# TABLE OF CONTENTS

- College Calendar ......................................................... 4
- Faculty ........................................................................... 5
- College Divisions .......................................................... 10
- Glossary of Terms .......................................................... 12
- Introduction to West Los Angeles College ....................... 14
- Admissions and Registration Information ......................... 20
  - Admission Eligibility .................................................. 20
  - Application for Admissions ......................................... 20
  - Residency Requirements ............................................. 20
  - Foreign Students Admissions ...................................... 21
  - Admissions Requirements for Veterans ......................... 22
  - Student Fees .............................................................. 23
  - Student Records and Directory Information .................. 25
  - Matriculation ............................................................ 26
  - Orientation and English/Math Assessment ..................... 26
  - Career Testing ........................................................... 27
- Academic Policies ........................................................... 28
  - Enrollment and Attendance Policies .............................. 28
  - Course Credit ............................................................ 29
  - Academic Standards and Credit Policies ....................... 35
  - Academic Honors ....................................................... 37
- Graduation and Educational Program Requirements ............ 39
  - Graduation Requirements ........................................... 40
  - Career Programs ....................................................... 44
  - Transfer Programs ..................................................... 55
- Transfer Requirements .................................................... 61
  - University of California Transfer Core ......................... 61
  - CSU General Education Requirements ............................ 63
  - Liberal Studies .......................................................... 65
  - Independent Colleges and Universities ......................... 66
- Course Descriptions ...................................................... 67
- Student Services and Programs ........................................ 102
  - Counseling and Guidance Services ............................... 102
  - Financial Aid ........................................................... 103
  - Veterans Services ..................................................... 104
  - Services for Students ............................................... 105
  - Student Activities .................................................... 106
  - Student Conduct ....................................................... 108
- Index ............................................................................... 113
- College Information ....................................................... 115
- Main Campus Map .......................................................... 115
  - Inside Back Cover

## USING THIS CATALOG

The West Los Angeles College Catalog describes the courses, programs and services of the college that are planned for the 1990-1992 academic years. **Most of the policies and regulations affecting students are described in this catalog, and each student is responsible for becoming familiar with this information.** More current and complete information may be obtained from the appropriate department or administrative office.
Career Programs

Students should refer to the "Graduation Requirements" section for additional information. Check prerequisites before scheduling in courses. Students are encouraged to seek assistance from counselors and faculty. Curricula listed under "Career Programs" are not for transfer students.

ACCOUNTING
ASSOCIATE IN ARTS DEGREE
CERTIFICATE PROGRAM

This program is designed to prepare the student for entry into the business community in such entry-level positions as bookkeeper, accounting clerk and assistant auditor. Skills required for maintaining records, controlling finances, and preparing financial reports are presented. Those intending to earn a B.A. in Accounting at a transfer institution should follow the transfer program in Business Administration.

Associate Degree

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 1*</td>
<td>Introductory Accounting I</td>
<td>5</td>
</tr>
<tr>
<td>ACCT 2</td>
<td>Introductory Accounting II</td>
<td>5</td>
</tr>
<tr>
<td>CO SCI 901</td>
<td>Introduction to Computers and Their Uses</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1</td>
<td>Principles of Economics I</td>
<td>3</td>
</tr>
<tr>
<td>ECON 2</td>
<td>Principles of Economics II</td>
<td>3</td>
</tr>
<tr>
<td>LAW 1</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 1</td>
<td>Principles of Selling</td>
<td>3</td>
</tr>
<tr>
<td>BUS/OA 32</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>(see &quot;Electives&quot; below)</td>
<td></td>
</tr>
</tbody>
</table>

**Certificate**

**REQUIRED COURSES**

All courses must be completed with a grade of C or better to count towards the accounting certificate. Upon completion of the requirements, a petition for the accounting certificate needs to be filed in the Office of Admissions and Records.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 1*</td>
<td>Introductory Accounting I</td>
<td>5</td>
</tr>
<tr>
<td>ACCT 2</td>
<td>Introductory Accounting II</td>
<td>5</td>
</tr>
<tr>
<td>ACCT 15</td>
<td>Tax Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 37</td>
<td>Accounting Machine Practice</td>
<td>3</td>
</tr>
<tr>
<td>BUS 1</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>LAW 1</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>(see &quot;Electives&quot; below)</td>
<td></td>
</tr>
</tbody>
</table>

**ELECTIVES (9 units from this list)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ACCT 3</td>
<td>Intermediate Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 20</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>CO SCI 901</td>
<td>Introduction to Computers and Their Uses</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1</td>
<td>Principles of Economics</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 1</td>
<td>Principles of Selling</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 2</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 1</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS/OA 32</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 25</td>
<td>Automated Accounting</td>
<td>3</td>
</tr>
</tbody>
</table>

All courses must be completed with a grade of C or better to count towards the accounting certificate. Upon completion of the requirements, a petition for the accounting certificate needs to be filed in the Office of Admissions and Records.

**AIRCRAFT ELECTRONICS TECHNOLOGY**

**ASSOCIATE IN SCIENCE DEGREE**

**CERTIFICATE PROGRAM**

To meet the rapidly growing demand for aircraft electronics technicians, the college offers both an Associate in Science Degree and a Certificate in Aircraft Electronics Technology. To earn the Associate Degree, students complete the 48 units of aircraft electronics technology courses listed below plus 16 units of general education courses. Those working for the certificate take the 48 units of technical courses only. Upon qualifying by examination, students are issued Federal Communications Commission certificates that entitle them to assume the responsibilities of qualified radio and radar technicians.

**NOTE:** The first and second semester constitute the core curriculