemite National Park. Field trips are required.

8  **Wildflowers of the Sacramento Region**

*Prerequisite: None
Transfer Credit: Accepted for credit: CSU, UC
Hours: 54 hours lecture, 54 hours laboratory

This course focuses on the wildflowers of the Sacramento Region. The identification, distribution, and interrelationships of herbaceous plants in their natural environment, ecological principles, and representative plant communities are examined. Special emphasis will be given to the study of plant families in our local grasslands, vernal pools, oak woodlands and foothills, and the use of taxonomic keys. AA/AS area A

9  **Analysis of a predator: The Mountain Lion**

*Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 15 hours lecture; 9 hours laboratory

This course will explore the natural history and political history of the Mountain Lion. Topics include the distribution and abundance of mountain lions in California and throughout western North America; the important ecological role of this predator; problems associated with mountain lions, and the legal status of mountain lions in California. An exciting field trip into mountain lion country is required to allow students to identify lion sign and appreciate the natural habitat of this magnificent predator.

10  **Black Bear Ecology and Management in California**

*Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 10 hours lecture; 36 hours laboratory

This course will explore the natural history, habitat and management of the Black Bear. Topics include the distribution, abundance, physiology, reproduction, behavior, and management of black bears. An exciting field trip into black bear country is required to allow students to identify bear sign and appreciate the natural habitat of this remarkable animal.

14  **Introduction to Range Management**

*Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory

This course examines the historical developments of range management theory and application of grazing strategies. This course focuses on the effects of grazing on range ecosystems, the taxonomy and physiology of range plants, ruminant nutrition and physiology. In addition, sampling techniques of vegetation, the use of fire and other methods for range conversion and maintenance are explored. Field trips are required.

24  **Forest Resource Protection**

*Prerequisite: None
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture; 54 hours laboratory

This course examines impacts to forest resources by destructive agents such as plant diseases, insects, fire, animals, and weather. Identification of causal agents and principles of forest protection are covered along with practical management concepts. Field trips are required.

48  **Work Experience**

*Prerequisite: None
Transfer Credit: Accepted for credit: CSU

This course is a cooperative effort between the college and federal, state, local, private or nonprofit organizations involved in natural resource planning, management or public information. Internship sponsors assist students in acquisition of skills and the application of knowledge learned in the classroom. In addition to applied job related skills, students will be provided general employment training and skills such as: resume writing, job applications, taking job interviews, how to look for jobs and developing job performance objectives.

93  **Current Topics in Natural Resources and Environmental Technology**

*Prerequisite: To be determined for each topic
Advisory: English 78 or ESL 2R
Hours: 9-90 hours lecture and/or 27-270 hours laboratory

Topics in natural resources management will be examined through various course offerings designed to cover field study activities and subjects relevant to natural resources and forestry not covered by regular catalog offerings. Topics and field study locations vary. Course content and unit credit to be determined by instructional area. Course topics may include advanced subjects related to wildlife, fisheries, conservation biology, forest resources and management, restoration ecology or aquatic ecology. Field trips required. This course may be taken four times.
Nursing & Allied Health

Degree: A.S. - Nursing - LVN Career Mobility
A.S. - Nursing - RN

Area: Health & Education
Dean: Sheryl Gessford
Director, Allied Health: Lucille Rybka
Phone: (916) 484-8254
Counseling: (916) 484-8572

Nursing is a healthcare profession which requires knowledge of biological, behavioral and physical sciences. Registered nurses are licensed by the state to perform a variety of health-care functions. They observe, assess, plan, implement and evaluate patient care as well as administer therapeutics, assist in patient rehabilitation and instruct patients in health care.

Career Opportunities

Employment in the field for registered nurses is excellent locally and nationally. The registered nurse enjoys a well compensated, rewarding, highly flexible career which should continue in the future. This field is expanding, and growth in the job market for registered nurses is projected.

The ARC Program

The Nursing Program consists of a combination of general education and nursing courses with related laboratory experience in local health agencies. Successful completion of the program qualifies the student to take the California State Licensing Examination to become registered as a nurse and eligible for employment. A grade of “C” or better is required in each Nursing course for progression in the program and for an associate degree in nursing. The student is responsible for providing uniforms, laboratory fees, malpractice insurance, necessary equipment, and transportation to off-campus laboratory locations. The nursing curriculum is offered both spring and fall. Start-up costs are approximately $1,200. In addition, the fourth semester students are required to take a prelicensure simulation/assessment examination. The cost is approximately $35.00. There are morning, afternoon, evening, and weekend clinical experiences required with limited notice. Knowledge of computer skills is desired.

NOTE: In accordance with Regulation 480 of the State Board of Registered Nursing, a person convicted of any offense other than a minor traffic violation, may not qualify to be licensed as a registered nurse. If there are any questions regarding this matter, please contact the State Board of Registered Nursing.

Requirements for Pre-enrollment to the Program

1. Graduation from an accredited high school or G.E.D. equivalent with scores as required by Section 1412B of the Nursing Practice Act prior to time of application.
2. A grade of C or better and a cumulative G.P.A. of 2.5 in the following prerequisites, NF10, (Nutrition), Psychology 1, English 1A, *Speech 1 or 15, *Sociology 1A, or *Anthropology 2, prior to app. to nursing program. *Are corequisites to N1 and N2.
3. ** A cumulative G.P.A. of 3.0 in the sciences: Bio 25, Bio 26, Bio 6 or Bio 4. These requirements are for first-time applicants to the program. Note: There is a seven-year recency requirement for the biological science courses.
4. Eligibility for English 4 or 5. (See nursing program information sheet.) (under revision)

Pre-enrollment Deadlines

Applications may be obtained from the Admissions and Records Office or by calling 484-8176. Applications are due in the Admissions and Records office by April 15 for the fall semester and by October 15 for the spring semester. In case the application date falls on a holiday or weekend, applications will be due in the Admissions and Records office on the preceding business day. Only completed application packets will be accepted. Completed application includes: Application, all official college transcripts, high school transcript or G.E.D. Refer to current information sheet.

Enrollment

1. Only students who meet the pre-enrollment requirements and follow the pre-enrollment procedures will be considered for the program.
2. Selection is based on a random selection process from among the qualified applicants.
3. The student admitted to the nursing program is required to have a physical examination and required inoculations prior to the start of the semester.

NOTE: Meeting all the course requirements does not guarantee enrollment to the program.

Requirements for Degree Major (67-68 units):

- Biology 4 or 6, 25, 26; English 1A; Nutrition and Foods 10;
- Psychology 1; Sociology 1A or Anthropology 2; Speech 1 or 15;
- Nursing 1, 2, 3, 4.
NOTE: Biology 4, 6, 25 and 26 have a prerequisite of an introductory college chemistry course with a grade of “C” or better. Please check catalog course descriptions.

Courses Required for the Associate Degree in Nursing

Pre-Enrollment Courses
Biology 4 or 6
Biology 25
Biology 26
English 1A
Nutrition and Foods 10
Psychology 1

Course Sequence for Degree Major
Nursing 1 (Semester 1)
Nursing 2 (Semester 2)
Nursing 3 (Semester 3)
Nursing 4 (Semester 4)

Speech 1 or 15: must be enrolled, if not previously taken concurrently with N1 Sociology 1A or Anthropology 2: must be enrolled concurrently with N2 if not previously taken.

Additional Graduation Requirements
Humanities
Social Science
Physical Education
Ethnic/Multicultural Studies
Competency in Reading and Math (Strongly recommended that math competency be met prior to entering Nursing program).

Note: speech 7 and Psychology 7 from Sacramento City College do not meet the American River College pre-enrollment requirements.

LVN CAREER MOBILITY (FOR LVNS ONLY)

Licensed Vocational Nurses (LVN) accepted into the career mobility phase of the Associate Degree Program are required to complete a combination of general education and nursing courses with related laboratory experience in local health agencies. Successful completion of the program qualifies the student to take the California State Licensing Examination to become registered as a nurse and eligible for employment. A grade of “C” or better is required in each Nursing course for progression in the program and for an associate degree in nursing. The student is responsible for providing uniforms, laboratory fees, malpractice insurance, necessary equipment and transportation to off-campus laboratory, start up cost is approximately $1,200. In addition, the fourth semester students are required to take a prelicensure simulation/assessment examination. The cost is approximately $55.00. There are morning, afternoon, evening, and weekend clinical experiences required with limited notice. Knowledge of computer skills is desired.

NOTE: In accord with Regulation 480 of the State Board of Registered Nursing, a person convicted of any offense other than a minor traffic violation, may not qualify to be licensed as a registered nurse. If you have any questions regarding this matter, please contact the State Board of Registered Nursing.

Requirements for Pre-enrollment to the Program
1. Current California Vocational Nurse license.
2. A grade of C or better and a cumulative GPA of 2.5 in the following prerequisites: NF10, Psychology 1, English 1A, Speech 1 or 15, Sociology 1A or Anthrop 2, prior to appl. to Nursing program. *Are corequisites to N1 and N2.

Note: A seven-year recency requirement is in effect for the biological sciences.

Pre-enrollment Deadlines
Applications may be obtained from the Admissions and Records Office or by calling 484-8176. Applications are due in the Admissions and Records Office by April 15 for the fall semester and by October 15 for the spring semester. In case the application date falls on a holiday or weekend, applications will be due in the Admissions and Records office on the preceding business day. Only completed application packets will be accepted. Completed application includes: Application, all official college transcripts, high school transcript or G.E.D., and photocopy of current LVN license and validation of current employment in the appropriate acute care setting.

Enrollment
1. Only students who meet the pre-enrollment requirements and follow the pre-enrollment procedures will be considered for the program.
2. Selection is based on a random selection process.
3. The students enrolled in the nursing program are required to have a physical examination and required inoculations prior to beginning of the first semester.

NOTE: Meeting all the course requirements does not guarantee admission to the program.

Requirements for Degree Major 67-68 units
Biology 4 or 6, 25, 26; English 1A; Family and Consumer Science 10; Psychology 1; Sociology 1A or Anthropology 2; Speech 1 or 15; Nursing (1, 2)*; 3, 4.

NOTE: Biology 4, 6, 25, and 26 have a prerequisite of an introductory college chemistry course with a grade of “C” or better. Please check catalog course descriptions.

Courses Required for the Associate Degree in Nursing

Pre-enrollment Courses
Biology 25
Biology 26
Biology 4 or 6
English 1A
Nutrition and Foods 10
Psychology 1
Speech 1 or 15*
Sociology 1A or Anthropology 2*
*must be completed before entering the 3rd semester.

Course Sequence for Degree Major
Nursing 23 (Summer Session)
Nursing 3 (Fall Semester)
Nursing 4 (Spring Semester)

Additional Graduation Requirements
Humanities
Social Science
Physical Education
Ethnic/Multicultural Studies
Competency in Reading and Math (Strongly recommended that math competency be met prior to entering the Nursing program).

+ Credit for:
Nursing 1
Nursing 2
Credit by Examination Policy for Associate Degree Program of Nursing

1. Credit by examination is available to anyone who feels they have the knowledge and skills comparable to the nursing course they wish to challenge (to a maximum of 15 units). Applicants from allied health fields (medical corpsmen, licensed psychiatric technicians, and others) who feel they have comparable knowledge may challenge.

2. All persons applying for advanced placement in the nursing major must meet the entrance requirements of the college, the college challenge policy, and the nursing entrance requirements. Advanced placement is subject to space available and is based on a priority system.

3. All prerequisites and concurrent course requirements (science and general education) must be completed up to the nursing course for which the student desires advanced placement.

Transfer-In Policy
Inquire at the Nursing Department, Allied Health Building, phone 484-8254. Letter of inquiry stating which semester is requested should be directed to the Nursing Director. Information will be mailed to prospective student.

Licensed Vocational Nurse (LVN) 30 unit option

(The following is quoted from the) Board of Registered Nursing, Rules and Regulations Section 1429 — Preparation Required for Licensed Vocational Nurses.

a. An applicant who is licensed in California as a vocational nurse is eligible to apply for licensure as a registered nurse if such applicant has successfully completed the courses prescribed below and meets all the other requirements set forth in Section 2736 of the code. Such applicant shall submit evidence to the board, including a transcript, of successful completion of the requirements set forth in subsection (c) and of successful completion or challenge of courses in physiology and microbiology comparable to such courses required for licensure as a registered nurse.

b. The school shall offer objective counseling of this option and evaluate each licensed vocational nurse applicant for admission to its registered nursing program on an individual basis. A school's determination of the prerequisite courses required of a licensed vocational nurse applicant shall be based on an analysis of each applicant's academic deficiencies, irrespective of the time such courses were taken.

c. The additional education required of licensed vocational nurse applicants shall not exceed a maximum of thirty (30) semester or forth-five (45) quarter units. Courses required for vocational nurse licensure do not count toward fulfillment of the additional education requirement. However, other courses comparable to those required for licensure as a registered nurse, as specified in Section 1426, may be counted toward fulfillment of the additional education requirement.

Nursing courses shall be taken in an accredited school and shall be beyond courses equivalent to the first year of professional nursing courses. The nursing content shall include nursing intervention in acute, preventive, remedial, supportive, rehabilitative and teaching aspects of nursing. Theory and courses with concurrent clinical practice shall include advanced medical-surgical, mental health, psychiatric nursing and geriatric nursing. The nursing content shall include the basic standards for competent performance prescribed in Section 1443.5 of these regulations.


NOTE: This option is available to all LVNs entering the American River College Nursing Program. Persons electing this 30-unit option will be eligible to write the BRN State Board Examination but will not be a graduate of the American River College Nursing Program.

Requirements

1. Applicant must hold a valid California Licensed Vocational Nurse license.
2. Completion of a physiology course with a grade of “B” or better prior to enrollment in the nursing courses.
3. Completion of microbiology or equivalent (4 units) with a grade of “B” or better prior to enrollment in the nursing courses.
4. Completion of the following courses (theory and clinical with a grade of “C” or better in each): Nursing 5 and Nursing 4
5. Placement into the second year nursing courses is on a space available basis.

For further information, contact the Nursing Department, Allied Health Building, phone 484-8176.

Baccalaureate Degree

Since the various Schools of Nursing are constantly changing prerequisite and admissions procedures, it is important that nursing students who are contemplating transfer to a four year institution consult with a counselor as early as possible.

Diploma RN Pursuing Associate Degree

Graduates of hospital schools of nursing who are currently licensed in California may earn an Associate Degree at American River College. This R.N. will need to make an appointment with a nursing counselor in the ARC counseling center.

1. Complete requirements for an A.S. Degree (consult with counselor on graduation requirements). At least 12 units must be completed at American River College to meet the residency requirement.
2. Petition for graduation. At this time the college will grant 30 units in nursing towards the major.

1 Fundamentals of Medical-Surgical Nursing I

Prerequisite: Acceptance into the Associate Degree Nursing Program (see program requirements).
Corequisite: Speech 1 or 15
Transfer Credit: Accepted for credit: CSU
Hours: 81 hours lecture; 324 hours laboratory.
Concepts of self-care are introduced. Theory and practice related to providing patient care with an emphasis on basic nursing skills and the nursing process. Life cycle concepts and their impact on self-care and health are included, with particular emphasis on the senior adult. Professional role development and ethical issues are introduced. Concurrent laboratory experience will take place in the appropriate setting. Field trips are required.

2 Maternal/Child and Medical - Surgical Nursing II

Prerequisite: Nursing 1 with a grade of “C” or better.
Corequisite: Sociology 1A or Anthropology 2
Transfer Credit: Accepted for credit: CSU
Hours: 81 hours lecture; 324 hours laboratory.
Concepts of self-care are applied to care of the newborn, child, middle and senior adult. Pathophysiologic and pathopsychologic factors creating health deviations are emphasized. Guidance is provided in utilization of the nursing process. Concurrent laboratory experience will take place in medical-surgical and maternal/child health settings. Legal issues relevant to health care and their implications are studied. Field trips are required.
3 Psychiatric and Medical-Surgical Nursing III
Prerequisite: Nursing 2 with a grade of "C" or better
Corequisite: Sociology 1A or Anthropology 2
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory.

Concepts of self-care are applied to the psychiatric and medical-surgical patient. Pathophysiological and pathopsychological factors are integrated. Independence is encouraged in the use of the nursing process. Related laboratory experience will take place in the psychiatric, and medical-surgical settings. Legal-ethical issues and community resources relevant to health care and their implications are studied. Field trips are required.

4 Management of Multiple Patients and Medical - Surgical Nursing IV
Prerequisite: Nursing 3 with a grade of "C" or better.
Transfer Credit: Accepted for credit: CSU.
Hours: 36 hours lecture; 54 hours laboratory.

Concepts of self-care are applied to care of the middle and senior adult. Focus is on nursing management of a group of complex patients and participation in the health care team in the acute areas. Pathophysiological and pathopsychological factors creating health deviations are emphasized. Priorities are given to the utilization of the nursing process in making and evaluating decisions. Concurrent laboratory experience will take place in the appropriate laboratory setting. The transition from student to graduate nurse is explored through studying the Nurse Practice Act and discussion of the problems, responsibilities, and challenges confronting the registered nurse.

11A Pharmacology and Implications for Health Care Practitioners
Prerequisite: None.
Advisory: Health related occupations.
Transfer Credit: Accepted for credit: CSU
Hours: 8 hours lecture.

This course will detail the principles of drug therapy as it applies to its effect in treating disease. The course will also study the metabolism and action of drugs with an emphasis on absorption, duration of action, distribution in the body and adverse drug reactions. The major drug classes and related implications for people receiving drugs that affect the body systems, prevent and treat pain, infections and malignant neoplasms will be discussed. Drugs that alter psychogenic behavior and sleep patterns will be included.

14 Medical Dosage Calculations
Prerequisite: None.
Advisory: Health Occupations.
Transfer Credit: Accepted for credit: CSU
Hours: 8 hours lecture.

This course prepares students and health professionals to calculate oral and parenteral drug dosages with a focus on safety and accuracy. Students will learn the three systems of measurements and conversion of one system to another. Calculation accuracy is emphasized by clinical scenarios that apply critical thinking skills.

23 Transition/Associate Degree Nursing
Prerequisite: LVN
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture; 108 hours laboratory.

The course is designed to be a bridging course for the California Licensed Vocational Nurse to enter the Associate Degree third semester level of nursing at American River College. Emphasis is on the nursing process, role transition, growth and development, cultural and ethnic diversity, communication skills, obstetrics, pediatrics and the senior adult. Concurrent laboratory experience will take place in an acute care hospital where the emphasis will be on problem solving, critical thinking and decision making as the student applies nursing theory to practice.

45 Physical Therapy Aide
(Same as Gerontology 45)
Prerequisite: None.
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture

This course is designed to prepare student for the responsibilities of Physical Therapy Aide and to provide a general introduction to the physical therapy field. Basic skills of range of motion, exercise, positioning, transfers, and ambulation with assistive devices are covered through lecture and hands-on experiences. The course presents basic anatomy, terminology and medical issues associated with the field of physical therapy.

50A Nurse Assistant
Prerequisite: Must have proof of a physical within one year, and a TB skin test within six months or a chest x-ray within one year.
Hours: 54 hours lecture; 110 hours laboratory.

This course leads to Nurse Assistant Certification from the California State Department of Health Services. Emphasis is on gerontological nursing assistant role; role and responsibilities as a health care member. Other key components in this course are principles of asepsis, infection control; patient care skills; emotional, social and spiritual needs of the patient.

50B Home Health Aide
Prerequisite: Nursing 50A with a grade of "C" or better or current Nurse Assistant Certification.
transfer Credit: Accepted for credit: CSU
Hours: 20 hours lecture; 20 hours laboratory.

This course focuses is on home health aide responsibilities; personal and rehabilitative nursing care in the home, skills of maintaining a safe home environment, meal planning and preparation, emotional care of the home-bound and home emergency procedures.

50C Acute Care Certified Nursing Assistant
Prerequisite: Certified Nursing Assistant
Hours: 27 hour lecture, 27 hours laboratory.

This course is designed as a supplemental educational program for Certified Nursing Assistants (CNAs) to meet current industry demands for employment as an Acute Care Nursing Assistant (ACNA). The course will present the expanded scope of practice of the CNA with emphasis on safe and competent nursing and personal care skills and service in accordance with the needs description provided by the acute care facilities.

60A Physical Assessment for Health Care Providers
Prerequisite: Nursing 1 or RN or LVN licensure or CNA Certificate.
Hours: 36 hours lecture.

This course is designed for health care professionals and Allied Health students desiring to expand their physical assessment skills. Advanced physical assessment of all major body systems will be included across the life span. Additional topics include nutritional, psychosocial, cognitive, and activity assessment. This course fulfills BRN continuing education requirements.
60B Basic (EKG) Electrocardiography Interpretation

Prerequisite: None
Advisory: Academic or work experience in the health care profession or Nursing 3.
Hours: 18 hours lecture.
This course provides an opportunity for RN’s, LVN’s, EMT’s, Respiratory Care Technicians and allied health students to learn basic ECG interpretation. The class will include atrial junctional and ventricular rhythm recognition. This course fulfills BRN and EMS requirements for continuing education.

60C Bedside Cardiac Assessment

Prerequisite: None
Advisory: Nursing 3 or LVN or RN licensure.
Hours: 9 hour lecture.
This class is designed for health care professionals and students who wish to improve their cardiac assessment skills. Topics include heart sounds, chest pain assessment, risk factor identification, physical finds, and anatomy and physiology overview. This course will satisfy BRN continuing education requirements.

60D Laboratory Value Interpretation and Diagnostics Studies

Prerequisite: None
Advisory: Nursing 1 or RN or LVN Licensure or CNA certificate.
Hours: 9 hours lecture.
This class is designed for health care professionals and students who wish to update and improve their knowledge of current lab values and diagnostic testing. This course will satisfy BRN continuing education requirements.

61 Strategies for Success in Nursing Careers

Prerequisite: None
Hours: 18 hours lecture.
This course explores strategies for success in nursing programs. It will also explore the role of the nurse in today’s health care setting in relationship to actual duties to be performed - the critical thinking aspect and accountability factors associated with the profession. The history, trends, and practice of nursing will be discussed as well as how nursing interfaces with other health care providers. Appropriate learning strategies, written and verbal communication skills will be highlighted and demonstrated.

54 Medical Language for Health Care Providers (formerly Medical Terminology)

Prerequisite: None
Hours: 54 hours lecture
This course is an orientation to medical language; basic structure of medical terms and their components—prefixes, suffixes, roots, and combining forms—with emphasis on analyzation, meaning, spelling and pronunciation. The course builds a medical vocabulary applicable to the specialties of medicine, the systems of the body, names of major diseases, and terms used in physical examination, diagnosis, and treatment.
Nutrition and Foods courses are designed to provide knowledge and skills to ensure a nutritional foundation for students. ARC’s dietary program is designed to fulfill the requirements for certification for employment in skilled nursing facilities.

The Dietary Manager/Dietary Service Supervisor Certificate is designed to certify those currently employed in skilled nursing facilities, or anyone desiring to be a supervisor, to meet the state requirements for certification. It meets the requirements for the California State Department of Health Services. To determine which course of study is right for you consult the coordinator of the Dietary Manager/Dietary Service Program by call 484-8145.

Dietary Manager - Dietary Service Supervisor

<table>
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1 Nutrition for Health and Fitness (2)

Prerequisite: None
Corequisite: PER 1 Advisory: English 58 or 60, and 78; or ESL 2R, 2L, and 2W; or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 36 hour lecture.
This class presents a study of nutrition and fitness designed to increase an awareness of food, nutrition, and physical activity and their interrelationships. This course will include developing skill in diet selection and food preparation and active participation in a balanced physical fitness program with an emphasis on muscle strength and endurance, cardiovascular endurance, and flexibility. This course is designed for those interested in general wellness. AA/AS area E2

10 Nutrition (3)

Prerequisite: None
Advisory: English 58 or 60, and 78; or ESL 2R, 2L, and 2W; or placement through assessment.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
An in-depth study of essential nutrients, functions, chemical compositions of foods and their utilization in the body. Nutritional values of foods, current topics in nutrition and individual nutritional needs throughout the life cycle will be covered. Not open to students who have completed Nutrition and Foods 11. (CAN FCS 2) AA/AS area A & E2; CSU area E1

11 Nutrition for Physical Performance (3)

Prerequisite: None
Advisory: English 58 or 60, and 78; or ESL 2R, 2L and 2W; or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course presents a comprehensive study of nutrition and fitness as they interrelate and apply to fitness and sport skill training and to athletic performance. The course includes an in-depth study of essential nutrients and functions, chemical compositions of foods and their use in the body as they relate to physical performance. Specifically, nutrition is related to muscle strength development, cardiovascular fitness, and body composition. Emphasis on current nutrition practices related to athletic performance. Designed for individuals interested in the study of how nutrition enhances athletic performance. Not open to students who have completed Nutrition and Foods 10. AA/AS area A & E2
12 Cultural Foods of the World (3)

Prerequisite: None
Advisory: English 58 or 60 and 78; or ESL 2R, 2L, and 2W; or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.

This course compares various western and non-western cultural food customs and patterns including their social, religious, economic and aesthetic significance. Ethnocentrism, gender-related stereotypes, and racism as they relate to the availability, distribution and preparation of food throughout the world will be compared. The nutritional status of various cultures as it relates to geographic, agricultural and socio-economic factors will be studied. AA/AS area F.

14 Children's Health, Safety and Nutrition (3) (Same as Early Childhood Education 14)

Prerequisite: None
Advisory: English 58 and 78; or ESL 2R, 2L, and 2W; or placement through assessment.
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.

This course is designed to look at basic nutrition, health, and safety needs of children from the prenatal period through school age. Topics include identification of the nutrients in foods as they affect a child’s physical and mental development. Course emphasis is placed on maintaining the optimal health, safety, and nutritional status of children at home and in group care. Not open to students who have completed Early Childhood Education 14/Family and Consumer Science 14.

15 Nutrition Issues Throughout Life (3)

Prerequisite: Nutrition and Foods 10
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.

This course is a study of the nutritive needs of persons at various stages of the life cycle with emphasis on special periods such as pregnancy, preschool, adolescence and aging. Particularly helpful to Physical Education, Early Childhood Education majors and those dealing with people in social agencies, such as nursing and gerontology.

16 Food Theory and Preparation (4) (Same as Hospitality Management 16)

Prerequisite: None
Corequisite: Mathematics 215 or placement through assessment.
Advisory: English 58 and 78; or ESL 2R, 2L, and 2W; or placement through assessment.
Transfer Credit: Accepted for credit: CSU.
Hours: 56 hours lecture; 108 hours laboratory.

This course is a comprehensive study of basic principles of food science and theory and techniques involved in food preparation. A study of the factors that influence foods and the changes which occur in foods during preparation. Emphasis is on basic cooking skills and theory application. Not open to students who have completed Hospitality Management 16. (CAN FCS 8)

43 Nutrition for Healthy Aging (Same as Gerontology 43) (3)

Prerequisite: None.
Advisory: English 58 or 60; or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.

This course is an introduction to nutritional concerns as they apply to the elderly, their implications in the aging process and the environmental, economic and cultural factors affecting nutritional status. Not open to students who have completed Gerontology 43.

48 Work Experience (1-4)

Prerequisite: Hospitality Management 61; Family and Consumer Science 95; Management 50.
Transfer Credit: Accepted for credit: CSU.
Hours: Unit of credit for each 75 hours of paid work experience or 60 hours of volunteer work.

This course provides practical experience in various situations for Family and Consumer Science major. Students work in cooperating establishments in different specialty areas in Family and Consumer Science. Recommended for those needing practical experience before employment. May be taken four times for credit up to a maximum of 6 units.

52 Special Topics (0.5-3)

Prerequisite: None
Hours: 9-54 lecture hours.

This course provides opportunities to study current, controversial topics in nutrition which are either not included in current offerings or require emphasis beyond that offered in existing courses. The course may be taken four times for a maximum of 6 units providing there is no duplication of topics.

63 Nutritional Care Management (3)

Corequisite: Nutrition and Foods 96
Advisory: English 58 and 78 or ESL 2R, 2L, 2W; or placement through assessment.
Hours: 54 hours lecture.

This course is a study of medical nutrition therapies as used in health care facilities. The emphasis is on the modification of diets for various dietary needs. The topics discussed include normal nutrition, medical nutrition therapy, food/drug interactions, nutritional care management of the Long Term Care resident, and cultural foods.

67 Management of the Dietary Department in Health Care Facilities (3)

Prerequisite: Serv Safe certificate or Hospitality Management 51
Corequisite: Nutrition and Foods 95
Advisory: English 58 and 78; or ESL 2R, 2L, 2W; Mathematics 210; or placement through assessment process
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.

This course reviews the standards of management and food preparation as it applies to quantity food production in health care facilities. The topics discussed include types and components of food production systems, workflow, menu implementation, emergency planning, maintenance of equipment, food production procedures, sanitation and safety, and dietary staff schedules and management.
95  Clinical Experience in Health Care Facilities

Prerequisite: Current TB clearance and other immunizations required by the clinical facility.
Corequisite: Nutrition and Foods 67
Advisory: English 58 and 78 or ESL 2R, 2L, 2W, or placement through assessment process.
Hours: 18 hours lecture; 90 hours laboratory.
This course is designed to be taken concurrently with Nutrition and Foods 67 - Management of the Dietary Department in Health Care facilities. This course includes 90 hours of clinical experience in the dietary departments of participating acute hospitals and long-term care facilities. The clinical experience is performed under professional supervision.

96  Clinical Experience Modified Diets

Prerequisite: Current TB clearance and other immunizations required by clinical facility.
Corequisite: Nutrition and Foods 63
Advisory: English 58 and 78 or ESL 2R, 2L, 2W, or placement through assessment.
Hours: 18 hours lecture; 90 hours laboratory.
This course includes 90 hours of clinical experience in the dietary departments of participating acute care hospitals and long-term care facilities. The clinical experience is performed under professional supervision.
Paramedicine is a specialty whose practitioners respond to emergencies before a patient reaches a hospital, rendering basic and advanced medical treatment before and during transport to a medical facility. Paramedics work for fire departments, rescue squads, private providers, industrial companies, clinics, and hospitals. Classroom, clinical and field internship training prepares paramedics to assess and treat a wide variety of medical emergencies. The knowledge, skills and experience gained through the paramedic program allows students to meet the responsibilities outlined in the Department of Transportation National Standard Curriculum.

The ARC paramedic program is designed to prepare the student for certification as a paramedic, working for a fire department, rescue squad, private provider, industry, clinic or hospital. Under the direct supervision and evaluation of a certified paramedic or a mobile intensive care nurse, the student will complete a field internship experience at a designated site. This provides pre-hospital experience and is the last course in the series preparing the student for certification.

In order to apply for the program, a student must have current certification as an EMT-1 and one year verified EMS experience, and a grade of “C” or better in a college-level human anatomy and physiology course which covers all systems.

Requirements for pre-enrollment to the Program

1. Graduation from an accredited high school or G.E.D.
2. Current certification as an EMT-1 and one year verified recent EMS experience. (Experience composite will be reviewed by admission committee.) or EMT 50 with a grade of B or higher.
3. A grade of “C” or better in Biology 25 and 26, or Biology 60, 60L or Biology 50 and 51, or other college level human anatomy and physiology course.
4. After enrollment into the program, comply with health requirements which include a physical exam and immunizations.

Pre-enrollment Deadline
Qualified applicants may obtain a pre-enrollment form by calling the Allied Health Department at 484-8176 or by coming to the Allied Health Office on campus. Paramedic program pre-enrollment deadline is the first Friday in December. Grades in progress will be accepted. Final acceptance is contingent upon successful completion of course work and validation of EMT experience.

Enrollment
Only students who meet the pre-enrollment procedures will be considered for the program.

Note: Meeting all the course requirements does not guarantee enrollment to the program.

Requirements for Degree Major or Certificate
Biology 25 and 26, or Biology 60, 60L, or Biology 50 and 51, or other college level human anatomy and physiology course.
Paramedic 51, 52 and 53.

General Education Graduation Requirement:
Students must also complete the general education graduation requirements for an A.S. degree. See general education requirements.
50 Emergency Medical Technician - Basic, Pre-hospital Field Internship
Prerequisite: Pre-paramedic skills placement exam, EMT I current certification
Corequisite: Biology 60 and 60L
Advisory: English 58 or 60 and 78, or ESL 2R, and 2W; Mathematics 205.
Hours: 18 hours lecture; 206 hours laboratory.
This course is an internship that will provide opportunities to refine hands-on
basic life support skills in the pre-hospital setting. This internship is in
preparation for application to the American River College, Paramedic Education
Program.

51 Introduction to Advanced Prehospital Care
Prerequisite: Biology 60 and 60L, Nursing 14 with a grade of “C” or better, admissi
on to the Paramedic Program
Advisory: Mathematics 51, English 78 and 58 or 60, ESL 63 and 2R.
Hours: 144 hours lecture; 216 hours laboratory.
This course contains the didactic material and related skills necessary to es
tablish a foundation for subsequent pre-hospital assessment and management
of patient. Anatomy and Physiology, Pharmacology, intravenous therapy, basic
and advanced life support, electrocardiography are included. In addition, the
course covers assessing and reporting to appropriate personnel in the pre-
hospital arena. Course content emphasis includes topics related to medical/
surgical, pediatric, obstetric, psychiatric/geriatric problems. Crisis interven-
tion, medical legal issues are discussed.

52 Clinical Internship
Prerequisite: Paramedic 51, with a grade of “C” or better; current Emergency
Medical Technician I certification
Hours: 36 hours lecture; 216 hours laboratory.
This course is designed to provide an opportunity to apply the cognitive knowl
edge and skills gained in the Paramedicine course to patient care in a hospital
setting. This course provides for increasing assessment techniques and ad
vanced skills.

53 Prehospital Field Internship
Prerequisite: Paramedic 52 with a grade of “C” or better. Current EMT I
certification.
Hours: 54 hour lecture; 480 hours laboratory.
Under the direct supervision and evaluation of a licensed paramedic or a mo
bile intensive care nurse, the student will complete a prehospital field internsh
ip experience at a predetermined clinical site. This internship will provide the
paramedic student with hands-on prehospital experience and is the final
course in the series preparing the student for licensure.

54 Emergency Medical Technician 1 - Recertification
Prerequisite: Current certification as an Emergency Medical Technician - Basic
or EMT-1.
Hours: 20 hours lecture, 4 hours laboratory.
This course provides currently certified Emergency Medical Technicians 1
with continuing education modules to satisfy recertification requirements of
local/state and National EMS organizations. The course will cover several
EMS related topics including: airway management, Basic Life Support re
view, patient assessment, spinal management, medical documentation, medi
cal/legal, vital signs and extrication techniques. May be taken for up to six
units.

55 Pediatric Advanced Life Support Certification
Prerequisite: Current Provider C Basic Cardiac Life Support card or county
approved equivalent certificate. Current licensure as a paramedic, nurse,
physician, allied health professional or current enrollment in the last semester of
an allied health program.
Hours: 6 hours lecture, 12 hours laboratory.
This course provides educational modules specific to pediatric emergencies
for allied health care professionals. The course provides certification in PALS.
May be taken for up to six units.

56 Advanced Cardiac Life Support Certification
Prerequisite: Current Provider C Basic Cardiac Life Support card or county
approved equivalent certificate; current licensure as a paramedic, nurse,
physician, allied health professional or current enrollment in the last semester of
an allied health program.
Hours: 6 hours lecture, 12 hours laboratory.
This course provides education modules for health care professionals specific
to adult cardiac emergencies for health care professionals. The course pro
vides certification in ACLS. May be taken for up to six units.

57A Post Licensure/Certification Out-of-Hospital Skills: Cardiac
Prerequisite: Current licensure as an EMT-Basic (1) or licensure as an
EMT-Paramedic. Current employment with an emergency medical services
provider (911 transport).
Hours: 6 hours lecture, 12 hours laboratory.
This course provides education modules related to cardiac emergencies for
prehospital health care professionals. Each module will specifically address
issues related to prehospital emergencies and local treatment protocol. This
course provides continuing education credit necessary for maintenance of
EMT-Basic certification or Paramedic licensure. This course may be taken four
times.

57B Post Licensure/Certification Out-of-Hospital Skills: BLS & Airway
Prerequisite: Current certification as an EMT-Basic (1) or licensure as an
EMT-Paramedic; current employment with a local emergency medical services
provider (911 transport).
Hours: 6 hours lecture, 12 hours laboratory.
This course provides education modules for prehospital health care profes
sionals. Each module will specifically address issues related to prehospital
emergencies and local treatment protocol. This course provides continuing
education credit necessary for maintenance of EMT-Basic certification or Para
medic licensure. This course may be taken four times.

57C Post Licensure/Certification Out-of-Hospital Skills: Trauma
Prerequisite: Current certification as an EMT-Basic (1) or licensure as an
EMT-Paramedic; current employment with an emergency medical services
provider (911 transport).
Hours: 6 hours lecture, 12 hours laboratory.
This course provides education modules specific to the kinematic of trauma
for prehospital health care professionals. Each module will specifically ad
dress traumatic injuries, causes, assessment and management. Information re
lated to prehospital emergencies and local trauma treatment protocols will
also be reviewed. This course provides continuing education credit necessary
for maintenance of EMT-Basic certification or Paramedic licensure. This course
may be taken four times.
57D  Post Licensure/Certification
Out-of-Hospital Skills: Pediatric Care
(0.5)

Prerequisite: Current certification as an EMT-Basic (1) or licensure as an EMT-Paramedic; current employment with an emergency medical services provider (911 transport).

Hours: 6 hours lecture, 12 hours laboratory.

This course provides education modules specific to pediatric emergencies for prehospital health care professionals. Each module will address issues related to the assessment and management of pediatric patients. National and local treatment protocols will be addressed. This course provides continuing education credit necessary for maintenance of EMT-Basic certification or Paramedic licensure. This course may be taken four times.

58  Pediatric Advanced Life Support - Recertification
(5)

Prerequisite: Current American Heart Association Pediatric Advanced Life Support Provider Card or county approved equivalent certificate.

Hours: 8 hours lecture, 3 hours laboratory.

This course provides education modules specific to pediatric emergencies for health care professionals. This course provides recertification for the student according to the American Heart Association's pediatric Advanced Life Support standards and guidelines. May be taken up to six units.

59  Advanced Cardiac Life Support - Recertification
(5)

Prerequisite: Current American Heart Association Advanced Cardiac Life Support Provider Card or county approved equivalent certificate

Hours: 8 hours lecture, 3 hours laboratory.

This course provides education modules specific for adult cardiac emergencies for health care professionals. This course provides recertification for the student according to the American Heart Association's Advanced Cardiac Life Support standards and guidelines. May be taken up to six (6) units.

60  EMS Search and Technical Rescue
(2)

Prerequisite: None

Hours: 27 hours lecture, 27 hours laboratory.

This course provides the student with a foundation in several technical rescue disciplines. Practical applications of water rescue, low angle and high angle rescue, and urban search and rescue are covered. Additionally, basic survival skills in rescue environments for the EMT/Paramedic, and selecting and caring for rescue equipment and supplies will be covered. This course emphasizes scenario-based learning in safely assessing, managing and pre-planning for the technical rescue environment.

61  Introductory Wilderness Medicine
(2)

Prerequisite: Current certification in provider level Cardiopulmonary Resuscitation

Advisory: Basic First Aid

Hours: 27 hours lecture, 27 hours laboratory.

This course provides the didactic material and related skills necessary to establish a foundation of medical care in the wilderness setting. Anatomy and physiology, care of traumatic injuries, patient assessment, environment injuries, medical emergencies, and common simple wilderness medical problems are included. Additionally, basic wilderness survival for the initial responder, and selecting and caring for wilderness medical equipment and supplies will be covered. This course emphasizes improvised care options, and long term care in field settings.

62  Advanced Wilderness Medicine
(2)

Prerequisite: Paramedic 61 or EMT, or other health care provider such as nurse or doctor.

Hours: 27 hours lecture, 27 hours laboratory.

This course allows the student to gain an advanced level of medical care in the wilderness setting. Anatomy and physiology, improvised airway control, principles of musculoskeletal care, integration of field, synthesis of wilderness medicine and urban care, and common simple wilderness medical problems are included. Additionally, basic wilderness survival for the wilderness responder, and selecting and caring for wilderness medical equipment and supplies will be covered. This course emphasizes improvised care options, and long term care in remote field settings.

64  Prehospital Calculations
(0.5)

Prerequisite: Current certification as an EMT-basic in the state of California, as required by Title 22.

Hours: 9 hours lecture.

This course provides basic instruction in calculating medication dosages in the pre-hospital setting.

77  Emergency Medical Technician I
(same as Fire Technology 77)
(5)

Prerequisite: Health Education 10 or current Cardiopulmonary Resuscitation certification.

Hours: 72 hours lecture, 72 hours laboratory.

This course is designed to instruct a student to the level of Emergency Medical Technician I. This includes all skills necessary for the individual to provide emergency medical care at a basic life support level with a fire, ambulance or other specialized service. This course is conducted in compliance with Title 22, Division 9, Chapter 2 of the California Code of Regulation and Emergency Medical Technician I. A grade of “C” or better is required for certification as EMT-I. Not open to students who have taken Fire Technology 77. May be repeated by students whose EMT certification has lapsed.
Philosophy is the logical examination of the fundamental issues that people have pondered for more than 2500 years. What is reality and what is beauty? What is knowledge and truth? What is good and just? Philosophy courses are directed toward understanding these and other questions in their historical and cultural contexts, and applying insights to contemporary life. The study of philosophy is a key component in improving one's critical thinking skills.

Social Science

Requirements for Degree Major

18 units of transfer-level work in addition to other graduation requirements.

Courses taken must be in at least four of the following areas:
- Anthropology
- Economics
- Geography
- History
- Philosophy
- Political Science
- Psychology (except Psychology 4)
- Sociology

4 Introduction to Logic (3)

Prerequisite: None
Advisory: English 58 or 60 or ESL 2W or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
This class is an inquiry into the way we think, the current method of analyzing thinking, and the historical foundations from which it is derived. Criteria are sought from these to distinguish good from bad thinking. From this, effective skills in thinking will be developed. (CAN PHIL 6) AA/AS area D2; CSU area A3

5 Introduction to Ethics (3)

Prerequisite: None
Advisory: English 58 or 60 or ESL 2W or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
This course is a survey of ideas proposed by important philosophers to describe and understand the conceptual foundations of ethical thought and judgment. (CAN PHIL 4) AA/AS area B; CSU area C2; IGETC area 3

6 Introduction to Philosophy (3)

Prerequisite: None
Advisory: English 58 or 60 or ESL 2W or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
This class is an inquiry into the traditional and historical views of Western Civilization's perennial human problems, e.g., peace, truth, equality, good and happiness, which provides a clarification of the problems as well as ultimate justification of each claim. It focuses on critical thinking techniques and applies them to selected philosophical topics such as human freedom, the nature and limits of knowledge, skepticism, empiricism, rationalism and the application of these to politics. (CAN PHIL 2) AA/AS area B; CSU area C2; IGETC area 3

7 Philosophy of Social Sciences (3)

Prerequisite: None
Advisory: English 58 or 60 or ESL 2W or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
This class is a survey of classic and modern thought on basic problems selected from at least two of the following fields: Theories of reality, political philosophy, philosophy of religion, and esthetics. The emphasis will be on the application of representative views of modern life. AA/AS area B; CSU area C2; IGETC area 4

10 Philosophy of Religion (3)

Prerequisite: None
Advisory: English 58 or 60 or ESL 2W or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
This course is an introduction to a philosophical examination of religion. This examination typically includes an analysis of basic religious concepts such as God, the afterlife, the soul, faith, karma, good and evil. It also includes an investigation into religious experience as well as arguments for and against various forms of religious belief. AA/AS area B; CSU area C2; IGETC area 3

12 Symbolic Logic (3)

(Same as Mathematics 12)

Prerequisite: Philosophy 4 or Mathematics 52; and Mathematics 53 with a grade of "C" or better.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
This course covers an introduction to symbolic logic including the logic of sentences (the statement calculus) and
the logic of classes and relations (the predicate calculus) together with an introduction to the nature and development of deductive systems. Applications include examples of logic used in elementary mathematics and the analysis of verbal arguments. Not open to students who have completed Mathematics 12. AA/AS area D2; CSU area B3

13  Religions of the Far East

Prerequisite: None
Advisory: English 58 or 60 or ESL 2W or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.

This course covers an introduction to the major religions of the Far East: Hinduism, Jainism, Buddhism, Sikhism, Taoism, Confucianism and Shinto. The origins, myths, basic teachings, development and modern forms of each religion will be surveyed through comparison and contrast with each other and with Western tradition in order to clarify concepts and practices. The present influences of these religions on Western change and on the relationship between cultures will be of focal interest. AA/AS area B; CSU area C2; IGETC area 3

14  Religions of the West

Prerequisite: None
Advisory: English 58 or 60 or ESL 2W or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.

Study of the origins, history, development, important teachings, mythology and modern forms of the major Western religions: Judaism, Christianity and Islam. Zoroastrianism, a forerunner of these, will also be examined in detail. In order to clarify concepts and practices, comparison and contrast with other religions will be used as a basis for discussion. The influences of these religions on the Western world will be identified and examined. AA/AS area B; CSU area C2; IGETC area 3

15  Ethics and Morals in Business

Prerequisite: None
Advisory: English 58 or 60 or ESL 2W or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.

Ever since the Industrial Revolution, there have been problems and issues concerning the moral and ethical nature of various business endeavors. This course will examine most of the important issues of economic activity, e.g., property rights, employee rights, stockholders' rights and the responsibilities of all of these—all of them with appropriate moral issues and criteria. This course will rely on the great moral philosophers to help address these issues, using the economists to set the issues.

20  History of Classical Philosophy

Prerequisite: None
Advisory: English 58 or 60 or ESL 2W or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.

This class addresses the development of philosophical thinking in the West from the pre-Socratic philosophers to Thomas Aquinas, its bearing on some contemporary issues in philosophy, and its influence in shaping philosophy as we know it today. (CAN PHIL 8) AA/AS area B; CSU area C2; IGETC area 3
The ARC physical education program offers a wide variety of courses that improve physical skill, strength, and dexterity. The UC system has a limitation on the number of units of physical education courses which can be transferred. The CSU system has no such limitation, but there are restrictions placed on the number of physical education units which can be applied toward the major. Refer to the catalog of the transfer institution of your choice for detailed information. All activity classes are open to both men and women unless noted within the course title. Students may enroll in more than one physical education class at the same time. They may not enroll in more than two sections of the activity during the same semester. Semester activity courses may be taken up to four times in each activity area (e.g. four Tennis, four Weight Training, four Modern Dance, etc.) unless otherwise noted in the units column. The prefix "PER" refers to courses used to satisfy the physical education requirement. Courses which are designated with a PET prefix are theory-oriented rather than activity-oriented and DO NOT satisfy the graduation requirements.

**Fitness Specialist**

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<td>PER 1 Fitness &amp; Weight Control</td>
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<td>PER 1 Weight Training</td>
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<td>PER 1 Yoga</td>
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<td>PER 1 Aerobics: Cardio Kickboxing</td>
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<td>Psychology 36</td>
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<td>Computer Information Science 1</td>
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<td>Business 71B</td>
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1. **Adapted Aquatics** (1)

Prerequisite: A physician's statement verifying: 1) the disability; 2) contraindications; 3) recommended activities. 
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment. 
Transfer Credit: Accepted for credit: UC (unit limitation), CSU 
Hours: 54 hours laboratory. 
This course is an individualized swimming, water safety and fitness class designed for individuals with disabilities who are precluded from general physical education classes. It focuses on cardiovascular endurance, range of motion, mobility, muscular strengthening, and muscular endurance. AA/AS area E1; CSU area E2

1. **Adapted Lifetime Sports** (1)

Prerequisite: A physician's statement verifying the disability, contraindication, and recommended activities. 
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment. 
Transfer Credit: Accepted for credit: UC (unit limitation), CSU 
Hours: 54 hours laboratory. 
Adapted Lifetime Sports is a physical education class designed to introduce students with physical disabilities to a variety of sports. Modifications and assistive devices will be used to enable students to safely participate in sports such as, but not limited to, archery, volleyball, tennis, soccer, softball, basketball, and golf. AA/AS area E1; CSU area E2

1. **Adapted Walk and Wheel** (1)

Prerequisite: A physician's statement verifying: 1) the disability; 2) contraindications; 3) recommended activities. 
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment. 
Hours: 54 hours laboratory. 
This class is designed for the student who is unable to participate in a general physical education activity class. Individualized programs are designed which include walking or wheelchairing for cardiovascular endurance and specific exercises for muscular strength, muscular endurance, and flexibility. Small group games and activities are included to promote fitness and fun. AA/AS area E1; CSU area E2

1. **Adapted Weight Training and Fitness** (1)

Prerequisite: A physician's statement verifying: 1) the disability, 2) contraindications, 3) recommended activities. 
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
Adapted weight training and fitness is designed for the student who is unable to participate in a general physical education activity class. This course includes individualized programs of physical fitness exercises, including isometric, isokinetic and isotonic activities to develop strength, flexibility and cardiorespiratory endurance. AA/AS area E1; CSU area E2

1 Aerobic Dance
Prerequisite: None.
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
A physical conditioning program designed to increase cardiovascular efficiency, flexibility and endurance through choreographed dances, and rhythmic exercises. AA/AS area E1; CSU area E2

1 Aerobic Mix Workout
Prerequisite: None
Advisory: English 58 or 60, 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours laboratory.
This course includes a variety of aerobic activities that provide a new approach to each workout. The emphasis is on rotating aerobic forms such as aerobic dance, step, cardio-kickboxing, and aerobic circuit to keep the workouts challenging and interesting. Basic heart rate calculations, nutrition, and workout facts will be covered.

1 Aerobics: Cardio-Kickboxing
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This course emphasizes proper alignment, execution, and timing of faster paced movements from kickboxing, boxing, and aerobic dance to improve cardiovascular fitness. AA/AS area E1; CSU area E2

1 African Dance
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This course will include basic movements from African styles of dance, such as West African, Afro-Haitian, or African Dance from the Republic of New Guinea. Classes will consist of beginning level warm ups, across the floor and center combination movements. There will be an opportunity for in-class choreography. AA/AS area E1; CSU area E2

1 Aqua Aerobics
Prerequisite: None.
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
No swimming skills needed. A fitness course using the resistance of water for low/no weight bearing improvement in cardiovascular fitness, muscular endurance, flexibility and strength. The course will include exercises leading to deep and shallow water workouts and provides information related to overall health and fitness. AA/AS area E1; CSU area E2

1 Aquatics Fitness
Prerequisite: None
Advisory: Advanced Swimming, English 58 or 60, or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This course is a self-paced “overload” method of training using a workout approach that stresses aerobic and anaerobic fitness. Deep and shallow water running will be emphasized, stroke efficiency, and lap swimming will be included. AA/AS area E1; CSU area E2

1 Archery Beginning
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This course emphasizes safety, knowledge, and basic skill development in a variety of beginning bow and arrow shooting activities. AA/AS area E1; CSU area E2

1 Archery, Intermediate
Prerequisite: None
Advisory: Beginning Archery, English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This course includes instruction and practice in more advanced skills of archery. It will also review basic techniques with an emphasis on development of physical and mental strengths necessary to perform at greater distances with greater accuracy. AA/AS area E1; CSU area E2

1 Badminton, Beginning
Prerequisite: None.
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 9 hours lecture; 27 hours laboratory.
This course includes basic fundamentals, techniques, rules and social etiquette of badminton as well as singles and doubles competition. AA/AS area E1; CSU area E2

1 Badminton, Intermediate
Prerequisite: None.
Advisory: Beginning Badminton, English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 94 hours laboratory.
This course provides a review of the basic fundamentals, techniques and rules. The emphasis is on skills and techniques such as play strategies for singles and doubles and shot selection for various play situations. AA/AS area E1; CSU area E2

1 Ballet, Beginning
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This class includes barre and floor barre warm-ups, basic classical ballet technique, positions and alignment. Elementary turns, and exercises given in
center combinations will focus on increased control, strength and balance. Basic ballet terms and vocabulary will also be studied. AA/AS area E1; CSU area E2

1 **Ballet, Intermediate** (1)

**Prerequisite:** None.

**Advisory:** Ballet, Beginning; English 58 or 60 and 78 or ESL 2R, 2W, or placement through assessment.

**Transfer Credit:** Accepted for credit: UC (unit limitation), CSU

**Hours:** 54 hours laboratory.

This class includes intermediate barre and floor barre warm-ups, intermediate classical ballet techniques, positions and turns. Exercises given in center combination will focus on increased control, speed, strength, and balance. Intermediate ballet terms and vocabulary will also be studied. AA/AS area E1; CSU area E2

1 **Baseball, Advanced** (1)

**Prerequisite:** None.

**Advisory:** High School varsity or college level baseball; English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.

**Transfer Credit:** Accepted for credit: UC (unit limitation), CSU

**Hours:** 54 hours laboratory.

This course emphasizes defense, offense, pitching, baserunning, team strategy and conditioning for advanced baseball. AA/AS area E1; CSU area E2

1 **Basketball, Advanced** (1)

**Prerequisite:** None.

**Advisory:** One year of varsity high school or college level basketball; English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.

**Transfer Credit:** Accepted for credit: UC (unit limitation), CSU

**Hours:** 54 hours laboratory.

This course features tournament scrimmage play to improve offensive, defensive and team skills for advanced basketball. AA/AS area E1; CSU area E2

1 **Body Fitness (Walking or Jogging)** (1)

**Prerequisite:** None.

**Advisory:** English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.

**Transfer Credit:** Accepted for credit: UC (unit limitation), CSU

**Hours:** 54 hours laboratory.

This class is designed to promote physical well-being through stress reduction and weight control. Attention will be given to increasing cardiovascular efficiency, muscular strength and endurance. Workout schedules are based on individual pulse rate readings related to a variety of training methods. AA/AS area E1; CSU area E2

1 **Bowling** (1)

**Prerequisite:** None.

**Advisory:** English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.

**Transfer Credit:** Accepted for credit: UC (unit limitation), CSU

**Hours:** 9 hours lecture; 27 hours laboratory.

This course includes basic fundamentals, techniques, rules and social etiquette of bowling. AA/AS area E1; CSU area E2

1 **Choreography** (1)

**Prerequisite:** None.

**Advisory:** English 58 or 60, 78 or ESL 2R, 2W, or placement through assessment process.

**Transfer Credit:** Accepted for credit: UC, CSU

**Hours:** 54 hours laboratory.

This course covers basic elements of choreography and provides an opportunity to explore choreographic structure. Choreographic concepts will be introduced, developed, and applied to various dance styles in a manner appropriate for all levels of dance skill. Emphasis will be on the choreographic process.

1 **Country Western Line Dance, Beginning** (1)

**Prerequisite:** None.

**Advisory:** English 58 or 60, and 78, or ESL 2R, 2W, or placement through assessment.

**Transfer Credit:** Accepted for credit: UC (unit limitation), CSU

**Hours:** 54 hours laboratory.

This course provides instruction in basic country western line dance steps and current country western line dances. AA/AS area E1; CSU area E2

1 **Country Western Line Dance, Intermediate** (1)

**Prerequisite:** None.

**Advisory:** PER 1, Country Western Line Dance, Beginning English 58 or 60 and 78 or ESL 2R, 2W, or placement through assessment process.

**Transfer Credit:** Accepted for credit: UC (unit limitation), CSU

**Hours:** 54 hours laboratory.

This course develops intermediate skills selected from current line dances that present an amalgamation of step patterns. It refines country western techniques relative to line dancing, rhythm and nonverbal communication. AA/AS area E1; CSU area E2

1 **Dance Production** (3)

**Prerequisite:** By audition; requires specific skills such as performance ability and dependability, double turns, 90 degree kick and work on an intermediate level, or with equivalent skills as determined by the instructor.

**Advisory:** English 58 or 60, 78 or ESL 2R, 2W, or placement through assessment process.

**Transfer Credit:** Accepted for credit: UC (unit limitation), CSU

**Hours:** 36 hours lecture; 54 hours laboratory.

This is a lecture/performance class with an emphasis on performance skills, intermediate dance technique, and student choreography for performance. AA/AS area E1; CSU area E2

1 **Deep Water Jogging** (1)

**Prerequisite:** None.

**Advisory:** English 58 or 60, 78 or ESL 2R, 2W, or placement through assessment process.

**Transfer Credit:** Accepted for credit: UC, CSU

**Hours:** 54 hours laboratory.

This fitness course uses the resistance of water for non-weight bearing exercises. Emphasis will be on cardiovascular fitness, muscular endurance, strength and flexibility. Progress will be monitored through appropriate fitness testing. No swimming skills are needed. An optional flotation belt will be provided.

1 **Diverse Cultures in Dance** (1)

**Prerequisite:** None.

**Advisory:** English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment process.

**Transfer Credit:** Accepted for credit: UC (unit limitation), CSU

**Hours:** 54 hours laboratory.

This class will focus on comparing and contrasting three forms of indigenous ethnic and culturally derived dance. Students will learn the traditional significance, movement patterns, and basic steps of the dance form as well as the historical values of its country of origin. AA/AS area E1; CSU area E2
1 Fire Fitness I - Fire Academy Recruit
Prerequisite: Successful completion of Fire Academy pre-fitness test.
Advisory: English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 48 hours lecture; 72 hours laboratory.
This course is an activity and lecture class for the cadets in the Sacramento Regional Fire Academy. The course includes instruction in an in-depth understanding of the concepts of exercise and nutrition. A regular physical fitness training program will be conducted toward improving cardiovascular endurance, muscular strength and body flexibility. The class will address improving the cadet's level of fitness and offer job-related fitness training. AA/AS area E1; CSU area E2

1 Fire Fitness II - In Station Fitness
Prerequisite: Fire Fitness Training I - Fire Academy Recruit
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 18 hours lecture; 36 hours laboratory.
This is a physical fitness course for employed fire fighters. It includes medical testing, physical fitness testing, lectures on fitness, nutrition, and stress management, and individually programmed workouts for fire fighters, with periodic progress testing. AA/AS area E1; CSU area E2

1 Fitness and Weight Control
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 18 hours lecture; 54 hours laboratory.
This course is designed to assess and improve physical fitness levels, and encourage a healthy attitude toward figure evaluation and weight control. Students receive instruction concerning the theories and practical activities involved in obtaining and maintaining an appropriate level of physical fitness. AA/AS area E1; CSU area E2

1 Football, Advanced
Prerequisite: None
Advisory: High school or college level football experience; English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This course emphasizes instruction in advanced techniques of offensive and defensive football skills. AA/AS area E1; CSU area E2

1 Golf Advanced
Prerequisite: None
Advisory: Intermediate golf; English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This course is designed for to develop golf skills to the competitive level. Competition on a regulation golf course, under instructor supervision, is required. AA/AS area E1; CSU area E2

1 Golf, Beginning
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This course will focus on basic fundamentals, techniques, rules, and etiquette of golf. AA/AS area E1; CSU area E2

1 Golf, Intermediate
Prerequisite: None
Advisory: Beginning Golf; English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This course offers fundamentals, techniques, rules, and etiquette of golf on an intermediate level. AA/AS area E1; CSU area E2

1 Hip Hop Aerobics
Prerequisite: None
Advisory: English 58 or 60, 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours laboratory.
Based on hip hop dance movement, this course is designed to promote cardiovascular fitness, flexibility, and overall strength by incorporating hip hop dance style, level changes, and rhythm into an aerobic and anaerobic conditioning program.

1 Individualized Fitness
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This course emphasizes a personalized approach to attaining a higher level of physical fitness. After two weeks of orientation and assessment, individualized workout programs will be established and monitored. Students may then attend workout sessions during any of the published "open hour" time periods up to 100 minutes of credit per day. Fitness assessments are made on a monthly basis. AA/AS area E1; CSU area E2

1 Jazz Dance Performance Group
Prerequisite: By audition; requires specific skills such as performance ability and dependability, double turns, 90 degree kick and work on an intermediate to advanced level
Advisory: English 58 or 60, 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 36 hours lecture, 54 hours laboratory.
This course is a jazz dance lecture/performance for intermediate to advanced dancers with an emphasis on community outreach, dance demonstrations and performance. The history of jazz dance in America is covered. Opportunity for ethnic styles to be compared and contrasted. Student choreography and performance are included. Students will learn lecture demonstration organizational skills. AA/AS area E1; CSU area E2

1 Jazz Dance, Beginning
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This beginning level course covers the basic vocabulary and steps of jazz dance. Subjects studied include: basic technique, turns, leaps, and floor work. Steps from hip hop, street, rock and modern jazz styles are used in center combinations and there will be an opportunity for student choreography. AA/AS area E1; CSU area E2
1  **Jazz Dance, Intermediate**  (1)

Prerequisite: Jazz Dance, Beginning
Advisory: English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment process.
Transfer Credit: accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This class further develops jazz dance technique while working towards multiple turns, quick study skills and performance confidence. The emphasis will be on more complicated routines and there will be an opportunity for student choreography. AA/AS area E1; CSU area E2

1  **Lap Swimming**  (1)

Prerequisite: None
Advisory: Advanced Swimming, English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This course includes a workout approach that emphasizes aerobic and anaerobic fitness through lap swimming. It is a self-paced class and utilizes interval training, cardiovascular conditioning, swimming technique, and aerobic training principles. AA/AS area E1; CSU area E2

1  **Marathon Training**  (1)

Prerequisite: None
Advisory: English 58 or 60, 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours laboratory.
This course emphasizes a personal approach to attaining a higher level of fitness through the attempt to complete a marathon (26.2 miles) in one day. Individual workout programs will be established and monitored to include endurance and self-pacing. Pre- and post-fitness testing will also be evaluated.

1  **Martial Arts: Tae kwondo**  (2)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 27 hours lecture; 27 hours laboratory.
This course in Martial Arts: Tae kwondo is a fitness program that concentrates on muscle development, improvement of coordination and flexibility, and increased aerobic capacity through the practice of various levels of self defense moves. AA/AS area E1; CSU area E2

1  **Modern Dance, Beginning**  (1)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This course includes movement technique and choreography. It encourages individual expression and creativity and utilizes improvisation and problem solving techniques in dealing with space, design, time and energy. AA/AS area E1; CSU area E2

1  **Off Season Conditioning**  (1)

Prerequisite: None
Advisory: High school varsity or college level sport participation; English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This course is designed to enhance the fitness level of out-of-season athletes so they will be more fully prepared for the competitive season. It includes aerobic conditioning, speed work, plyometric training, agility drills, flexibility, and strength training. AA/AS area E1; CSU area E2

1  **Self-Defense for Women**  (1)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 9 hours lecture; 27 hours laboratory.
This course is designed to develop certain skills, knowledge, and attitude, which are important in defending or avoiding physical attack. AA/AS area E1; CSU are E2

1  **Soccer - Outdoor, Beginning**  (1)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This course is designed to give students a greater awareness and understanding of soccer by teaching basic skills and strategy of soccer and rules that govern the play of soccer. AA/AS area E1; CSU area E2

1  **Soccer - Outdoor, Advanced**  (1)

Prerequisite: None
Advisory: Soccer, Beginning; English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This course is designed to give students a greater awareness of soccer by teaching advanced skills and strategy of soccer and rules that govern play of soccer. AA/AS area E1; CSU area E2

1  **Soccer, Indoor**  (1)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This course is designed to provide a greater awareness and understanding of indoor soccer by teaching the skills, strategy, and rules that govern the play of indoor soccer. AA/AS area E1; CSU area E2

1  **Social Dance, Beginning**  (1)

Prerequisite: None
Advisory: English 58, 78 or ESL 2R, 2W
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This course offers instruction in basic dance steps, styles, and rhythms. Students will develop the skills necessary for dances such as Fox Trot, Waltz, Swing, Cha-Cha, Samba, and Tango. The course also includes an opportunity for study of current dances that are in vogue. AA/AS area E1; CSU area E2
1 Social Dance, Intermediate

Prerequisite: None
Advisory: Social Dance, Beginning; English 58, 78, or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This class develops intermediate skills selected from Fox Trot, Waltz, Cha Cha, West Coast Swing, and other current popular dance rhythms. It refines social dance techniques relative to rhythm, partnering, and nonverbal communication skills. AA/AS area E1; CSU area E2

1 Softball - Fast Pitch

Prerequisite: None
Advisory: High school varsity softball or college level softball; English 58, 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This is a course emphasizing defense, offense, pitching, base running, and conditioning which is designed to develop advanced skills in fielding, pitching, base running, and hitting. Emphasis will be placed on team offensive and defensive strategies at an advanced playing level. AA/AS area E1; CSU area E2

1 Softball - Slow Pitch

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This course is designed to develop basic softball skills and understanding of slow pitch rules in tournament format. AA/AS area E1; CSU area E2

1 Step Aerobics

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
A physical conditioning program designed to improve cardiovascular fitness and encourage better endurance, flexibility and strength through the use of step aerobics training methods, this course includes instruction in rhythmic, choreographed step routines, basic stretch and toning exercises and provides information related to overall health and fitness. AA/AS area E1; CSU area E2

1 Stretch

Prerequisite: None
Advisory: English 58 or 60, 78 or ESL 2R, 2W, or placement through assessment process
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours laboratory.
This course emphasizes stretching for health and increased range of motion. It is designed to provide an individualized approach to stretching and includes pre- and post-stretching techniques for specific activities such as sports, dance, or repetitive stress work-related movements.

1 Swimming, Advanced

Prerequisite: None
Advisory: Swimming, Intermediate; English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This course includes advanced instruction in freestyle, backstroke, breaststroke, butterfly, individual medley, touch turns, flip turns, and starts. In addition, various aerobic and anaerobic training methods will be taught. Endurance and stroke efficiency will be emphasized. AA/AS area E1; CSU area E2

1 Swimming, Beginning

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This course is designed for non-swimmers, students who cannot swim one length of the pool, (25 yards). Instruction will be given in physical and psychological adjustment to the water, basic swimming techniques and safety skills. AA/AS area E1; CSU area E2

1 Swimming, Intermediate

Prerequisite: None
Advisory: Swimming, Beginning; English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This course provides instruction in the following swimming strokes: stream-line position, front and back crawl, elementary back, breaststroke, side stroke, and butterfly kick. Related aquatic techniques of diving, treading, turns, sculling, basic rescue and survival skills will also be taught. AA/AS area E1; CSU area E2

1 Tap Dance, Beginning

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC, (unit limitation), CSU
Hours: 54 hours laboratory.
This is a course in basic tap technique, warm-ups, drills and rhythm forms. The class will focus on basic steps and beginning level group routines with an emphasis on balance, alignment and rhythm analysis. AA/AS area E1; CSU area E2

1 Tap Dance, Intermediate

Prerequisite: None
Advisory: Tap Dance, Beginning; English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This course includes tap technique, warm-ups, drills and rhythm forms at the intermediate level. The class will focus on intermediate steps, riffs, and group routines with an emphasis on clean taps, speed, and rhythm analysis. AA/AS area E1; CSU area E2

1 Team Sports

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This course is an activity course emphasizing knowledge and skill development in basketball, softball, flag football and soccer. AA/AS area E1; CSU area E2
1 Tennis
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This course introduces and reviews the basic fundamentals of tennis, including forehand, backhand, serve, volley, overhead and lob. Rules, etiquette and game tactics are presented. Practice sessions focus on game situations needed for beginning and intermediate levels of play. AA/AS area E1; CSU area E2

1 Tennis, Advanced
Prerequisite: None
Advisory: Intermediate Tennis; English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This course includes a review of the basic fundamentals of singles and doubles play. It emphasizes development of skills and techniques needed to compete at the tournament level. AA/AS area E1; CSU area E2

1 Theatre Dance
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This course is designed to provide students with the opportunity to experience theatre dance and gain skills in musical theatre movement. Movement covered will include choreographed routines, audition techniques for musical theatre dance and basic group and partnering skills. There will be an opportunity for student choreography. AA/AS area E1; CSU area E2

1 Track and Field
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This course includes skill development in men's and women's track and field activities including running, jumping, and throwing events. AA/AS area E1; CSU area E2

1 Volleyball, Advanced
Prerequisite: None
Advisory: Intermediate volleyball; English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This course is designed to develop advanced skills in those students who have already participated at the elementary level. Lecture and demonstration will provide students with the knowledge to continue this activity at a higher skill level. AA/AS area E1; CSU area E2

1 Volleyball, Beginning
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This course is designed to develop basic volleyball skills through lecture, demonstration, drills, and practice games. Students will gain a better understanding of and appreciation for volleyball and will be provided with opportunities for skill development. AA/AS area E1; CSU area E2

1 Volleyball, Intermediate
Prerequisite: None
Advisory: Beginning volleyball; English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This course is designed to develop intermediate skills. Lecture and demonstration will provide students with the knowledge to continue this activity at a higher skill level. AA/AS area E1; CSU area E2

1 Water Safety Instructor (Lifeguard Training)
Prerequisite: Valid Advanced First Aid Certificate and Advanced Swimming with a grade of "C" or better.
Corequisite: Health Education 15 or 20.
Advisory: English 58 or 60, 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 36 hours lecture; 54 hours laboratory.
This course includes teaching techniques and preparation for instructing swim courses. The emphasis is on teacher training, life guarding knowledge and skills. Completion of this course with a grade of "B" or better confers an American Red Cross Certification for "Lifeguard Training" and "Water Safety Instructor." AA/AS area E1; CSU area E2

1 Weight Training
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This course provides instruction in weight training and methods that promote muscular strength and endurance. Attention is also given to muscle tone, flexibility, and cardiovascular fitness. AA/AS area E1; CSU area E2

1 Weight Training for Competition
Prerequisite: None
Advisory: Circuit Weight Training, Weight Training, Beginning, Advanced; English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This course is a strength/power training program for students involved in intercollegiate athletics. It is designed to develop strength, power and muscle endurance appropriate to specific athletic events. AA/AS area E1; CSU area E2

1 Weight Training, Advanced
Prerequisite: Beginning Weight Training, Circuit Weight Training or tryout.
Advisory: English 58, 78 or ESL 2R, 2W
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
A strength/power training program including power lifting and olympic lifting. The lifts and proper techniques for successful strength development in these areas will be emphasized. Both traditional and advanced workout routines will be used. AA/AS area E1; CSU area E2
1 Weight Training, Circuit (1)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This course presents the student with a system of exercising with weights that provides a balanced approach to physical fitness training. There will be an emphasis on increasing strength, muscle endurance, cardiovascular endurance and flexibility while decreasing body fat. AA/AS area E1; CSU area E2

1 Wheelchair Sports and Games (1)

Prerequisite: a physician’s statement verifying: 1) the disability; 2) contraindications; 3) recommended activities
Advisory: English 58 or 60, 78 or ESL 2R, 2W, or placement through assessment
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
This class is designed for individuals with physical disabilities who are confined to a wheelchair or who are ambulatory, but more successful in sports when using a wheelchair. Sports will include, but not be limited to, basketball, quad rugby, volleyball, badminton, and tennis. AA/AS area E1; CSU area E2

1 Yoga (1)

Prerequisite: None
Advisory: English 58 or 60, 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours laboratory.
This course in yoga emphasizes breathing, stretching, and relaxing techniques. Yoga positions and philosophies are examined. AA/AS area E1; CSU area E2

3 Intramural Sports/Campus Recreation (1)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours laboratory.
A class for students interested in increasing their own sports/physical fitness skills and in promoting particular sports/physical fitness activities among other students. This course is intended to provide recreational, competitive and instructional opportunities other than on-going programs. This course may be taken four times. Grading is on a credit/no credit basis.

4 Intercollegiate Athletics (2)

Prerequisite: Adequate skill as determined by tryout.
Advisory: English 58, 78 or ESL 2R, 2W
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 180 hours laboratory.
Fundamentals, rules, individual and/or team strategy, appropriate to intercollegiate athletic competition. Baseball (M) Spring; Basketball (M&W) Fall; Cross Country (M&W) Fall; Football (M) Fall; Golf (M&W) Spring; Soccer (M&W) Fall; Softball (W) Spring; Swimming and Diving (M&W) Spring; Tennis (M&W) Spring; Track and Field (M&W) Spring; Volleyball (W) Fall; Water Polo (W) Fall

PHYSICAL EDUCATION THEORY

2 Applied Physiology of Exercise (2)

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture
This course is part of the Fitness Specialist Certificate Program and examines how the body functions under conditions of exercise stress. It covers the practical applications of muscle function, cardiorespiratory functions, training techniques, and the effect of environmental conditions on exercise.

3 Applied Kinesiology (2)

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture
This course is part of the Fitness Specialist Certificate, will discuss movement as it relates to exercise. It will include analysis of movements in sport skills, stressing the contributions made by the muscular and skeletal systems.

4 Fitness and Exercise Assessment (1)

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture
This course is part of the Fitness Specialist Certificate Program. It covers the assessment of cardiorespiratory endurance, body fat, muscular strength and endurance, blood pressure, and the evaluation of the results of such tests.

5 Special Populations (1)

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 18 hours lecture
This course for the Fitness Specialist certificate will cover the effects of exercise on special populations and to modify exercise based on age and medical conditions. Special groups discussed will include seniors; children; the physically impaired, and individuals with coronary heart disease, diabetes, asthma, obesity, low back pain, arthritis, or pregnancy.

6 Techniques of Instruction - Strength Training (2)

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture
This course, part of the Fitness Specialist Certificate, is designed to provide a thorough review of strength training. The course studies anatomy and physiology as they apply to strength training, training sequences, available equipment, and safety factors. Included in this course is the development of strength training routines.

7 Identification and Management of Fitness Injuries (2)

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture
This course addresses elementary human anatomy and its relationship to physical activity. Athletic training methods and protective equipment are covered. Treatment and rehabilitation of injuries as they relate to fitness training will be presented.
8 Techniques of Instruction - Aerobics and Group Fitness

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture
This course is part of the Fitness Specialist Certificate and covers teaching a variety of fitness activities to groups of individuals. Emphasis will be on how to design a physiologically safe and effective aerobic exercise class.

9 Administration of Fitness Programs

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture
This course is part of the Fitness Specialist Certificate program. It serves as an introduction to the administration of fitness programs including business operations, office procedures, and facility and equipment considerations.

12 Introduction to Physical Education

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 36 hours lecture
This course includes opportunities and responsibilities associated with physical education leadership. Theory, history and principles of physical education will be covered.

15 Theory and Techniques of Adapted Physical Education

Prerequisite: None
Corequisite: PET 16
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture
This course provides students with an orientation to specific disabilities and important principles of physical activity for individuals with disabilities. Basic knowledge of movement related terminology, exercise principles and concepts, transfer techniques, and characteristics of specific disabilities as they relate to exercise will be covered. This class is invaluable for students interested in pursuing a career in physical therapy, nursing, adapted physical education, physical education, or fields requiring one to work with individuals with disabilities.

16 Laboratory in Adapted Physical Education

Prerequisite: None
Corequisite: PET 15
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 54-108 hours laboratory
This course offers practical experience in the implementation of physical activity for students with disabilities. This course may be taken three times.

17 Theory of Baseball

Prerequisite: None
Advisory: High school or college level baseball playing experience; English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU.
Hours: 18 hours lecture
This course develops a thorough understanding of baseball. Emphasis on learning and understanding basic concepts of training, individual techniques, strategies, and systems of defense, offense, pitching, base running, and field maintenance. Philosophies and drills are included. May be taken twice for credit.

18 Theory of Basketball

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU.
Hours: 18 hours lecture
This course develops a thorough understanding of basketball. Emphasis is on lecture, demonstrations, and videos of basic fundamental basketball skills, team strategy, offensive and defensive strategies, conditioning drills, and a variety of philosophical methods of how the game is played. May be taken twice.

19 Theory of Football

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU.
Hours: 18 hours lecture
This course covers current problems and new trends in football with emphasis on basic fundamentals, team defense and offense. May be taken twice.

20 Theory of Tennis, Tactics and Strategy

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU.
Hours: 36 hours lecture
This course covers instruction in strategy and tactics with emphasis on percentage tennis, theory of angles, and play on different surfaces. Instruction in better stroking through appropriate shot selection and the physics of stroking. May be taken twice.

21 Theory of Track & Field

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU.
Hours: 18 hours lecture
This course covers each track and field event and will emphasize the techniques and training methods essential to successful performance. Collegiate track and field rules and procedures for conducting a meet are discussed. May be taken twice.

22 Special Topics in Fitness and Sports

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU.
Hours: 9-54 hours lecture
This umbrella course provides concentrated study of a variety of current fitness issues. Topics will reflect contemporary concerns for physical fitness, performance in competitive sport, and wellness. May be taken three times for a maximum of nine units of credit.
25 Theory of Softball

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU.
Hours: 18 hours lecture.
This course develops a thorough understanding of softball. The emphasis is on lecture and demonstration of basic fundamental softball skills, team strategy, offensive and defensive strategy, conditioning drills and a variety of philosophical methods of how the game is played. May be taken twice.

26 Theory of Volleyball

Prerequisite: Completion of a college level volleyball course with a grade of "C" or better, or concurrent enrollment in Intermediate or Advanced Volleyball.
Corequisite: PER 1 - Volleyball
Advisory: English 58 or 60, 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 18 hours lecture.
This course develops a thorough understanding of the many aspects of the game including training/conditioning, individual techniques, offense strategy/systems, and defense strategy/systems. Particular emphasis is on the importance of individual proficiency and team tactics. May be taken twice for credit.

29 Theory of Swimming

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU.
Hours: 18 hours lecture.
The course covers all aspects of competitive swimming, including the scientific principles of stroke biomechanics, physiology and psychology of training, workout design, and meet management. Includes a review of current regulations of the National Collegiate Athletic Association and the Commission on Athletics. May be taken twice.

30 Care and Prevention of Athletic Injuries

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
This course is an introduction to injury prevention, injury care, and rehabilitation of athletic injuries. It includes basic information of sports injuries, their causes and treatments.

30A Practical Applications in Athletic Training/Sports Medicine

Prerequisite: None
Corequisite: PET 30
Advisory: Biology 25
Transfer Credit: Accepted for credit: CSU
Hours: 36 hour lecture, 54 hours laboratory.
This course is designed to provide an overall experience of the sports medicine/athletic training profession. Topics include common evaluation and rehabilitative techniques, modality usage, and advanced taping and wrapping methods.

32 Fitness Specialist Internship

Prerequisite: A grade of "C" or better in at least 8 units from the following courses: PET 002, PET 003, PET 004, PET 005, PET 006, PET 007, PET 008, PET 009, PET 027 or Nutrition 027
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture; 54 hours laboratory
This course is designed to provide students in the Fitness Certificate program with practical experience in screening, performing fitness assessment tests, and formulating an exercise prescription based on fitness test indicators. In addition to the lecture schedule, there will be additional practicum hours to be arranged at local fitness centers and health clubs.
ARC offers a program of broad study in the field of mathematics and physical sciences.

**Mathematics - Physical Science**

**Requirements for Degree Major**

18 units of transfer level course work in addition to other graduation requirements Courses may be selected from astronomy, chemistry, engineering, geology, mathematics, physical geography, physical science, physics and statistics. See graduation requirements.

**General Science**

**Requirements for Degree Major**

18 units of transfer level course work in science in addition to other graduation requirements.

Two laboratory courses must be included, one in a physical science and one in a biological. Courses may be selected from anatomy, astronomy, bacteriology, biology, botany, chemistry, geology, physical anthropology, physical geography, physical science, physiology, physics, and zoology. See ARC graduation requirements.

1  **Introduction to Physical Science**  (3)

*Prerequisite: None*

*Advisory: Mathematics 215*

*Transfer Credit: Accepted for credit: UC (unit limitation), CSU*

*Hours: 54 hours lecture.*

This course covers the fundamental concepts of astronomy, geology, physics, chemistry, and meteorology. It is designed for the student with little or no science background. It is not open to science, mathematics, or engineering majors.

AA/AS area A; CSU area B1; IGETC area 5A

2  **Physical Science Laboratory**  (1)

*Prerequisite: None*

*Corequisite: Physical Science 1*

*Transfer Credit: Accepted for credit: UC, CSU*

*Hours: 54 hours laboratory.*

This is a laboratory course to supplement and complement Physical Science 1. Students will perform experiments in the several disciplines in the physical sciences. Study of geologic, weather and topographic maps, star charts and use of tools, equipment and methods of science are also covered.

AA/AS area 3A; CSU area B1; IGETC area 5A

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**Physics**

4A  **Mechanics of Solids and Fluids**  (5)

*Prerequisite: Mathematics 9A*

*Corequisite: Mathematics 9B*

*Advisory: Physics 11*

*Transfer Credit: Accepted for credit: UC (unit limitation), CSU*

*Hours: 72 hours lecture; 54 hours laboratory.*

This course covers mechanics of particles, rigid bodies, and fluids. The Physics 4A, B, C, sequence is required for majors in physics, chemistry, or engineering. The class includes lecture, laboratory, and problem discussion sections. (CAN PHYS SEQ B - PHYS 4A+4B+4C; CAN PHYS 8) AA/AS area A; CSU area B1; IGETC area 5A

4B  **Electricity and Magnetism**  (4)

*Prerequisite: Physics 4A with a grade of “C” or better.

*Advisory: Mathematics 9C*

*Transfer Credit: Accepted for credit: UC (unit limitation), CSU*

*Hours: 54 hours lecture; 54 hours laboratory.*

This course covers an in-depth treatment of electricity and magnetism. It involves problem solving with emphasis on utilization of integral calculus. (CAN PHYS 12)
4C  **Heat, Waves, Light and Modern Physics**  (4)

*Prerequisite:* Physics 4A with a grade of "C" or better.
*Advisory:* Mathematics 9C
*Transfer Credit:* Accepted for credit: UC (unit limitation), CSU
*Hours:* 54 hours lecture; 54 hours laboratory.

This course covers thermodynamics and heat, statistical mechanics, waves and sound, light, quantum concepts, and nuclear physics. (CAN PHYS 14)

4P  **Problem Solving for Physics 4**  (1)

*Prerequisite:* None
*Corequisite:* Physics 4A, 4B or 4C.
*Transfer Credit:* Accepted for credit: CSU
*Hours:* 18 hour lecture.

This course is an optional problem solving course to accompany the Physics 4 series. May be taken three times.

5A  **General Physics**  (4)

*Prerequisite:* Mathematics 15 with a grade of "C" or better or placement through assessment.
*Advisory:* Physics 11.
*Transfer Credit:* Accepted for credit: UC (unit limitation), CSU
*Hours:* 54 hours lecture; 54 hours laboratory.

This course deals with mechanics, heat and sound. It satisfies partial requirements in pre-medical courses and in other technical courses except physics and engineering. (CAN PHYS SEQ A - PHYS 5A+5B; CAN PHYS 2) AA/AS area A; CSU area B1; IGETC area 5A

5B  **General Physics**  (4)

*Prerequisite:* Physics 5A.
*Transfer Credit:* Accepted for credit: UC (unit limitation), CSU
*Hours:* 54 hours lecture; 54 hours laboratory.

This course deals with electricity, magnetism, light and atomic physics. It satisfies the requirements for pre-medical courses and in other technical courses except physics and engineering. (CAN PHYS 4)

7  **Basic Concepts in Physics**  (3)

*Prerequisite:* Mathematics 53 with a grade of "C" or better or placement through assessment.
*Transfer Credit:* Accepted for credit: UC (unit limitation), CSU
*Hours:* 36 hours lecture; 54 hours laboratory.

This course is a quantitative introduction to the concepts of motion, force, matter and energy. An integrated lab/lecture course, it emphasizes both conceptual and quantitative solutions to physics problems. It is designed for liberal studies majors intending to get an elementary school teacher credential. AA/AS area A; CSU area B1

10L  **Conceptual Physics Laboratory**  (1)

*Prerequisite:* None
*Corequisite:* Physics 10
*Transfer Credit:* Accepted for credit: UC, CSU
*Hours:* 54 hours laboratory.

This laboratory course complements Physics 10. Together with Physics 10, this course satisfies the UC and CSU general education science lab requirement. Emphasis is placed on the nature of scientific observation and measurement and their relationship to general physical concepts. Students will be given a concrete, hands-on sense of observing and interpreting data from a variety of experimental environments. AA/AS area A; CSU area B1

11  **Basic Physics**  (3)

*Prerequisite:* Mathematics 15
*Transfer Credit:* Accepted for credit: UC (unit limitation), CSU.
*Hours:* 54 hours lecture.

This is a survey course for science majors who have had no previous course in physics and who plan to continue with Physics 4A or 5A. Emphasis is on problem solving. Students who have taken Physics 10 cannot get transfer credit for Physics 11. AA/AS area A; CSU area B1; IGETC area 5A

10  **Conceptual Physics**  (3)

*Prerequisite:* None
*Advisory:* Mathematics 51
*Transfer Credit:* Accepted for credit: UC (unit limitation), CSU
*Hours:* 54 hours lecture.

This is a survey course for liberal arts majors and students who have not taken a course in physics. It includes selected topics in motion, gravity, heat, sound, electricity, magnetism, light, atomic and nuclear physics. AA/AS area A; CSU area B1; IGETC area 5A
The study of political science involves the examination of the structure of government and political systems, as well as the interaction of individuals and institutions within those systems. These courses offer insight into the events on the local, state, national, and international level.

Requirements for Degree Major
18 units of transfer-level work in addition to other graduation requirements.

Courses taken must be in at least four of the following areas: Anthropology, Economics, Geography, History, Philosophy, Political Science, Psychology (except Psychology 4), and Sociology.

General Education Graduation Requirement
Students must also complete the general education graduation requirements for an A.A. degree. See general education requirements.

International Studies Certificate
The program is designed to benefit students that will seek careers or transfer with an international focus. The required courses will transfer as electives or lower division prerequisite for selected majors.

Requirements for Certificate: 29 units

Courses Required 29 Units

Anthropology 2 3
Foreign Language * 8
Required Electives 9
Social Science 1 or Political Science 10 3
Social Science 2 or Political Science 2 3
Social Science 3 3

Select 9 units from the following electives:
Anthropology 12, Art 3A, 4, English 26, 35, 34, Geography 2
History 4, 5, 10, 19, 20, 33, Humanities 1, 2, 3, 8, 9,
Philosophy 13, 14, Political Science 1, 15

* Foreign language courses must be transferable (courses numbered 1 - 49).

1 Introduction to Government: United States (3)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.

This course is an analysis of the U.S. government's historic origins, philosophical and theoretical justification, constitutional structures and how these institutions work. Examination and description of the procedural aspects of the political system; campaigns, elections, lobbying, legislating, executing and adjudication of law. Analysis of contemporary problems and issues. Description of California state and local governments' constitutional base, structures and functions, political process, problems and issues. This course is designed to partially fulfill the American Institutions graduation requirements. (CAN GOVT 2) AA/AS area C1; CSU area D2; IGETC area 4

2 Introduction to Government: Foreign (3)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.

The political institutions of selected West European and Third World nations are examined comparatively. Emphasis on the formation of political institutions, political culture, citizen and interest participation, political parties, and modern bureaucratic public policy roles. AA/AS area C2; CSU area D3; IGETC area 4

4 Introduction to Government: California (3)

Prerequisite: None
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.

The essential organization, institutions and processes of California state and local government. Fulfills California state requirements in state and local government, but not the requirement in the U.S. Constitution.

5 Constitutional Rights (3)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
Political Science

Survey of American constitutional rights. Analysis of court decisions and related materials dealing with constitutional problems such as racial, gender, and other forms of discrimination, criminal procedures, freedoms of religion, speech, press, and association, voting, education; employment, and due process of law. AA/AS area C2; CSU area D3

10   International Relations  (3)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
This course is a survey of the nation-state system. The focus will be on global issues in the post Cold War era, examination of third world and super power relations, their political impact upon world peace and international stability. The course analyzes issues such as the nuclear proliferation, regional and hemispheric political instability, the politics of hunger and the rise of nationalism. AA/AS area C2; CSU area D3; IGETC area 4

15   Political Ideologies  (3)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
This course is a survey of comparative, conceptual and historical analysis of competing ideological approaches to government. Emphasis upon the theories, values, and assumptions that make up a political ideology and the effect of such theories on a political system. AA/AS area C2; CSU area D3; IGETC area 4

16   Law and Society  (3)
(Same as Business 16)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
This course is an introduction to the Anglo-American Common Law System with emphasis upon the nature and purpose of law. The evolution of legal concepts as a reflection of the social environment, and the basic organization and functioning of the American judicial system will be presented from a theoretical rather than a practical viewpoint through analysis of selected cases and reading materials. Not to be taken in place of Business 18A (Business Law). AA/AS area C2; CSU area D3; IGETC area 4
Psychology focuses on the study of behavior of humans and other animals. It involves both pure science and the practical application of science to matters of everyday life. Students pursuing psychology as a field of study will find many career options centering on helping others understand, predict, and deal with their own behavior and the behavior of others.

**Social Science**

**Requirements for Degree Major**

18 units of transfer-level work in addition to other graduation requirements.

Courses taken must be in at least four of the following areas: Anthropology, Economics, Geography, History, Philosophy, Political Science, Psychology (except Psychology 4), and Sociology.

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**1 General Principles**

Prerequisite: None

Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment.

Transfer Credit: Accepted for credit: UC (unit limitation), CSU

Hours: 54 hours lecture.

For psychology majors, behavioral science majors and other students who desire a broad overview of general principles. Topics include the scientific method, statistics, biological determinants and general processes of behavior such as development, learning, verbal behavior, intelligence, perception, motivation, emotion, personality and mental health. Using a seminar style, the focus will be on encouraging thorough analysis and evaluation of psychological theories and research studies as they relate to practical, everyday issues. AA/AS area C2; CSU area D3; IGETC area 4

**2 Biological Psychology**

Prerequisite: Psychology 1 with a grade of "C" or better.

Transfer Credit: Accepted for credit: UC, CSU.

Hours: 54 hours lecture.

This course is an analysis and description of the physiological determinants of behavior. Content includes the brain and nervous system, central system pathologies, endocrine function and the biochemistry of mental disease. A basic course for psychology, medical and biological science majors. (CAN PSY 10) AA/AS area A; CSU area B2; IGETC area 5B

**3 Social Psychology**

Prerequisite: Psychology 1 with a grade of "C" or better.

Transfer Credit: Accepted for credit: UC, CSU.

Hours: 54 hours lecture.

This course encompasses a study of human interaction with a focus on individual personality within a social context. It includes topics of social perception, social cognition, gender roles, interpersonal attraction, attitude change, conformity, prejudice, aggression, altruism, and cooperative behavior. AA/AS area C2; CSU area D3; IGETC area 4

**4 Research Methods in Psychology**

Prerequisite: Psychology 1

Corequisite: Psychology 5 or Statistics 1

Transfer Credit: Accepted for credit: UC, CSU.

Hours: 36 hours lecture; 54 hours laboratory.

This course covers the planning and execution of research studies in the behavioral sciences. Crucial topics include hypothesis formation, review of professional literature, research design, collection of data, statistical analysis and scientific report writing. (CAN PSY 8)

**5 Introductory Statistics for the Behavioral Sciences**

Prerequisite: Psychology 1 with a grade of "C" or better; Mathematics 53

Transfer Credit: Accepted for credit: UC (unit limitation), CSU

Hours: 54 hours lecture.

This course focuses upon the concepts and application of descriptive and inferential statistics in psychology and other behavioral sciences. Topics include hypothesis testing, correlation, chi-square, and analysis of variance procedures. (CAN PSY 6) AA/AS area D2 & 4C; CSU area B3
8 Biological Psychology Laboratory (1)

Prerequisite: None
Corequisite: Psychology 2
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours laboratory.
This course is a study of the methods and techniques used to investigate sensation, perception, psychophysics, and biological psychology. Topics include: the organization of the brain, anatomy and physiology of the neuron, methods and an examination of sensory systems. AA/AS area A; CSU area B2; IGETC area 5B

9 Psychology of Death and Dying (3)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment process.
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course involves an investigation of investigation of beliefs, attitudes, anxieties, and behaviors associated with dying and death. Included will be information relevant to suicide, life-threatening illnesses, bereavement, euthanasia and various philosophical views on the phenomenon of death. AA/AS area E2; CSU area E1

12 Work and Human Behavior (3)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment process.
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course covers the principles of psychology applied to the workplace. Topics include self and job appraisal, assertiveness, stress management, communication skills and other factors pertinent to being a successful employee. AA/AS area E2; CSU area E1

15 Abnormal Behavior (3)

Prerequisite: Psychology 1 or 20 with a grade of "C" or better.
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture
This course is an exploration of the broad questions of abnormality and abnormality. Investigation of specific mental, emotional and behavioral difficulties and current approaches to psychological intervention including present community mental health practices. Considers the contribution of social, biological and psychological factors to the development and persistence of behavior disorders. AA/AS area E2; CSU area E1; IGETC area 4

16 Psychology of Women in a Multicultural Society (3)

Prerequisite: None
Advisory: English 58 or 60, and 78, or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture.
This course is a study of the psychological effects of society upon women. Emphasis will be on the exploration of sociocultural, gender-role, sex-role, stereotyping, and intrapersonal and interpersonal factors in the development of women. AA/AS areas C2 & F; CSU area D3

18 Human Development: Life Span (3)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture.
This course examines human development across the lifespan, from conception through death, by focusing on development from the perspectives of physiology, cognition, and psychology along with the interaction among these three domains. Seeing development as an on-going process and the practical application of this knowledge are emphasized. This course is designed as a foundation for careers in educational, social, psychological, and medical fields as well as providing a better understanding of one's own developmental process. AA/AS area C2 or E2; CSU area D3 or E1

19 Issues of Diverse Populations (Same as Human Services 19) (3)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment process.
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course is a study of the values, problems, issues, concerns and counseling needs of special population groups including the elderly, African American, Hispanics, Asians, Native Americans, homosexuals, the poor and terminally ill. Also includes the nature and extent of chemical dependency and other addictive behaviors. Not open to students who have completed Human Services 19. AA/AS area C2 or F; CSU area E1

20 Applied Psychological Principles (3)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours lecture.
This course explores human behavior emphasizing the practical and adjustive aspects of psychology in everyday life. Topics include: development, personal growth and adjustment over the life span, emotions, stress, adjustment, behavior disorder, personality, attitudes, values and interpersonal relations. AA/AS area C2; CSU area D3; IGETC area 4

21 Introduction to Psychology of Human Relations (3)

Prerequisite: None
Advisory: English 58 or 60, and 78, or ESL 2R, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.
This course is an introduction to attitudes and methods that enhance communication skills in human relations and enable effective intervention in problem situations. Group techniques are emphasized. AA/AS area E2; CSU area E1

24 Marriage, The Family and Alternatives (3)

Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W, or placement through assessment process.
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.
This course is a study of marriage, the family and alternatives from historical, sociological and psychological viewpoints. Topics will include the structure and functions of the family, childrearing, gender roles, mate selection, the sexual revolution, conflict crisis, divorce, and alternatives to traditional marriage. AA/AS area E2; CSU area E1

25 Human Sexuality  
(3)

Prerequisite: None  
Advisory: English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment process.  
Transfer Credit: Accepted for credit: UC, CSU.  
Hours: 54 hours lecture.  
This course is a study about human sexual behavior from birth through adulthood. Historical, religious, cultural, psychological, physiological, sociological and legal points of view are considered and explored. AA/AS area E2; CSU area E1

26 Psychology of Aging: Adult Development and Aging (Same as Gerontology 26)  
(3)

Prerequisite: None  
Advisory: English 58 or 60, 78 or ESL 2R, 2W or placement through assessment.  
Transfer Credit: Accepted for credit: CSU.  
Hours: 54 hours lecture.  
This course covers the physical, psychological, and social aspects of the aging process including the interactions between the elderly and the rest of society. Topics include an analysis of stereotypes, social bonds, environment factors, sexuality, physical health, mental health, death, and bereavement. Not open to students who have completed Gerontology 26. AA/AS area C2; CSU area E1

32 Behavior Modification: Theory and Application  
(3)

Prerequisite: Psychology 1 or 20.  
Transfer Credit: Accepted for credit: CSU.  
Hours: 54 hours lecture.  
This course reviews methods of changing behavior through the systematic application of learning principles. It examines the philosophical and research foundation for behavioral psychology as well as the controversy surrounding behaviorism. The emphasis is on practical applications including institutional settings, schools, child behavior management, smoking, alcohol abuse, sexual dysfunction, assertiveness and cognitive restructuring. AA/AS area E2; CSU area E1

34 Child Development (Same as Early Childhood Education 34)  
(3)

Prerequisite: None  
Advisory: English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment process.  
Transfer Credit: Accepted for credit: UC, CSU.  
Hours: 54 hours lecture.  
This course is a study of the growth and development of children from the prenatal stage through adolescence. For each stage of development, students learn about the physical, cognitive, linguistic, social-moral, and emotional aspects of development, with attention to both typical as well as atypical development in each area. Included are the influences of culture, family and the environment. This material is designed as a foundation for careers in child care, teaching and nursing as well as parenting and preparing general students interested in child development. Not open to students who have completed Early Childhood Education 34. (CAN FCS 14) AA/AS area C2; CSU area D3; IGETC area 4

35 Introduction to Chemical Dependency (Same as Human Services 35)  
(3)

Prerequisite: None  
Advisory: English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment process.  
Transfer Credit: Accepted for credit: CSU.  
Hours: 54 hours lecture.  
This is a survey course that examines the physiological and psychological effects of chemical dependency on the individual. Also included is an analysis of the effects of substance abuse on the family; the sociological, economic conditions contributing to substance abuse; and a description of community efforts at prevention and treatment. Not open to students who have completed Human Services 35. AA/AS area E2; CSU area E1

36 Physiology and Pharmacology: Alcohol & Other Drugs (Same as Human Services 36)  
(3)

Prerequisite: Human Services 35/Psychology 35.  
Transfer Credit: Accepted for credit: CSU.  
Hours: 54 hours lecture.  
This course reviews methods of changing behavior through the systematic application of learning principles. It examines the philosophical and research foundation for behavioral psychology as well as the controversy surrounding behaviorism. The emphasis is on practical applications including institutional settings, schools, child behavior management, smoking, alcohol abuse, sexual dysfunction, assertiveness and cognitive restructuring. AA/AS area E2; CSU area E1

37 Alcoholism: Intervention, Treatment & Recovery (Same as Human Services 37)  
(3)

Prerequisite: Human Services 36/Psychology 36.  
Transfer Credit: Accepted for credit: CSU.  
Hours: 54 hours lecture.  
A study of the chemical composition of alcohol and mechanism of action in the body of alcohol and other psychoactive drugs, including opiates, stimulants, depressants, psychotherapeutics and psychedelics. Also included are the social and psychological implications of toleration, habituation and substance abuse of the user and abuser. Not open to students who have completed Human Services 36.
Real Estate

Real estate is a profession that assists in the sale of property. The ARC real estate program prepares students for a career in real estate or for advancement for those already employed in the field, and offers a wide variety of options for study. Courses involve both theory and practice for reentry positions or to qualify for the Real Estate Salesperson or the Real Estate Broker exams and licenses. ARC also offers continuing education units (CEUs) for those already employed as real estate professionals.

Students completing appropriate coursework at American River College are eligible to take either the Real Estate Salesperson Exam or the Real Estate Broker Exam given by the California Department of Real Estate.

Contact the California Department of Real Estate for exam and license requirements.

Career Opportunities

The field of real estate offers an exciting career in the buying and selling of property. There is a real need for well-trained real estate professionals in almost every area of the state.

There are two types of real estate professionals: brokers and salespersons. Brokers may set up their own businesses, while salespersons must work for a licensed broker.

The real estate field in California is highly competitive. Prospects are best for highly trained, ambitious, sales-minded individuals.

The real estate agent is usually paid on a commission basis, with the agent and the broker sharing the brokerage commission. Few brokers pay salaries during training or allow a draw against future sales. The beginner, therefore, should have enough money to survive until commissions increase and should be prepared to cope with irregular earning periods. Most brokers recommend that new licensees have a six to nine month reserve saved. The real estate market itself fluctuates according to current interest rates and other economic factors.
### Principles of Real Estate

**Prerequisite:** None  
**Advisory:** English 58 or 60 and 78 or ESL 2R and 2W; Business 60  
**Transfer Credit:** Accepted for credit: CSU.  
**Hours:** 54 hours lecture.  
The fundamental real estate course covering the basic laws and principles of California real estate, giving understanding, background, and terminology necessary for advanced study in specialized courses. This course is required by the California Department of Real Estate prior to taking the real estate salesperson's examination.

### Legal Aspects of Real Estate

**Prerequisite:** None  
**Advisory:** Real Estate 19; English 58 or 60 and 78 or ESL 2R and 2W; Business 60  
**Transfer Credit:** Accepted for credit: CSU.  
**Hours:** 54 hours lecture.  
This course includes California real estate laws, ownership methods, estates, transfers, financing instruments and foreclosures, leasing, contracts, and agency. Applies toward the educational requirements for the broker's examination.

### Real Estate Practice

**Prerequisite:** None  
**Advisory:** Real Estate 19; English 58 or 60 and 78 or ESL 2R and 2W; Business 60  
**Transfer Credit:** Accepted for credit: CSU.  
**Hours:** 54 hours lecture.  
This course covers the day-to-day operations in real estate roles and brokerage, including listing, prospecting, advertising, financing, sales techniques, escrow and ethics. Basic laws and practices of California real estate, provide the students with understanding, background, and terminology necessary for advanced study in specialized courses. Applies toward the educational requirements for the broker's examination.

### Real Estate Finance

**Prerequisite:** None  
**Advisory:** Real Estate 19; English 58 or 60 and 78 or ESL 2R and 2W; Business 60  
**Transfer Credit:** Accepted for credit: CSU.  
**Hours:** 54 hours lecture.  
This course covers real estate financing including lending policies and problems in financing transactions in residential apartment, commercial and special purpose properties. Methods of financing properties are emphasized. Applies toward the educational requirements for the broker's examination.

### Real Estate Appraisal

**Prerequisite:** None  
**Advisory:** Real Estate 19; English 58 or 60 and 78 or ESL 2R and 2W; Business 60  
**Transfer Credit:** Accepted for credit: CSU.  
**Hours:** 54 hours lecture.  
This course will cover the purposes of appraisals, the appraisal process, the different approaches to value, and the methods and techniques used to determine the value of various types of property. Emphasis will be on residential and single-unit property but will include an introduction to the valuation of income producing property. This course applies toward the educational requirements for the broker's examination.

### Real Estate Economics

**Prerequisite:** None  
**Advisory:** Real Estate 19; English 58 or 60 and 78 or ESL 2R and 2W; Business 60  
**Transfer Credit:** Accepted for credit: CSU.  
**Hours:** 54 hours lecture.  
This course covers the nature and classification of real estate and real estate investments, economic development of real property, real estate cycles and market trends, and governmental and private sector influence on the economics of real estate. It is recommended that this course be taken last in the real estate series.

### Introduction to Escrow Procedures

**Prerequisite:** None  
**Advisory:** Real Estate 19; English 58 or 60 and 78 or ESL 2R and 2W; Business 60  
**Transfer Credit:** Accepted for credit: CSU.  
**Hours:** 54 hours lecture.  
This course covers the functions and responsibilities of the escrow holder, including actual preparation of escrow instructions and documents in a typical real estate transaction. It also includes audit, disbursement, the issuance of closing statements and analysis of title insurance policies.

### Advanced Escrow Procedures

**Prerequisite:** Real Estate 86 with a grade of “C” or better  
**Advisory:** Real Estate 19; English 58 or 60 and 78 or ESL 2R and 2W; Business 60  
**Transfer Credit:** Accepted for credit: CSU.  
**Hours:** 54 hours lecture.  
This course covers unusual and difficult types of escrow. The student will learn how to evaluate possible solutions with emphasis on real estate loans, financing instruments, and exchanges.

### Real Estate Investment Analysis

**Prerequisite:** None  
**Advisory:** Real Estate 19; English 58 or 60 and 78 or ESL 2R and 2W; Business 60  
**Transfer Credit:** Accepted for credit: CSU.  
**Hours:** 54 hours lecture.  
This course is designed for brokers, salespersons and investors. Involves property and financial analysis of a wide range of real estate investment offerings, their risks and associated yields. This course is open to all students who desire a more intensive real estate investment course than Real Estate 83. The course emphasizes planning and the specific objectives of the investor.

### Advanced Appraisal

**Prerequisite:** Real Estate 84 with a grade of “C” or better  
**Advisory:** Mathematics 51  
**Hours:** 54 hours lecture.  
This course covers the appraisal of real estate through the proper application of the sales comparison, depreciated cost, and income capitalization approaches to value; income-producing properties are used as examples throughout the course. The presentation of the subject matter is traditional and follows procedures recommended for use by the leading appraisal societies. Appraisal theory and current appraisal practice are introduced, discussed, and, where possible, illustrated with local examples.
95  Real Property Management  (3)

Prerequisite:  None
Advisory:  English 58 or 60 and 78 or ESL 2R and 2W.
Hours: 54 hours lecture.
In this class, the student will learn about the day-to-day operation and management of real property including: marketing procedures, leases, maintenance, accounting and economics, record-keeping, management forms, legal requirements, laws, human relations, employer responsibilities and management.

96  Real Estate Organization and Office Administration  (3)

Prerequisite:  None
Advisory:  Real Estate license or 12 units of course work in real estate.
Hours: 54 hours lecture.
This course is designed for real estate brokers or those about to become brokers. It covers the various types of real estate brokerage and the knowledge, motivation, and preparation necessary to organize and manage a brokerage office.
Recreation professionals are people in leadership, supervisory, and administrative capacities who are employed in the parks, recreation and leisure services field as activity leaders, facility managers, and program supervisors. Recreation managers are responsible for a given area of activity, tournament, show, or special event. Some provide instruction and leadership in sports and game activities, arts and crafts and aquatics, while others conduct classes in music, dance, drama, outdoor recreation and physical fitness.

**Career Opportunities**

Throughout the U.S., more than 300,000 people are employed with a primary concern for the provision of recreation and park facilities and services in federal, state, municipal and voluntary nonprofit agencies. In addition, several times that number are employed in commercial and private recreation related positions. Travel and tourism, club management, resort recreation, food and beverage services, lodging, professional sports, entertainment and cultural services, and many other services are very much a part of the exploding recreation and leisure services market. Recreation students can move into positions of more responsibility through experience and additional education. Many ARC students, after completing their A.A. requirements, will transfer to a four-year program to continue their education toward a bachelor's degree. Special agreements between ARC and other institutions now provide our students with a smooth transfer to many of the four-year programs in the state.

**Requirements for Degree Major:** 28-32 units

<table>
<thead>
<tr>
<th>Core Requirements</th>
<th>Units</th>
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<tbody>
<tr>
<td>Health Education 15</td>
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<tr>
<td>Speech 1 or 15</td>
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<tr>
<td>PET 15</td>
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<td>PET 16</td>
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<td>3</td>
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<tr>
<td>Recreation 42</td>
<td>3</td>
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<tr>
<td>Recreation 45A</td>
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<tr>
<td>Recreation 47</td>
<td>3</td>
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<tr>
<td>Recreation 48</td>
<td>1-4</td>
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<tr>
<td>Early Childhood Education 34 or Psychology 34</td>
<td>3</td>
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<tr>
<td>Gerontology 26 or Psychology 26</td>
<td>3</td>
</tr>
</tbody>
</table>

**General Education Graduation Requirements:** Students must also complete the general education graduation requirements for a A.A degree. See general education requirements.

**40 Introduction to Recreation and Leisure Services**

*Prerequisite: None*

*Advisory: English 58, 78 or 2R, 2W*

*Transfer Credit: Accepted for credit: CSU.*

*Hours: 54 hours lecture.*

Overview of recreation, park and leisure services. A basic course describing and interpreting recreation as a form of community services. The nature, scope and significance of leisure and recreation as a social force in contemporary society. Emphasis placed on the role of the professional leader in organizing recreation programs and services, operations, facilities and resources. Field trips required. (CAN REC 2)

**42 Outdoor Recreation**

*Prerequisite: None*

*Advisory: English 58, 78 or ESL 2R, 2W*

*Transfer Credit: Accepted for credit: CSU.*

*Hours: 54 hours lecture.*

Orientation to job opportunities; trends, problems and issues in public and private outdoor recreation agencies. Philosophies and operating purposes of federal, state and local governmental outdoor recreation facilities. Field trips to outdoor recreation areas required.
Recreation

47  Recreation Activity Leadership  (3)

Prerequisite:  None
Advisory:  English 58 or 60, 78 or ELS 2R, 2W or placement through assessment process.
Transfer Credit: Accepted for credit:  CSU.
Hours: 36 hours lecture; 54 hours TBA.
This is a basic course for recreation majors, involving a study of essential elements and basic principles of organization and leadership of various types of recreation programs. It covers the methods and materials used in planning and conducting organized recreation programs in public and private agencies. Special emphasis will be placed on the role of the face-to-face leader in organizing recreational programs in a variety of settings. Required of all recreation majors. (CAN REC 4)

48  Work Experience  (1-4)

Prerequisite:  None
Advisory:  English 58, 78 or ESL 2R, 2W
Transfer Credit: Accepted for credit:  CSU.
Hours: Lecture hours:  See Work Experience.
This course gives practical experience to students who are training for recreation leadership, by providing actual supervised work at various playgrounds and recreation facilities within the Sacramento area (teen centers, swimming pools, gymnasiums, school areas, etc.)
Most people take breathing for granted. But for the thousands of Americans who suffer from breathing problems, each breath is a major accomplishment. Those people include patients with chronic lung problems such as asthma, bronchitis and emphysema, but they also include heart attack and accident victims, premature infants, and people with cystic fibrosis, lung cancer, or AIDS. In each case, the patient will most likely receive treatment from a respiratory care practitioner (RCP) under the direction of a physician. Respiratory care practitioners, including both respiratory therapists and respiratory therapy technicians, work to evaluate, treat, and care for patients with breathing disorders.

**Career Opportunities**

There are more than 100,000 respiratory care practitioners in the United States. Typically they are a vital part of a hospital’s lifesaving response team that answers patient emergencies. An increasing number of practitioners have branched out into alternate care settings such as nursing homes, physicians’ offices, home health agencies, specialized care hospitals, medical equipment supply companies, and patients’ homes. The outlook for respiratory care professionals is expected to grow in the coming years due to the large increase in the elderly population, the impact of environmental problems that have contributed to breathing problems, and technological advances that are prolonging the lives of those suffering from heart attack, cancer and accidents, as well as premature babies.

**The ARC Program**

The program is accredited by the Commission on Accreditation of Allied Health Programs. Successful completion of the program qualifies the graduate to apply for the Credentialing examinations offered through the State of California and the National Board for Respiratory Care. A grade of “C” or better is required in Biology 6, 25, 26; Computer Information Science 1, 11A, 12A; Physics 10 and Psychology.

If the grade in the Respiratory Care courses for performance in the clinical care area is unsatisfactory and/or if the grade for performance in theory is less than a “C”, the course grade will be an “F”. The student is responsible for providing laboratory coats, laboratory fees, malpractice insurance and transportation to off-campus facilities. There may be morning, afternoon or evening clinical experiences in a variety of clinical settings with limited notice.

**Requirements for Pre-enrollment to the Program**

1. Graduation from an accredited high school or G.E.D. equivalent as defined by the current requirements of the State of California and the National Board for Respiratory Care.
2. Minimum cumulative GPA of 2.0.
3. Biology 25 with a grade of “C” or better
4. College level Algebra (Math 51)—verified by transcript

**Pre-enrollment Deadlines**

Applications may be obtained at the Allied Health Building, Room 290, and must be filed by the date stated on the program information sheet.

**Enrollment**

1. Only students who meet the pre-enrollment requirements and follow the pre-enrollment procedures will be considered for the program.
2. Selection is based on a random selection process from among the qualified applicants.
3. The student admitted to the respiratory care program is required to have a physical examination and required inoculations prior to the start of the first semester.

**NOTE:** Meeting all the course requirements does not guarantee admission to the program.
Respiratory Care

Requirements for Degree Major: 69-70 units

Required Courses: 29-30 units

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<th>Course</th>
<th>Units</th>
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<td>Biology 25</td>
<td>5</td>
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<td>Biology 26</td>
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<td>Computer Information Science 12A</td>
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<td>English 1A or ESL 5</td>
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<td>Physics 10</td>
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<td>Psychology 1</td>
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<td>Math 51</td>
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Concentration Requirements: 40 units

<table>
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<th>Course</th>
<th>Units</th>
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<tr>
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<td>Respiratory Care 51C</td>
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<tr>
<td>Respiratory Care 51L</td>
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<td>Respiratory Care 54B</td>
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General Education Graduation Requirements: Students must also complete the general education graduation requirements for an A.A. degree. See general education requirements.

51A Introduction to Health Care for the Respiratory Care Practitioner (2)

Prerequisite: Acceptance into the Respiratory Care Program (see program requirements).
Corequisite: Respiratory Care 51B and 51C.
Hours: 36 hours lecture.

The course describes the organizational context of the U.S. health care system as it relates to the role and function of respiratory care practitioners. It focuses on the skills of communication and human interaction within the context of the modern health care delivery system. It also presents the ethical, legal, interprofessional and economics aspects of health care. It also identifies health care related safety techniques including universal precautions and infection control. Critical thinking processes are presented as a basis for comprehension of course content.

51B Applied Cardiopulmonary Physiology (3)

Prerequisite: Acceptance into the Respiratory Care Program
Corequisite: Respiratory Care 51A and 51C, Biology 26
Hours: 54 hours lecture.

The course provides a foundation for the development of critical thinking skills necessary for the clinical practice of respiratory care. It gives a comprehensive overview of the cardiopulmonary system with emphasis on applied physiology expanding on the concepts introduced in anatomy and physiology, and provides in depth information on ventilation, gas transport and acid-base balance, including interpretation of data and the relationship of physiological principles to patient care.

51C Patient Assessment- Introduction to Clinical Problem Solving (2)

Prerequisite: Acceptance into the Respiratory Care Program
Corequisite: Respiratory 51A and 51B and 51L
Hours: 36 hours lecture.

The course presents a clinically oriented guide to assessment of the patient's cardiopulmonary system with emphasis on its application to respiratory care procedures. It also describes assessment procedures, equipment, and the interpretation of results arising from the gathered information.

51I Patient Assessment Techniques (2)

Prerequisite: Acceptance into Respiratory Care program
Corequisite: Respiratory Care 51A, 51B, 51C
Hours: 108 hours laboratory

This course consists of supervised clinical experience, with emphasis on the application of theories and techniques related to assessment of patients with cardiopulmonary illness. It examines cardiopulmonary resuscitation and basic life support techniques. Students will obtain certification of basic life support cardiopulmonary resuscitation techniques for the healthcare provider.

52A Pharmacology for Respiratory Care (3)

Prerequisite: Respiratory Care 51A, 51B, 51C and 51L with a grade of “C” or better.
Corequisite: Respiratory Care 52B, 52C, 52L
Hours: 54 hours lecture.

The course covers the concepts and principles of pharmacology required in the practice of respiratory care, including medications, actions, dosages, routes of administration, and adverse reactions.

52B Cardiopulmonary Pathophysiology (3)

Prerequisite: Respiratory Care 51A, 51B, 51C with a grade of “C” or better.
Corequisite: Respiratory Care 52A and 52C
Hours: 54 hours lecture.

This course covers the manifestations of cardiopulmonary and related diseases encountered in respiratory care practice. It presents the causes for and general treatment, as well as respiratory care treatment of these diseases. Students will evaluate for possible diagnoses, treatment approaches and evaluation of patient response to treatment for possible modification.

52C Theory and Techniques I - Fundamental Respiratory Care (3)

Prerequisite: Respiratory Care 51A, 51B, 51C and 51L with a grade of “C” or better.
Corequisite: Respiratory Care 52A, 52B, 52L and Physics 10
Hours: 54 lecture.

The course presents the principles of medical gas delivery devices; humidity, aerosol and hyperinflation therapies and chest physiotherapy. It examines cardiopulmonary resuscitation and basic life support techniques. Students will obtain certification of basic life support cardiopulmonary resuscitation techniques.

52L Fundamental Respiratory Care Techniques (2)

Prerequisite: Respiratory Care 51A, 51B, 51C, and 51L with grade of “C” or better
Corequisite: Respiratory Care 52A, 52B, 52C
Hours: 108 laboratory
This course consists of supervised clinical experience, with emphasis on the application of theories and techniques related to fundamental respiratory care procedures. Focus is on the application of skills learned in previous respiratory care courses while developing new skills.

53A Theory II - Adult Critical Care Techniques/Special Procedures

Prerequisite: Respiratory Care 52A, 52B, 52C; Biology 6 with a grade of "C" or better.
Corequisite: Respiratory Care 53B.

NOTE: ALL SCIENCE courses required for the Respiratory Care Degree must be completed with a grade of "C" or better prior to starting the RC 53 and 54 series.

Hours: 54 hours lecture.
This course presents the principles of airway management; mechanical ventilatory support of the adult; hemodynamic monitoring; metabolic assessment; hyperbaric oxygen therapy and the transport of the mechanically ventilated adult. It presents advanced cardiopulmonary life support techniques.

53B Techniques II - Adult Critical Care Techniques/Special Procedures

Prerequisite: Respiratory Care 52A, 52B, 52C with a grade of "C" or better.
Corequisite: Respiratory Care 53A

Hours: 378 hours laboratory
This course provides laboratory and clinical practice in hospitals and other healthcare facilities to allow for the application of clinical skills and exposure to clinical situations.

54A Theory III - Respiratory Care in Specialty Areas

Prerequisite: Respiratory Care 53A, 53B with a grade of "C" or better; Current certification of advanced cardiopulmonary life support.
Corequisite: Respiratory Care 54B

Hours: 54 hours lecture.
This course presents the principles of neonatal/pediatric respiratory care, including basic and advanced techniques as well as transport of mechanically ventilated newborns and children. It also presents the principles underlying cardiopulmonary rehabilitation, including patient assessment, stress testing, reconditioning techniques, psychosocial aspects specific to the home setting and long term ventilator care.

54B Techniques III - Neonatal/Pediatric and Cardiopulmonary Rehabilitation Techniques

Prerequisite: Respiratory Care 53A, 53B with a grade of "C" or better.
Corequisite: Respiratory Care 54A.

Hours: 378 hours clinical laboratory experience.
This course provides laboratory and clinical practice in hospitals and other healthcare facilities to allow for the application of clinical skills and exposure to clinical situations.
Sign Language Studies

The ARC Program

American River College’s Sign Language Program was established over 25 years ago and is one of only 12 postsecondary programs in California that grant degrees in sign language studies and/or interpreting. The Sign Language Studies Program begins with a two-year study of a second language, American Sign Language (ASL), the primary language of Deaf people. This language foundation will help to prepare you to communicate and work with deaf and hard of hearing people. The degree or certificate provides sequential course work leading to employment in the fields of education, human services or business at the paraprofessional level.

Courses offered include four semesters of ASL, as well as studies in interaction with deaf people; while learning a second language, you will also study the deaf community and the culture of deaf people. Upon completion of certain sign language courses, you may enroll in the Interpreting Training Program, a more advanced degree or certificate program. After an additional four semesters of study, students earn an interpreting degree or certificate.

Other Sign Language Studies majors transfer to universities where they concentrate on careers such as teaching, social work, counseling, etc. Others may opt for employment as a teacher’s aide, independent living attendant or dormitory houseparent.

Career Opportunities

Because of the complex and diverse needs of deaf and hard of hearing people, opportunities for employment are varied.

There is a great need for skilled and qualified sign language interpreters in educational and social service agencies, and students have been able to develop career-track positions that provide services to the deaf community.

As our interpreting students begin their careers they can pursue specialization such as educational, social services, legal, employment and medical. To find out more about the field of sign language interpreting, visit the Registry of Interpreters for the Deaf web site at www.RID.org.

Sign Language Studies

Requirements for Degree Major: 40 units

Core requirements (for degree and certificate) 25 units

Sign Language Studies 1, 2, 3, 4, 5, 6, 48A

Concentration Requirements: 15 units

Business or Human Services Option only (see below)

Recommended Electives

English 1A, Sign Language Studies 46A-Q (up to 3 units)

General Education Graduation Requirement:

Students must also complete the general education graduation requirements for an A.A. degree. See general education requirements.

Sign Language Studies/ Business Certificate

Requirements for Certificate: 40 units

Core Requirements (see above) 25 units

Human Services 14 3
Psychology 1 or 20 3
Management 1 or 24 3
Management 21 3
Management 23 or 80 3

Sign Language Studies/ Human Services Certificate

Requirements for Certificate: 40 units

Core Requirements (see above) 25 units

Human Services 14 3
Psychology 1 or 20 3
Psychology 18 3

and 6 units from the following:

English 10, Psychology 15, Human Services 19/Psychology 19, ECE 34/Psychology 34.
INTERPRETER TRAINING PROGRAM

Requirements for Degree Major: 54 units
Core requirements: 25 units
Sign Language Studies 1, 2, 3, 4, 5, 6, 48A

Concentration Requirements: 29 units
Sign Language Studies 7, 9, 10, 11, 12, 13, 17, 45A, 45B, 48B
Select 4 units from 45C-M
General Education Graduation Requirements
Students must also complete the general education graduation requirements for an AA degree. See general education requirements.

INTERPRETING CERTIFICATE

Requirements for Certificate: 54 units
Core requirements for Sign Language Studies (25 units - see above) and
Sign Language Studies 7, 9, 10, 11, 12, 13, 17, 45A, 45B, 48B
Select 4 units from 45C-M
The Interpreting Certificate cannot be completed in one year.

1 American Sign Language 1
Prerequisite: None
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture.
This is a beginning course in a series of four courses in the visual-gestural processes of sign language. It provides instructional activities to become competent in communication with deaf people. The emphasis on nonverbal communication. AA/AS area B; IGETC area 6

2 American Sign Language 2
Prerequisite: Sign Language Studies 1 with a grade of "C" or better.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture.
This is the second in a series of four courses in American Sign Language. The emphasis is on nonverbal communication. Topics presented include grammatical features such as descriptors, differentiation between cardinal/ordinal numbers, contrastive structure, temporal aspect markers and temporal sequencing. AA/AS area B

3 American Sign Language 3
Prerequisite: Sign Language Studies 2
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture.
This course is the third in a series of four courses in American Sign Language. It emphasizes expressive and receptive nonverbal communication skills between signers who have preliminary American Sign Language syntactical and lexical skills. It provides an understanding of deaf cultural processes by identifying behaviors and norms from activities assigned in the class. It also includes dialogues that involve asking, empathizing, negotiating and agreeing or disagreeing. AA/AS area B; CSU area C2

4 American Sign Language 4
Prerequisite: Sign Language Studies 3 with a grade of "C" or better.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 72 hours lecture.
This course is the last in a series of four courses in American Sign Language. It emphasizes expressive communication skills that involve making major life decisions, role shifting sequences in situations involving two or more people, narrating factual information, explaining rules and/or processes, games, narrating accidents, and using money. It incorporates information and activities previously learned about Deaf Culture into these narratives. AA/AS area B; CSU area C2

5 Impact of Deafness
Prerequisite: None
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.
This course is a survey of four institutions which have critical impact on the psycho-social development of people: family, education, work, and society. It provides awareness and sensitivity to the unique challenges of deafness and how they influence personal-social and communication competencies of the deaf person. Student selected visits to community events are required. AA/AS area C2 & F

6 Educating Deaf People
Prerequisite: None
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.
This is a survey course of topics related to educating deaf children, adults, and multi-handicapped individuals. It also covers teaching methods and philosophies, school placement issues, child development, and methods of coping with developmental stages. Student-selected visits to community events are required.

7 ASL Discourse
Prerequisite: Sign Language Studies 4 with a grade of "C" or better.
Advisory: SLS 48A
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course introduces signing beyond the conversational level. Complex and diverse signed situations are presented to improve both expressive and receptive skills. The focus will be on the diversity of register, affect, and style in American Sign Language.

8 Numbers, Fingerspelling, Classifiers
Prerequisite: Sign Language Studies 4.
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course will focus on providing more advanced experiences and communication techniques with expressive and receptive fingerspelling, the use of classifiers, and the use of ASL number systems (numbers will include but not be limited to cardinal, ordinal, informational numbers: numbers related to time, temporal aspect signs, measurements, sports, and mathematical numbers).
10  **ITP: Ethics and Professional Standards of Interpreting**

Prerequisite:  SLS 4 with a grade of "C" or better
Advisory:  SLS 5, SLS 6, SLS 48A
Transfer Credit: Accepted for credit:  CSU
Hours: 54 hours lecture.

This course provides a working knowledge of the profession of interpreting. It includes the history of the interpreting field, the Registry of Interpreters for the Deaf Code of Ethics, interpersonal relations, the roles and responsibilities of interpreters, and an overview of the settings involved.

11  **ITP: Consecutive Interpreting**

Prerequisite:  None
Corequisite:  SLS 10
Advisory:  SLS 5, 6, 48A
Transfer Credit: Accepted for credit:  CSU
Hours: 54 hours lecture.

This course provides basic skills in consecutive sign language interpreting (sign-to-voice and voice-to-sign). Primary emphasis includes a theoretical analysis of the interpreting process, reinforcement of prerequisite language, and development of the fundamental skills.

12  **ITP: Simultaneous Interpreting**

Prerequisite:  SLS 11 with a grade of C or better.
Advisory:  SLS 5, 6, 48A
Transfer Credit: Accepted for credit:  CSU
Hours: 54 hours lecture.

This course provides intermediate knowledge and skill development in the area of simultaneous interpreting. Both sign to voice and voice to sign interpreting skills will be incorporated. Primary emphasis includes an application of the interpreting process, a focus on analytical and composition skills, and incorporation of cultural considerations.

13  **ITP: Transliteration**

Prerequisite:  SLS 11 with a grade of "C" or better
Advisory:  SLS 5, 6, 48A
Transfer Credit: Accepted for credit:  CSU
Hours: 54 hours lecture.

This course provides basic skills in transliteration. Both sign to voice and voice to sign transliterating skills will be incorporated. Primary emphasis includes language/client assessment, contact signing forms, semantic appropriateness, syntactic considerations, lipshadowing, lip-reading, and fingerspelling reception and production.

17  **ITP: Text Analysis and Translation: ASL and English**

Prerequisite:  SLS 4 with a grade of "C" or better.
Advisory:  SLS 7
Transfer Credit: Accepted for credit:  CSU
Hours: 54 hours lecture.

This course compares and contrasts the grammatical structures and patterns of American Sign Language and English. Comparison of the phonology, morphology and syntax found in ASL and English will be the focus, with emphasis on the practical use of such knowledge.

45A  **ITP: Introduction to Deaf Blind Interpreting**

Prerequisite:  SLS 4 with a grade of "C" or better
Transfer Credit:  CSU
Hours: 54 hours lecture.

This course provides exposure to, background in, and techniques for working with members of the deaf-blind community.

45B  **ITP: Introduction to Oral Transmission**

Prerequisite:  SLS 10 with a grade of "C" or better
Transfer Credit:  CSU
Hours: 54 hours lecture.

This course provides exposure to, background in, and techniques for oral transmission and interaction with oral deaf people.

45C  **ITP: Introduction to Educational Interpreting, K - 12**

SLS 11 with a grade of "C" or better
Transfer Credit:  CSU
Hours: 54 hours lecture.

This course is an introduction to interpreting in the educational setting with a focus on the elementary and secondary levels of education. Emphasis will be on vocabulary development and enrichment specific to educational interpreting, resource development, team building, roles and responsibilities, communicating with children, and ethics.

45D  **ITP: Introduction to Educational Interpreting, Post Secondary**

SLS 11 with a grade of "C" or better
Transfer Credit:  CSU
Hours: 54 hours lecture.

This course is an introduction to interpreting in the educational setting with a focus on the post secondary level of education. Emphasis will be on vocabulary development and enrichment specific to educational interpreting, resource development, team building, roles and responsibilities, and ethics.

45E  **ITP: Introduction to Medical Interpreting**

Prerequisite:  SLS 11 with a grade of "C" or better
Transfer Credit:  CSU
Hours: 54 hours lecture.

This course is an introduction to interpreting in the medical setting. Environmental considerations, vocabulary development, resource building, introductory knowledge, and ethics will be considered.

45F  **ITP: Introduction to Performing Arts Interpreting**

Prerequisite:  SLS 11 with a grade of "C" or better
Transfer Credit:  CSU
Hours: 54 hours lecture.

This course is an introduction to interpreting in the performing arts setting. Environmental considerations, vocabulary development, resource building, introductory knowledge, and ethics will be considered.
45G  **TTP: Introduction to Social Services and Employment Interpreting**  
Prerequisite: SLS 11 with a grade of “C” or better  
Transfer Credit: CSU  
Hours: 18 hours lecture  
This course is an introduction to interpreting in the social services/employment setting. Environmental considerations, vocabulary development, resource building, introductory knowledge, and ethics will be considered.

45H  **TTP: Introduction to Multicultural Communication**  
Prerequisite: SLS 4 with a grade of “C” or better  
Advisory: SLS 11  
Transfer Credit: CSU  
Hours: 9 hours lecture  
This course is an introduction to the field of multicultural communication. The focus will be on cultural and linguistic diversity, personal life experiences, and on enhancing racial and ethnic diversity in the interpreting profession.

45I  **TTP: Introduction to Telephone, Television and Remote Relay Interpreting**  
Prerequisite: SLS 11 with a grade of “C” or better  
Transfer Credit: CSU  
Hours: 9 hours lecture  
This course is an introduction to interpreting using the telephone, via television and video and remote relay interpreting. Environmental considerations, vocabulary development, resource building, introductory knowledge, and ethics will be considered.

45J  **TTP: Introduction to Religious Interpreting**  
Prerequisite: SLS 11 with a grade of “C” or better  
Transfer Credit: CSU  
Hours: 9 hours lecture  
This course is an introduction to interpreting in the religious setting. Environmental considerations, vocabulary development, resource building, introductory knowledge, and ethics will be considered.

45K  **TTP: Introduction to Working with a Certified Interpreter**  
Prerequisite: SLS 11 with a grade of “C” or better  
Transfer Credit: CSU  
Hours: 9 hours lecture  
This course is an introduction to interpreting with a certified deaf interpreter (CDI). Definition of roles, resource building, introductory knowledge, team development, and ethics will be considered.

45L  **TTP: Specialized Vocabulary: Math and Computers**  
Prerequisite: SLS 4 with a grade of “C” or better  
Advisory: SLS 11  
Transfer Credit: CSU  
Hours: 9 hours lecture  
This course provides an opportunity to develop specialized discourse for use in future interpreting assignments. The focus of the class will include use of general resources in ASL and English and the development of vocabulary and resources related to mathematics, computer, and scientific terms.

46A  **ASL and the Deaf Community**  
Prerequisite: None  
Transfer Credit: Accepted for credit: CSU  
Hours: 9 hours lecture.  
This module introduces linguistic features of ASL and the socio-linguistic dynamics of the Deaf Community. Credit/no credit only.

46B  **Intercultural Communication**  
Prerequisite: None  
Transfer Credit: Accepted for credit: CSU  
Hours: 9 hours lecture.  
This module will explore personal and cultural values, behaviors, perceptions, and assumptions of the Deaf and hearing people who work with them. Included is the application of intercultural techniques for effective interaction and communication. Credit/no credit only.

46C  **Number Systems in ASL**  
Prerequisite: None  
Transfer Credit: Accepted for credit: CSU  
Hours: 9 hours lecture.  
This module provides hands-on experiences using ASL numbers with the cardinal/ordinal, incorporation and unique systems. Credit/no credit only.

46D  **Fingerspelling I**  
Prerequisite: None  
Advisory: SLS 1  
Transfer Credit: Accepted for credit: CSU  
Hours: 9 hours lecture.  
This module provides hands-on experiences with fingerspelling. Credit/no credit only.

46E  **Fingerspelling II**  
Prerequisite: SLS 46D  
Transfer Credit: Accepted for credit: CSU  
Hours: 9 hours lecture.  
This module will expand upon the skills learned in Fingerspelling I and introduces a more sophisticated fingerspelling usage as used by members of the Deaf Community. Credit/no credit only.

46F  **Classifiers**  
Prerequisite: None  
Advisory: SLS 1  
Transfer Credit: Accepted for credit: CSU  
Hours: 9 hours lecture.  
This module provides extensive hands-on experience with using basic and complex classifiers. Credit/no credit only.

46G  **Signing for Dependency Situations**  
Prerequisite: None  
Advisory: SLS 2  
Transfer Credit: Accepted for credit: CSU  
Hours: 9 hours lecture.  
This module will provide information related to the signs used by the Deaf community related to alcohol, sex, and drug abuse. Credit/no credit only.
Sign Language Studies

46H Life Situations (0.5)

Prerequisite: None
Advisory: SLS 1
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture.
This module will provide hands-on experiences with signs that relate to food shopping, preparing food, common household chores, and holiday seasons. Credit/no credit only.

46I Pronouns (0.5)

Prerequisite: None
Advisory: SLS 1
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture.
This course will focus on advanced pronoun use with expressive and receptive skill in use of pronouns through hands-on activities. Credit/no credit only.

46J Everyday Conversations Used by Deaf People (0.5)

Prerequisite: None
Advisory: SLS 1
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture.
This module is an introduction to expressions, colloquialisms, vocabulary and cultural experiences that are used by Deaf people in their everyday lives. Credit/no credit only.

46K Non-Verbal Communication (0.5)

Prerequisite: None
Advisory: SLS 1
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture.
This module provides an introduction to gesture and mime processes that are fundamental to American Sign Language. Credit/no credit only.

46L Introduction to the Interpreting Profession (0.5)

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture.
This module will include discussion of trends, training requirements, certification requirements, traits and characteristics needed to become a successful interpreter in the Deaf community. Credit/no credit only.

46M Political and Legal Signs (0.5)

Prerequisite: None
Advisory: SLS 2
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture.
This module introduces signs related to advocacy efforts, the political/legislative process, and the legal system as it relates to the Deaf community. Credit/no credit only.

46N Basic Medical Signs (0.5)

Prerequisite: None
Advisory: SLS 2
Transfer Credit: Accepted for credit: CSU
Hours: 9 hour lecture.
This module provides hands-on experiences with commonly used medical signs. Credit/no credit only.

46O Signs for Sports (0.5)

Prerequisite: None
Advisory: SLS 2
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture.
This module addresses signs related to sports, sports events, and recreational activities enjoyed by members of the Deaf community. Credit/no credit only.

46P Non-Manual Signals in ASL (0.5)

Prerequisite: None
Advisory: SLS 1
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture.
This module illustrates the importance of non-manual signals in ASL. Discussion will relate to the role of non-manual signals as adverbs as grammatical distinctions in certain clauses, and as linked with a specific sign. Credit/no credit only.

46Q Interacting with Deaf-Blind People (0.5)

Prerequisite: None
Advisory: SLS 1
Transfer Credit: Accepted for credit: CSU
Hours: 9 hours lecture.
This module develops sensitivity awareness to the unique communication needs of deaf-blind people. Emphasis will be on interactive principles used in situations with deaf-blind people. Credit/no credit only.

47 Topics in Sign Language and Deafness (.5-3)

Prerequisite: Sign Language Studies 1
Transfer Credit: Accepted for credit: CSU.
Each module is a study of a specific topic or a technique in the area of sign language or deafness. Credit/no credit only.

48A Work Experience in Sign Language (1-3)

Prerequisite: Sign Language Studies 1 with a grade of “C” or better.
Transfer Credit: Accepted for credit: CSU.
This course is supervised practical experience working with deaf clients. Under supervision of an agency mentor, the student provides entry-level paraprofessional services based on their skill level and other applicable experiences such as tutoring, note taking, communication aide, peer counselor, office assistant, administrative aide, instructional aide services. May be taken four times for credit for a maximum of 8 units.

48B ITP: Work Experience in Interpreting (1-3)

Prerequisite: Sign Language Studies 5 and 6 with a grade of “C” or better.
Corequisite: Sign Language Studies 13
Transfer Credit: Accepted for credit: CSU.
This course involves supervised work experience and career guidance in agencies which provide interpreting services to deaf clients. Students will be required to perform interpreting services to receive credit toward the completion of the interpreting certificate program. Students gain third party interpreter/transliterating experiences under supervision of an interpreting mentor. May be taken four times for credit for a maximum of 8 units.
The Social Science Department offers a survey course of U.S. history, blended liberal studies for elementary teachers (both degree and certificate) and a certificate option in international studies.

**Requirements for Degree Major**

18 units of transfer-level work in addition to other graduation requirements.

Courses taken must be in at least four of the following areas:
- Anthropology
- Economics
- Geography
- History
- Philosophy
- Political Science
- Psychology (except Psychology 4)
- Sociology

**General Education Graduation Requirement:**
Students must also complete the general education graduation requirements for an A.A. degree. See general education requirements.

**Blended Liberal Studies for Elementary Teachers - A.A.**

**Requirements for Degree Major**

50 units

<table>
<thead>
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<th>Core Requirements</th>
<th>Units</th>
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<tr>
<td>Psychology 34/ECE 34</td>
<td>3</td>
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<tr>
<td>English 10A/ECE 10A</td>
<td>3</td>
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<td>English 1A</td>
<td>3</td>
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<tr>
<td>English 1B or English 1C</td>
<td>3</td>
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<tr>
<td>English 2</td>
<td>3</td>
</tr>
<tr>
<td>English 10</td>
<td>3</td>
</tr>
<tr>
<td>Economics 1A</td>
<td>3</td>
</tr>
<tr>
<td>History 12 and Humanities 1 or History 11 and Humanities 2</td>
<td>6</td>
</tr>
<tr>
<td>History 17</td>
<td>3</td>
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<tr>
<td>Math 2</td>
<td>3</td>
</tr>
<tr>
<td>Political Science 1</td>
<td>3</td>
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<td>Sociology 5 or History 16W</td>
<td>3</td>
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<td>Speech 1</td>
<td>3</td>
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<tr>
<td>Geology 8</td>
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<tr>
<td>Biology 5</td>
<td>4</td>
</tr>
</tbody>
</table>

**Recommended electives**

- Foreign Language: Students must complete the intermediate level (third college-level semester) course in a foreign language, 1 unit of Physical Education

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**International Studies Certificate**

The program is designed to benefit students that will seek careers or transfer with an international focus. The required courses will transfer as electives or lower division prerequisite for selected majors.

**Requirements for Certificate:**

29 units

<table>
<thead>
<tr>
<th>Courses Required</th>
<th>Units</th>
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<tr>
<td>Anthropology 2</td>
<td>3</td>
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<tr>
<td>Foreign Language *</td>
<td>8</td>
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<tr>
<td>Political Science 10</td>
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<tr>
<td>Political Science 2</td>
<td>3</td>
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<td>History 11 or 12</td>
<td>3</td>
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<tr>
<td>Required Electives</td>
<td>9</td>
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</table>

*Foreign language courses must be transferable (courses numbers 1-49)

**Select 9 units from the following electives**

- Anthropology 12; Art 3A; Economics 1A, 1B; English 26, 33, 34; Geography 2, 10; History 4, 4H, 5, 5H, 6, 10, 11*, 12*, 19, 20; Humanities 1, 2, 3, 8, 9; MUFHL 9; Philosophy 13, 14; Political Science 1, 15; Social Science 1, 2, 3; Sociology 1A

*Can only apply toward electives if not applied toward required courses

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**1 International Studies - Peace and Conflict Studies**

Prerequisite: None

Advisory: English 58 or 60, 78 or ESL 2R, 2W or placement through assessment process.

Transfer Credit: Accepted for credit: UC, CSU

Hours: 54 hours lecture.

This course will examine the political and social causes of violence and war including an analysis of the political and economic processes that affect social integration, justice, and peace in international relations. AA/AS area C2; CSU area D3; IGETC area 4

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**2 International Studies - Current International Development Issues**

Prerequisite: None

Advisory: English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment process.

Transfer Credit: Accepted for credit: UC, CSU

Hours: 54 hours lecture.
This course deals with current socio-economic and political issues in developing countries. The course will present alternative theories of development with a particular focus on the issues of health, sanitation, women in development, social change, population and growth. AA/AS area C2; CSU area D3; IGETC area 4

3  International Studies - International Economy of the Twenty First Century  

Prerequisite:  None  
Advisory:  English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment process.  
Transfer Credit: Accepted for credit:  UC, CSU  
Hours: 54 hours lecture.  
This course will examine the financial and trade relations between developed and developing nations. An analysis of the interdependency of diverse world economies and the national and international economic institutions that regulate these relations will be an important part of the course activities.

51  History of the United States to 1865  

Prerequisite:  None  
Advisory:  English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment process.  
Hours: 54 hours lecture.  
This course is a survey of United States history from its European, African and Native American backgrounds to 1865. The course examines the origin and development of many of this nation's political, social, economic and intellectual institutions including their influences upon contemporary American life. These analyses also emphasize such historical concepts as cause and effect, multiple causation and historical interpretation. AA/AS area 3C1

52  History of the United States to Present  

Prerequisite:  None  
Advisory:  English 58, or 60, and 78, or ESL 2R, 2W, or placement through assessment process.  
Hours: 54 hours lecture.  
This course is a survey of United States History from 1865 to present. It examines many of America's political, social, economic, and intellectual institutions, including their influences upon contemporary life. The course also examines this nation's increasing involvement in world affairs. These analyses are set within the context of such historical concepts as cause and effect, multiple causation, and historical interpretation. AA/AS area 3C1
Sociology is the study of human behavior in society focusing on the study of systems, and how individuals live, work, and interact within them.

Requirements for Degree Major
18 units of transfer-level work in addition to other graduation requirements.

Courses taken must be in at least four of the following areas: Anthropology, Economics, Geography, History, Philosophy, Political Science, Psychology (except Psychology 4), and Sociology.

General Education Graduation Requirement:
Students must also complete the general education graduation requirements for an A.A. degree. See general education requirements.

1A Introductory Sociology (3)
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
Examines society in terms of the interactions of groups and cultures. Involves a consideration of family, government, education and religion as basic American institutions. Emphasis on scientific method of approach. (CAN SOC 2) AA/AS area C2; CSU area D3; IGETC area 4

1B Social Problems (3)
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
Survey of social problems of present day American culture including a study of their causes and an evaluation of proposed solutions and methods of treatment. Attention is directed to unemployment, poverty, physical and mental disease, delinquency, crime and related problems. (CAN SOC 4) AA/AS area C2; CSU area D3; IGETC area 4

5 Minorities in America (3)
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
This course examines the basic sociological approaches to the study of racial and ethnic groups in America. Focuses on historical, social and economic factors affecting inter-group and intragroup dynamics. Studies variation in assimilation patterns among groups and implications of demographic shifts. AA/AS area C2 & F; CSU area D3; IGETC area 4

6 Chicano Culture (3)
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
This course examines the individual chicanos(a) and his cultural pattern within the U.S.; the acquisition of their culture, innovation, adaptation and direction of their cultural development. AA/AS area C2; CSU area D3; IGETC area 4

15 Introduction to Corrections (3)
Prerequisite: Psychology 1.
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.
Development, function and administration of federal, state, county and city law enforcement institutions. Causes and impact of crime and delinquency upon society. Treatment programs at local, state and federal correctional institutions, adult and juvenile, including probation and parole. Lectures, field trips, interviews and report writing.

20 Women in American Culture (3)
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment process.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
This course is an examination of Native American, Anglo American, African American, Hispanic American, and Asian American women's roles in American society within a historical and cross-cultural perspective. The focus of this course is an analysis and discussion of gender relations in the home/family, the work place, and the treatment of women in the mass media and in the health care system. AA/AS area C2 & F; CSU area D3; IGETC area 4

22 Sociology of Aging (Same as Gerontology 22) (3)
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2W or placement through assessment process.
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.
This course examines the aged and aging process with emphasis on social factors affecting and affected by an aging population. It includes an analysis of demographics, history of aging in America, social conditions, resources and support systems, employment, retirement, social class/cultural differences. Not open to students who have completed Gerontology 22. AA/AS area E2; CSU area E1
Special Studies

49 Special Studies in (Subject) (1-4)

Prerequisite: College courses basic to the study.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: One unit for each 18 hours of lecture or equivalent.
Individual study or scheduled classes to provide students with the opportunity to pursue studies of special interest which are not covered in established catalog courses. Specific studies will be designated according to the subject field to be studied; studies having to do with transfer programs will be numbered 49, and studies related to two-year vocational programs will be numbered 99. For more information see Instructional Program, Independent and Special Study in the front of the catalog.
The number-one skill identified by employers is the ability to communicate clearly in both oral and written form. The number-two skill identified by employers is the ability to work effectively as a member of a team. Speech courses can help provide good communications skills so important in the workplace.

Requirements for Degree Major: 24 units

Core Requirements

<table>
<thead>
<tr>
<th>Subject</th>
<th>Units</th>
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<tbody>
<tr>
<td>English 1A or 1A Honors</td>
<td>3</td>
</tr>
<tr>
<td>English 1B or 1B Honors or</td>
<td>3</td>
</tr>
<tr>
<td>Speech 1</td>
<td>3</td>
</tr>
</tbody>
</table>

and 18 units of transfer level course work from the following subjects: composition, speech, foreign language, journalism, literature. Up to six units may be in humanities or philosophy.

General Education Graduation Requirement

Students must also complete the general education graduation requirements for an A.A. degree. See general education requirements

1 Speech Communication (3)

Prerequisite: None
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
This is a course in oral composition and delivery. It focuses on the organization of supporting materials, methods of securing interest, and the presentation of information and ideas in oral communication situations typically found in the business and social community. Video taping equipment may be used as an aid to the student's self-analysis and improvement. (CAN SPCH 4) AA/AS area D2; CSU area A1; IGETC area 1C

2 Persuasive Speech (3)

Prerequisite: Speech 1
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours lecture.
This course is a detailed study emphasizing persuasive discourse through an understanding of basic communication principles. Emphasis will be placed on the use of proofs, language and logical thinking. Video taping equipment may be used as an aid to the student's self-analysis and improvement. CSU area A3

3 Argumentation and Debate (3)

Prerequisite: None
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours lecture.
This course focuses on the theory, methods and application of argumentation and debate. It considers the use of evidence and appeals in the advocacy of dissenting propositions. (CAN SPCH 6) CSU area A3

4 Forensics Laboratory (2)

Prerequisite: None
Transfer Credit: Accepted for credit: CSU.
Hours: 108 hours laboratory.
This course is a laboratory course giving practice in preparing for and participating in the Students Speaker's Bureau and intercollegiate competition. This course may be taken four times for credit.

5 Oral Interpretation (3)

Prerequisite: None
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
This course is an analysis and oral performance of prose and poetry with a focus on the communication of the literature's intellectual, emotional and aesthetic content. This course is designed to deepen appreciation of literary forms, structure and values. This is not a course in reading improvement. AA/AS area B; CSU area C2

6 Listening (3)

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 54 hours lecture.
This course focuses on the listener in communication. The student will learn about the variables in listening and will learn to listen for a variety of purposes, such as listening for helping others, listening for critical evaluation, listening for content, and listening for aesthetic pleasure. The student will work for competence in listening skills in both formal and professional settings.

7 Voice and Diction (3)

Prerequisite: None
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture.
This course focuses on the overall improvement of vocal quality. Emphasis is on drills involving breath control, resonance, pitch and inflection thereby developing confidence in speaking. The International Phonetic Alphabet will be studied. This course is not recommended for special therapy or as a second language speech course. (CAN DRAM 6)
8  **Introduction to Communication Theory**  (3)

*Prerequisite: None*
*Transfer Credit: Accepted for credit: UC, CSU.*
*Hours: 54 hours lecture.*

This course is an introduction to the symbolic process of human communication through the study of basic communication models, fundamental theory, and relevant research findings, including the intrapersonal, and sociocultural levels. Emphasis will be on achieving an understanding of the communication process, its component elements, and its significance in human affairs.

10  **Interpersonal Communication**  (3)

*Prerequisite: None*
*Transfer Credit: Accepted for credit: CSU*
*Hours: 54 hours lecture.*

This course focuses on personal communication transactions with emphasis on the acquisition of techniques and skills essential to self-actualization and to establishing authentic relationships. Through simulated communication experiences and structured exercises, the student may experiment with a variety of alternative communication behaviors. (CAN SPCH 8) AA/AS area E2; CSU area E1

14  **Intercultural Communication**  (3)

*Prerequisite: None*
*Transfer Credit: Accepted for credit: UC, CSU.*
*Hours: 54 hours lecture.*

This class is an introduction to the challenges and rewards of intercultural communication in everyday situations. The course is designed to increase understanding of variations and commonalities in communication patterns across cultures and prepare students for more effective communication. Emphasis is on both international cultural variance and subcultural or group-based experiential background variance. AA/AS area 3F

15  **Group Discussion**  (3)

*Prerequisite: None*
*Transfer Credit: Accepted for credit: UC, CSU.*
*Hours: 54 hours lecture.*

This course is designed to increase students’ understanding of group communication and to prepare students to function more effectively in groups. Focus is on communication in task and social groups. The subject matter deals with communication concepts and behaviors in problem-solving, decision-making, leadership, group roles, norms and conformity. Several written group analyses and one major research paper are required in most sections. (CAN SPCH 10) AA/AS area 3D2; CSU area A1; IGETC area 1
These courses are designed for students elected to student government positions. The American River College Student Association (S.A.) is recognized as the voice of students. Those enrolled have a variety of opportunities to serve on the student senate and/or college committees.

**Leadership Development Certificate**

<table>
<thead>
<tr>
<th>Requirements for Certificate:</th>
<th>17 units</th>
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<tbody>
<tr>
<td>Courses Required</td>
<td>Units</td>
</tr>
<tr>
<td>Student Government 1</td>
<td>2</td>
</tr>
<tr>
<td>Student Government 2</td>
<td>3</td>
</tr>
<tr>
<td>Political Science 1</td>
<td>3</td>
</tr>
<tr>
<td>Select one course from 3 different instruction areas.</td>
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<tr>
<td>Minimum units 9.</td>
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<tr>
<td>Speech 1, 2, 15</td>
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<tr>
<td>Sociology 1B, 20</td>
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<tr>
<td>Psychology 1, 20</td>
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<tr>
<td>Anthropology 2</td>
<td></td>
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<tr>
<td>Philosophy 4, 5</td>
<td></td>
</tr>
</tbody>
</table>

1. **Introduction to Student Government** (2)

   *Prerequisite: None.*  
   *Transfer Credit: Accepted for credit: CSU.*  
   *Hours: 18 hours lecture; 54 hours laboratory.*  

   This course is a study of the legal, educational and philosophical basis of student government. It is designed for students interested in or participating in student government. This course provides practical experience in student government, in the administration of student programs, and participation on faculty and administrative committees. May include field trips to other campuses, area conferences, and state conferences. May be taken three times for credit.

2. **Leadership Development** (3)

   *Prerequisite: None*  
   *Transfer Credit: Accepted for credit: CSU*  
   *Hours: 54 hours lecture*  

   This course is designed to provide emerging and existing student leaders the opportunity to explore the concept of leadership and to develop and improve their leadership skills. The course integrates group exercises, films, and contemporary readings on leadership.
Theatre courses provide theory and activity in all phases of dramatic production. Students choose either acting, film, or technical theatre concentrations.

Requirements for Degree Major: 26-39 units

Core Requirements 15-21 Units
Theatre Arts 1, 15A or 15A Honors, 30A 9
Theatre Arts 47, 47A, 47B, 47C, 47D, 47E or 44) 2-6
(earned by participation in two productions)
Two elective courses (4-6 units) from any theatre course used to fulfill other parts of the major.
Fulfillment of Acting, Film or Technical Theatre concentration

General Education Graduation Requirements:
Students must also complete the general education graduation requirements for an A.A. degree. See general education requirements.

Acting Concentration
Concentration Requirements 12-14 Units
Theatre Arts 15B, 30A 5
Theatre Arts 16A, 16B or 19 3
One acting course from the following (unless used above): 2-3
Theatre Arts 16A, 16B, 17, 19, 20, 23, 25, 26 or 29
One technical course from the following: 2-3
Theatre Arts 24, 31, 32, 34, 35, 36, or 37

Film Concentration
Concentration Requirements 13-18 Units
Theatre Arts 6 3
Theatre Arts 7A and 7B or Theatre Arts 7 3-6
Two courses from the following: 5-6
Theatre Arts 8, 9, 19, or 29A
One additional theatre course not used to fulfill requirements elsewhere in the degree.

Technical Theatre Concentration
Concentration Requirements 11-15 Units
Three technical courses from: 7-9
Theatre Arts 24, 31, 32, 34, 35, 36, 37 or Fashion 37 (taken twice), or 39A
One acting course from: 2-3
Theatre Arts 15B, 16, 16A, 16B, 17, 19, 20, 23, 25, 26, or 29

Recommended Electives: English 47, MUFLH 6, MUIVI 22A, English 44, PER 1 (Theatre Dance)

1 Introduction to the Theatre (3)
Prerequisite: None
Advisory: English 58 or 60, and 78 or ESL 2R, 2L, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
This course surveys the literary, cultural and historical aspects of theatre arts. It is an audience oriented, non-performance theatre arts course open to all students. (CAN DRAM 18) AA/AS area B; CSU area C1; IGETC area 3

2A History and Theory of the Theatre (3) (formerly Theatre Arts 2)
Prerequisite: None
Advisory: English 58 and 78 or ESL 2R, 2L, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
This course is a survey of the history of theatre from the Greeks through the 17th century. The history and development of theatre and drama are studied in relationship to cultural, political and social conditions of the time. Plays are read for analysis of structure, plot, character and historical relevance. This course is recommended for students planning to major in theatre, humanities, English or speech. AA/AS area B; CSU area C1; IGETC area 3

2B History and Theory of the Theatre (3) (formerly Theatre Arts 3)
Prerequisite: None
Advisory: Theatre Arts 2; English 58 and 78 or ESL 2R, 2L, 2W, or placement through assessment.
Transfer Credit: Accepted for credit: UC, CSU.
Hours: 54 hours lecture.
This course is a survey of the history of theatre from the 17th century through modern theatre. The history and development of theatre and drama are studied in relationship to cultural, political, and social conditions of the time. Recommended for students planning to major in theatre, humanities, English or speech. AA/AS area B; CSU area C1; IGETC area 3

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4 Diversity in American Drama (1960 to Present) (formerly Theatre Arts 8) (3)
Prerequisite: None
Advisory: English 58 and 78, or ESL 2R, 2L, 2W; or placement through assessment.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture.
This course surveys the theatrical (not the literary) expression of Native-American, African-American, Latino, and Asian-American theatre from 1960 to the present, including the social, political, cultural, and economic climate in which the theatre was created, and other special interest group theatrical expression as appropriate. AA/AS area B & F; CSU area C1; IGETC area 3

6 Introduction to Film (formerly Theatre Arts 10) (3)
Prerequisite: None
Advisory: English 58 and 78, or ESL 2R, 2W, 2L; or placement through assessment.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture.
This course explores the artistic, business, and social elements of modern film. It examines the elements that go into making films: acting, directing, cinematography, writing and editing. It investigates the techniques used to manipulate the audience into fear, laughter and sadness; and compares the commercial box office hit and “movie star” to enduring artistic films and actors. The class will view and analyze films to evaluate filmmaking techniques and the impact of films and the movie business on society. AA/AS area B; CSU area C1; IGETC area 3

7 History of the Film (formerly Theatre Arts 4) (3)
Prerequisite: None
Advisory: English 78 or ESL 2R, or placement through assessment.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture.
Art of the motion picture, using both lectures and films. Students study the history of motion pictures, view and evaluate films which are landmarks in the art of movie making. AA/AS area B; CSU area C1; IGETC area 3

7A History of Film: 1880s Through the 1950s (formerly Theatre Arts 4A) (3)
Prerequisite: None
Advisory: English 58 and 78, or ESL 2R, 2L, 2W; or placement through assessment.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture.
This course is an historical and critical survey of film as an art form. It emphasizes the evolution of artistic and technical facets of production in features, documentary and experimental films. AA/AS area B; CSU area C1; IGETC area 3

7B History of Film: 1950’s to Present (formerly Theatre Arts 4B) (3)
Prerequisite: None
Advisory: English 58 and 78, or ESL 2R, 2L, 2W; or placement through assessment.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture.
This course is an historical and critical survey of film as an art form. It emphasizes the evolution of artistic and technical facets of production in features, documentary and experimental films. AA/AS area B; CSU area C1; IGETC area 3

7H Honors Seminar in History of Film (formerly Theatre Arts 4H) (1)
Prerequisite: Cumulative GPA of 3.0 or higher, and English 1A or 1A Honors with a grade of “C” or better.
Corequisite: Theatre Arts 7 or 7A or 7B.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 18 hours lecture.
This honors course (a supplement to Theatre Arts 7, 7A, and 7B) provides a seminar for advanced students to view and analyze additional films important to the development of cinematic art and to analyze and critique those films in terms of acting, directing, writing, editing, cinematography, and genre. May be taken twice with different corequisites. CSU area C1

8 Diversity in American Film (formerly Theatre Arts 11) (3)
Prerequisite: None
Advisory: English 58 and 78, or ESL 2R, 2W, or 2L; or placement through assessment.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture.
This course surveys the cinematic expression of artists often underrepresented in the main stream media such as women, Native-Americans, African-Americans, Latinos, Asian-Americans, gays and lesbians. Media stereotypes and the social, political and cultural climate that created them will be covered through films, lecture and discussion. AA/AS area 3B & F; CSU area c1

9 Cinema Genres (3)
Prerequisite: None
Advisory: English 58 and 78, or ESL 2R, 2W, or 2L; or placement through assessment.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture.
This course studies one or more film topics or genres. It explores specific types of film in depth concentrating on historical and technical changes in that genre. It covers the style of directing, acting and design for that genre. It examines specific actors, directors, writers, cinematographers, producers, and/or studios who specialized in that area. This course may be taken four times for credit on different topics. AA/AS area 3B

15A Honors Theory and Techniques of Acting (3)
Prerequisite: 3.0 or better cumulative GPA; two semesters of high school drama.
Corequisite: English 1A or English Honors
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours lecture.
The major theories and techniques of acting, including improvisation, physical expressiveness, voice production, and memorized scenes. Supplementary reading and writing required. Attendance at live theatrical performances required. (CAN DRAMA 8) AA/AS area B; CSU area C1; IGETC area 3

15A Theory and Techniques of Acting (3)
Prerequisite: None
Corequisite: English 58 or 60 and 78 or ESL 2R and 2W; or placement through assessment.
Transfer Credit: Accepted for credit: UC (unit limitation), CSU
Hours: 54 hours lecture.
This course explores the major theories and techniques of acting, including improvisation, physical expressiveness, voice production and character portrayal and scene work. (CAN DRAM 8) AA/AS area B; CSU area C1; IGETC area 3

15B  Theory and Techniques of Acting  
Prerequisite: Theatre Arts 15A or Theatre Arts 15A Honors with a grade of “C” or better.  
Transfer Credit: Accepted for credit: UC, CSU  
Hours: 54 hours lecture.  
This course covers the application of acting theories and techniques to scripts of realistic drama, memorized scenes, various acting exercises and audition pieces—all of which are presented in the classroom.

16  Styles of Acting  
Prerequisite: Theatre Arts 15A or 15A Honors with a grade of “C” or better.  
Advisory: Theatre Arts 1 and 15B.  
Transfer Credit: Accepted for credit: UC, CSU  
Hours: 36 hours lecture, 54 hours laboratory.  
Investigation of styles of acting through lectures and prepared scenes from representative classic and modern plays and one-act plays.

16A  Styles of Acting: Classical  
Prerequisite: Theatre Arts 15A or 15A Honors with a grade of “C” or better.  
Advisory: Theatre Arts 1, 15B  
Transfer Credit: Accepted for credit: UC, CSU  
Hours: 36 hours lecture, 54 hours laboratory.  
This course explores the styles of acting required for Classic Theatre from the Greeks through Restoration. It will examine the actor’s approach to the text as well as the voice and movement needs of classic styles. Styles include Greek, Commedia dell’ Arte, Shakespeare, Comedy of Manners, and Restoration.

16B  Styles of Acting: Modern  
Prerequisite: Theatre Arts 15A or 15A Honors with a grade of “C” or better.  
Advisory: Theatre Arts 1, 15B  
Transfer Credit: Accepted for credit: UC, CSU  
Hours: 36 hours lecture, 54 hours laboratory.  
This course explores the styles of acting required for modern theatre from 1875 to the present. It will examine the actor’s approach to modern texts as well as the voice and movement needs of modern styles. Styles include realism, and Theatre of the Absurd.

17  Theatre Movement  
Prerequisite: None  
Transfer Credit: Accepted for credit: UC, CSU  
Hours: 18 hour lecture; 54 hours laboratory.  
This course is an active participation and performance experience designed to provide opportunities in discovery and solving movement tasks of the actor. The course incorporates exercises to expand the individual’s movement for characters and scenes, as well as training in specific movement areas, such as combat, period style, and dance. The course may be taken four times for credit.

18A  Improvisation and Theatre Games  
Prerequisite: None  
Transfer Credit: Accepted for credit: UC, CSU  
Hours: 18 hours lecture; 54 hours laboratory

This class will include theatre games and improvisational exercises designed to develop trust and cooperation, mental acuity, and physical and vocal range as an actor. Improvisation technique will be built from the ground up, providing a strong foundation for advanced work in non-scripted performance and also in modern rehearsal technique that involves extensive use of improvisation.

19  Acting for the Camera  
Prerequisite: Theatre Arts 15A or 15A Honors with a grade of “C” or better.  
Transfer Credit: Accepted for credit: UC, CSU  
Hours: 36 hours lecture; 54 hours laboratory.  
This is an introductory course in the theory and technique of acting for film and video, focusing on the differences between stage acting and acting for the camera. Scenes and commercials are enacted and played back on videotape for class critiquing.

20  Voice, Diction and Dialects  
Prerequisite: None  
Advisory: English 58 and 78 or ESL 2R, 2W, or 2L; or placement through assessment.  
Transfer Credit: Accepted for credit: UC, CSU  
Hours: 54 hours lecture.  
This course focuses on the overall improvement of vocal quality. It emphasizes self-improvement drills involving breath control, resonance, pitch, inflection and articulation. The course covers the study and application of the International Phonetic Alphabet, and will also include a special study and application of stage dialects and/or accent rendition. It explores monologue and dialogue performances, and develops confidence in speaking and voice production. The emphasis is for theatre arts majors.

23  Introduction to Readers Theatre  
Prerequisite: None  
Advisory: English 58 and 78 or ESL 2R, 2L or 2W; or placement through assessment.  
Transfer Credit: Accepted for credit: UC, CSU  
Hours: 36 hours lecture; 54 hours laboratory.  
This is an introductory course to group oral performance of literature. The course explores the analysis of poetry, prose and drama with a goal of adapting literary materials for group performance. Students develop analytical and performance skills which culminate in Reader’s Theatre presentations.

24  Techniques of Puppetry  
Prerequisite: None  
Advisory: English 256 and 270 or ESL 1W and 1R; or placement through assessment.  
Transfer Credit: Accepted for credit: CSU  
Hours: 36 hours lecture; 54 hours laboratory.  
This course explores puppetry as a dramatic medium. Topics to be covered include: history and development of puppetry; puppet design and creation; puppet manipulation and improvisation; and puppet play production techniques and applications.

25  Children’s Theatre  
Prerequisite: None  
Advisory: English 78  
Transfer Credit: Accepted for credit: CSU  
Hours: 36 hours lecture; 54 hours laboratory.  
This course explores children’s literature in performance through dramatic presentations of fiction, drama and poetry for an audience of children or young
people. It provides the opportunity to analyze and experience the production process from script to stage. Class participation includes the development of a touring children's production. No prior theatrical experience is required. Recommended for theatre, education, early childhood education and recreation majors. Public performances and regular field trips are required. AA/AS area B; CSU area C1

26 Creative Drama for Children
(formerly Theatre Arts 22)

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 72 hours laboratory.
This course will explore basic drama forms to help the drama leader guide children in developing their own dramatic skills. The course provides instruction on how to infuse drama, pantomime, improvisation, and creative role-playing into school curriculum and recreational programs. This class is designed for anyone who interacts with pre-school and elementary age children.

29 Directing and Play Production
(formerly Theatre Arts 6, Fundamentals of Play Production)

Prerequisite: Theatre Arts 15B with a grade of “C” or better.
Advisory: English 58 and 78 or ESL 2R, 2L, or 2W; or placement through assessment.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 36 hours lecture.
This course is an introduction to directing and the elements of play production. It covers the process of preparing and analyzing a script for production, casting the show, blocking and rehearsing actors, dealing with technical needs, and promoting the show. It will also include directing scenes and preparing a prompt book. CSU area C1

30A Stagecraft

Prerequisite: None
Advisory: Mathematics 204, English 256 and 270
Transfer Credit: Accepted for credit: UC, CSU
Hours: 36 hours lecture; 72 hours laboratory.
This course is an introduction to backstage and the creation of scenery for theatre, film and television. It covers design styles, painting, set construction, set movement techniques, properties construction, backstage and rehearsal organization and management, and career possibilities. The course combines lectures, reading and projects with practical experience gained from working on department production. (CAN DRAM 12)

31 Stage Lighting

Prerequisite: None
Advisory: Mathematics 204, English 256 and 270
Transfer Credit: Accepted for credit: UC, CSU
Hours: 36 hours lecture; 72 hours laboratory.
This course is an introduction to the basic concepts of lighting for stage, film and television. The course covers the planning of lighting from the basics of electricity, equipment and control, to the design elements of color, space, scenery and movement to produce a lighting design. (CAN DRAMA 10)

32 Advanced Technical Theatre

Prerequisite: Theatre Arts 30A and 31.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 36 hours lecture; 72 hours laboratory.
This course is an advanced study dealing with technical theatre production techniques and design in the areas of scenery, props, lighting, sound, scenic painting, rigging and stage management through individual projects and participation in major productions. May be taken twice for credit.

34 Arts Management (formerly Theatre Arts 26)

Prerequisite: None
Advisory: English 58 and 78, or ESL 2W and 2R; or placement through assessment.
Transfer Credit: Accepted for credit: CSU
Hours: 36 hours lecture; 54 hours laboratory.
This course is a general survey class in arts management with emphasis on organization, marketing/development, and financial management. It includes promotion and publicity, house management, box office operations and public relations. Field work will include projects with an existing arts organization.

35 History and Theory of Costuming

Prerequisite: None
Advisory: English 58 and 78 or ESL 2R, 2L, 2W; or placement through assessment.
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.
This is a survey course of historical periods as portrayed through fashion and costumes from the cradle of civilization through modern times. The impact of social, political, cultural and economic issues on costuming is explored, as is the effect of costumes on society. Students integrate design elements with historical styles to create designs for theatrical costumes. AA/AS area B; CSU area C1

36 Costume Construction

Prerequisite: None
Corequisite: English 256 and 270, ESL 1W and 1R, or placement through assessment.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54 hours lecture; 54 hours laboratory.
This course explores the basic areas of costume construction: fabrics, color, patterns, sewing techniques, costume pieces and accessories. Period styles, costume analysis and basic design are also covered. Costume construction will be for theatrical productions. May be taken twice for credit.

37 Vintage Costuming
(Same as Fashion Careers 37)

Prerequisite: None
Advisory: English 256 and 270, ESL 1W and 1R; or placement through assessment.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 9-18 hours lecture; 27-54 hours laboratory.
This course covers the factors that influence historical costume design and production. It also includes the principles and techniques involved in developing and constructing a period costume. Costumes will be fabricated for both theatrical productions and individual projects. The historical period will change each semester. May be taken four times for credit on different topics. Not open to those who have completed Fashion 37.

39A Stage Make-Up

Prerequisite: None
Transfer Credit: Accepted for credit: UC, CSU
Hours: 18 hours lecture; 54 hours laboratory.
This course covers the basic techniques of theatrical makeup. It explores makeup materials, color and light, and modeling techniques in the development of makeup designs for youth, middle and old age, historical persons, stylized faces, clowns, animals, and fantasy makeup. (CAN DRAM 14)

42 Special Topics in Theatre (5-3)

Prerequisite: None
Transfer Credit: Accepted for credit: CSU
Hours: 27-162 hours laboratory.
This course is designed to give students an opportunity to study topics in theatre which are not included in current course offerings. May be taken four times for credit for a maximum of eight units on different topics.

43 Musical Theatre (Same as MUP 5) (formerly Theatre Arts 5) (1-2)

Prerequisite: Audition
Transfer Credit: Accepted for credit: UC, CSU
Hours: 54-108 hours laboratory.
This course explores the development of a musical theatre production presented before the campus and community. A different production will be presented each semester the course is offered. May be taken four times for credit. Not open to students who have completed MUP 5. CSU area C1

44 Fundamentals of Repertory Production (formerly Theatre Arts 7) (1-6)

Prerequisite: Audition/Interview
Transfer Credit: Accepted for credit: UC, CSU
Hours: 0-36 hours lecture and/or 0-162 hours laboratory.
This repertory production workshop provides for participation in one or more productions, working in all areas of theatre including acting, scenery, lighting, costumes, make-up and theatre publicity, and culminates in performance at the end of the session. May be taken four times for credit up to a maximum of 12 units.

46 One-Act Play Workshop (3)

Prerequisite: Theatre Arts 15A or 15A Honors and Theatre Arts 15B or 16 or 30A or 31.
Transfer Credit: Accepted for credit: UC, CSU
Hours: 36 hours lecture; 54 hours laboratory.
This course explores the play production process. Class members collaborate in the analysis, preparation and production of one-act plays through participation as either directors, writers, actors, or technicians. The process culminates in public performances. May be taken four times for credit.

47 Rehearsal and Performance (5-3)

Prerequisite: Audition/Interview
Transfer Credit: Accepted for credit: UC, CSU
Hours: 27-162 hours laboratory.
This course provides a workshop training experience in the preparation and performance of collegiate theatre productions. Actors audition with the director for acting roles. Students interested in technical work interview for backstage positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. May be taken four times for credit for a maximum of 12 units.

47A Rehearsal and Performance - Drama (5-3)

Prerequisite: Audition
Transfer Credit: Accepted for credit: UC, CSU
Hours: 27-162 laboratory.
This course provides a workshop training experience in the preparation and performance of dramatic theatre productions. Actors audition with the director for acting roles. Students interested in technical work interview for backstage positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. May be taken four times for credit for a maximum of 12 units.

47B Rehearsal and Performance - Comedy (5-3)

Prerequisite: Audition
Transfer Credit: Accepted for credit: UC, CSU
Hours: 27-162 hours laboratory.
This course provides a workshop training experience in the preparation and performance of comedy theatre productions. Actors audition with the director for acting roles. Students interested in technical work interview for backstage positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. May be taken four times for credit for a maximum of 12 units.

47C Rehearsal and Performance - Musical (5-3)

Prerequisite: Audition
Transfer Credit: Accepted for credit: UC, CSU
Hours: 27-162 hours laboratory.
This course provides a workshop training experience in the preparation and performance of musical theatre productions. Actors audition with the director for acting roles. Students interested in technical work interview for backstage positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. May be taken four times for credit for a maximum of 12 units.

47D Rehearsal and Performance - Classical (5-3)

Prerequisite: Audition
Transfer Credit: Accepted for credit: UC, CSU
Hours: 27-162 hours laboratory.
This course provides a workshop training experience in the preparation and performance of classical theatre productions. Actors audition with the director for acting roles. Students interested in technical work interview for backstage positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. May be taken four times for credit for a maximum of 12 units.

47E Rehearsal and Performance - Children’s Show (5-3)

Prerequisite: Audition
Transfer Credit: Accepted for credit: CSU
Hours: 27-162 hours laboratory.
This course provides a workshop training experience in the preparation and performance of children’s theatre productions. Actors audition with the director for acting roles. Students interested in technical work interview for backstage positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. May be taken four times for credit for a maximum of 12 units.
48  Work Experience in Theatre  (1-4)

Prerequisite: None.
Transfer Credit: Accepted for credit: CSU.
Hours: 18 hours lecture, 60-300 hours laboratory.
This course provides a supervised work experience in a professional theatre setting. Students may be assigned to work the box office, wardrobe, scenery construction, properties, lighting and sound, stage management, costuming, makeup, design, or acting. May be taken four times for a maximum of 8 units.

255A Senior Adult Theatre Workshop  (1-2)

Prerequisite: None
Hours: 18 hour lecture; 0-54 hours laboratory.
This course explores theatre specifically for senior adult actors and audience. It covers exercises in vocal and physical expression, theatre, characterization, dramatic script analysis, and the performance of dramatic scenes. May be taken four times for credit.

255B Senior Adult Theatre Workshop  (.5-2)

Prerequisite: Theatre Arts 255A with a grade of "C" or better.
Hours: 0-18 hours lecture; 0-54 hours laboratory.
Preparation and performance of theatre productions by senior adults, including acting and performing, stage managing, crewing, technical work in sets, props, lights, costumes, sound, makeup, box office and publicity. May be taken twice for credit.
300  Supervised Tutoring  (0)
Prerequisite: None.
Individualized tutoring designed to assist students to increase their success in college courses. May enroll for support of more than one college course per semester. Content will vary depending upon the adjunct course. Attention will be given to essential study skills and utilization of campus learning resources. May be repeated in subsequent semesters. Student must be enrolled in a college credit course and be referred by an instructor or counselor. May be repeated.

1  Freshman Project 1: College Skills and Values  (3)
Prerequisite: English 58 or 60 or Business 8 or ESL 2W or 2L or placement through assessment process.
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.
This course is an introduction to the cultural environment of college. It emphasizes study skills, critical thinking skills and self-assessment skills as they relate to life-long goal completion. Particular attention is given to the mechanism of intellectual self-discipline and its impact on setting and meeting life-long goals. AA/AS area E2; CSU area E1.

10  Tutoring High School Students  (3)
Prerequisite: Placement through assessment process.
Transfer Credit: Accepted for credit: CSU.
Hours: 36 hours lecture; 54 hours laboratory.
A program offered in coordination with high schools. The course will include a four week introductory training period. Tutors will work at a selected high school twice per week with assigned tutees. Recommended for students majoring in teacher preparation. May be taken twice for credit. AA/AS area E2; CSU area E1.

11A  Teaching Online  (1)
Prerequisite: English 1A with a grade of “C” or better.
Advisory: Working knowledge of Macintosh/PC.
Transfer Credit: Accepted for credit: CSU.
Hours: 18 hours lecture.
This course offers the opportunity to integrate the usage of software, hardware, and Internet tools and their related pedagogies into online teaching. The course will require specific hands-on activities and development of materials using technologies featured within the course. This course will provide a brief overview of how to teach a course online. The course will show how to facilitate a class discussion online, how to communicate online, how to create quizzes online, and how to send and receive assignments online.

12A  Introduction to Tutor Training  (1)
Prerequisite: None
Advisory: A grade of “B” or better in the course the student will serve as a tutor.
Transfer Credit: Accepted for credit: CSU.
Hours: 18 hours lecture.
This course is offered in coordination with the American River College Tutorial Services Program. It is designed to train students to become effective tutors.

12B  Introduction to Group Tutoring  (1)
Prerequisite: None
Advisory: A grade of “B” or better in course to be tutored.
Faculty recommendation to be a Beacon Learning Assistant or Learning Resource Center group tutor.
Transfer Credit: Accepted for credit: CSU.
Hours: 9 hours lecture; 27 hours laboratory.
This course is offered in coordination with the Beacon Peer-Assisted Learning Program and the Tutorial Services Program. It is designed to familiarize the Learning Assistant with the role of the tutor and the methods of effective group tutoring. This course emphasizes collaborative, interactive approaches to learning in a group setting.

22  Web Publishing  (3)
(same as Computer Information Science 22)
Prerequisite: None
Advisory: CIS 1, 21A
Transfer Credit: Accepted for credit: CSU.
Hours: 54 hours lecture.
This course introduces students to publishing on the Internet’s World Wide Web. Topics include creating WWW pages with the HyperText Markup Language (HTML), organizing a series of pages into a web site, and uploading web pages to a server. The course makes extensive use of the computer tools necessary to insert HTML tags, create images, and view web documents. As apprentice web designers and publishers, students will learn to identify the information dissemination needs of a client, design an appropriate WWW solution, and implement it.
47  **Group Leadership Processes**  

Prerequisite: An introductory course in psychology, sociology or speech.  
Transfer Credit: Accepted for credit: CSU  
Hours: 54 hours lecture, discussion and laboratory for each unit of credit.  
Designed to offer and to prepare students for necessary experiences in group processes as participants and as leaders. Students will be given opportunities to assume group leadership roles and to practice effective oral communication as they assist new students with general information about the college and its curriculum.

52  **Effective Study Skills**  

Prerequisite: None  
Advisory: English 256 with a grade of “C” or better or placement through assessment.  
Hours: 18 hours lecture.  
This course is designed to assist students to obtain the skills and knowledge necessary for success in college. A focus will be placed on communication skills, goal-setting, learning styles, evaluating web resources, and effective study skills such as time management, memory enhancement, note-taking techniques, textbook reading, exam preparation and exam anxiety.

270  **Becoming an Effective Student**  

Prerequisite: None.  
Hours: 54 hours lecture.  
Introductory course which includes a review of techniques and skills necessary for successful completion of college level courses. Includes a survey of current requirements for various curricular and vocational goals as well as orientation to college, self, and career. Problems of personality development and mental health are considered.
Welding is the most common way of permanently joining metal parts. Heat is applied to the pieces to be joined, the metal melts and fuses together to form a permanent bond. The resultant weld joint is as strong as if the two parts were one.

Because of its strength, welding is used to construct and repair ships, automobiles, spacecraft and to join steel beams and reinforcing rods in buildings, bridges and highways.

There are three basic methods used to create the heat necessary to weld metals.

The most frequently used process is called arc welding. It uses electricity to create heat as electrical current arcs between the tip of an electrode and the metal parts to be joined.

In resistance (or spot) welding, heat is created by resistance to the flow of electrical current through the metal parts. In gas welding, the flame from the combustion of gases is used to melt the metal.

It is the welder’s responsibility to control the amount of heat and the size of the melted area and to add the proper amount of filler material so that the parts form a strong bond or joint.

Welders must know how to use gas and electric welding equipment safely, and how to plan their work from drawings or specifications.

The ARC Program

The American Welding Society (AWS) nationally accredits the American River College’s welding program. ARC has met all the requirements of the AWS QC4 Standards for Accreditation of Test Facilities for their Certified Welder Program. AWS certification is recognized by the welding industry as an important step in professional development. With multiple certifications, ARC will prepare students to work with welding industry codes, standards and specifications.

The ARC welding program provides both classroom instruction and shop training for positions in most fields of welding. Competencies include techniques of jointing ferrous and non-ferrous metals by use of Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), Fluxed Core Arc Welding (FCAW) and Gas Tungsten Arc Welding (GTAW) welding processes. Competencies also include shop math, blueprint reading, welding symbol interpretation, oxy fuel gas cutting, plasma arc cutting, air arc gouging, welding metallurgy, welding inspection, and intensive training for welding certification.

Welding Technology

Degree: A.A. - Welding Technology
Certificate: Blueprint Interpretation
          Gas Metal Arc Plate & Pipe Welding
          Gas Tungsten Arc Plate & Pipe Welding
          Shielded Metal Arc Plate & Pipe Welding

Website: www.arc.losrios.cc.ca.us/techvoc

Welding 51 3
Welding 54 3
Welding 56 2
Welding 62A 3
Welding 62B 3
Welding 62C 3
Welding 64 3
Welding 64A 3
Welding 65A 3
Welding 65B 2
Welding 65C 3
Welding 66A 3
Welding 66B 3

Design Technology 51, Mathematics 51.

Recommended Electives

Design Technology 51, Mathematics 51.

General Education Graduation Requirement:
Students must also complete the general education graduation requirements for an A.A. degree. See general education requirements.

Cannot be completed in one year.
51 Introduction to Welding

Prerequisite: None
Transfer Credit: Accepted for credit: CSU.
Hours: 36 hours lecture; 54 hours laboratory.
This course is an introduction to welding processes, shielded metal arc, gas metal arc, flux-cored gas shield and self-shield, gas tungsten arc, oxyacetylene cutting on joint design, and positions used in industry. Safety in oxyacetylene cutting is also covered.

54 Introduction to Welding Metallurgy

Prerequisite: Welding 51
Hours: 54 hours lecture; 36 hours laboratory.
This course introduces production of iron and the manufacture of iron and steel in shapes and forms used in industry. The focus is on identification and selection of irons and steels, mechanical and physical properties of metals, and crystal structure of metals. Additionally failure and deformation, the heat treating of steel, and the metallurgy of welds will be covered.

62A Shielded Metal Arc Welding (Stick Electrode Welding)

Prerequisite: None
Corequisite: Welding 51.
Transfer Credit: Accepted for credit: CSU.
Hours: 36 hours lecture; 54 hours laboratory.
This course will cover pre-employment training for welding technicians. Emphasis on developing manipulative proficiency in the use of shielded metal-arc welding in the flat, horizontal, vertical and overhead positions on light and heavy gauge material. Emphasis will also be placed on groove welding of plate, limited and unlimited thickness in accordance with D1.1 Structural Welding Code. May be taken twice for credit.

62B Shielded Metal Arc Welding (Stick Electrode Welding)

Prerequisite: Welding 62A with a grade of “C” or better.
Transfer Credit: Accepted for credit: CSU.
Hours: 36 hours lecture; 54 hours laboratory.
This course will cover the welding requirements for any type of welded structure made from the commonly used carbon and low-alloy constructional steel. The course also will cover the rules and regulation of welding in the steel construction industry and the principles of welding inspection.

64 Gas Tungsten Arc Welding

Prerequisite: None
Corequisite: Welding 51
Hours: 36 hours lecture; 54 hours laboratory.
This course covers tungsten inert gas welding of aluminum, stainless steel and other metals used in industry.

64A Gas Tungsten Arc Welding (Pipe)

Prerequisite: Welding 64 with a grade of “C” or better.
Hours: 36 hours lecture; 54 hours laboratory.
This course will cover the areas of low-pressure and high-pressure critical piping systems such as steam pipe, pipe lines, boilers, offshore oil-rigs and other critical heavy duty application of piping systems will also be covered.

Welding Technology
65A  Gas Metal Arc Welding, Semi-automatic Processes  (3)
Prerequisite:  None
Corequisite:  Welding 51
Hours: 36 hours lecture; 54 hours laboratory.
This course will cover automatic wire feed welding covering fine through heavy wire welding on steel plate gauges of varying thickness. Joint design, gas variations and all welding positions are covered.

65B  Gas Metal Arc Welding of Non-Ferrous Metals  (2)
Prerequisite:  Welding 65A with a grade of “C” or better.
Hours: 18 hours lecture; 54 hours laboratory.
This course will cover semi-automatic wire feed welding using fine through heavy wire welding on non-ferrous metals of varying thickness. Joint design, gas variations and all welding positions are covered. Emphasis is on aluminum, stainless steels, and mixtures of gases. Introduction to open-groove plate and pipe gas metal arc welding processes is provided. A performance qualification test is optional at end of course.

65C  Gas Metal Arc Welding (GMAW) - Pipe  (3)
Prerequisite:  Welding 65A
Hours: 36 hours lecture; 54 hours laboratory.
The course will cover the areas of low-pressure heating, air-conditioning, refrigeration, and water supply as well as some gas and chemical systems. The short circuit metal transfer will be used on all gas metal arc welding (GMAW) pipe connections.

66A  Mathematics for Welding Technicians  (3)
Prerequisite:  None
Hours: 54 hours lecture.
This course covers practical mathematics as they are applied to technical and trade work. It involves applying mathematics principles to the welding trade. Areas covered are common fractions, decimal fractions, percentages, practical algebra, rectangles, triangles, metric measurement, measuring instruments, strength of materials and essentials of trigonometry. Problems involving labor and cost of material are also covered. AA/AS area D2

66B  Symbol Reading, Layout and Fabrication  (3)
Prerequisite:  None
Corequisite:  Welding 51
Transfer Credit:  Accepted for credit:  CSU.
Hours: 36 hours lecture; 54 hours laboratory.
This course will cover blueprint and welding symbol interpretation. Metal layout, measurement, marking and layout tools used in construction; techniques of fabrication and assembly methods. Concentration on fundamentals of blueprint reading and topics as basic lines and views, dimensions, notes and specification, structural shapes, sections, detail and assembly.

67  Introduction to Metal Fabrication and Sculpture (same as Art 67)  (3)
Prerequisite:  Welding 51 with a grade of “C” or better.
Hours: 36 hours lecture; 54 hours laboratory.
This course will cover metal sculpture techniques, design principles and materials used for sculpture, and functional and nonfunctional art forms, on ferrous and non-ferrous metals. Techniques on the major welding processes - gas welding, SMAW, MIG and TIG - will be an integral part of the course as well as related safety issues. This course may be taken twice for credit.

68  Introduction to Ornamental Iron (Same as Art 68)  (3)
Prerequisite:  Welding 51 with a grade of “C” or better
Hours: 36 hours lecture; 54 hours laboratory.
This course will cover the hands-on basics of metal forming and welding techniques, design principles and materials used for sculpture, and functional art forms with emphasis on the use of the anvil and the gas forge. Techniques on the major welding processes - gas welding, SMAW, MIG and TIG - will be an integral part of the course as well as related safety issues. This course may be taken twice for credit.

83  Advanced Student Projects  (2)
Prerequisite:  “C” or better in the Welding major.
Hours: 108 hours laboratory.
This course provides an opportunity for students to pursue advanced projects which are selected by the welding department. This course may be taken twice for credit.

93  Topics in Welding—New and Emerging Occupations  (.5-5)
Prerequisite:  To be determined for each topic.
Hours: 9-90 hours lecture, and/or 27-270 hours laboratory.
Individualized course developed in cooperation with industry to meet specialized training needs. This course may be taken four times with different topics.

118  Employability Skills for Technical Careers (same as Automotive Technology 118 and Electronics Technology 118)  (2)
Prerequisite:  None
Hours: 36 hours lecture.
This course provides the opportunity of exploring technical careers while developing valuable work and life skills. It is an introduction to a variety of technically-related occupations. Emphasis is placed on exploring technical careers in the Sacramento area. Activities are designed to enhance personal development, employability skills, and self esteem through leadership, citizenship, and character development.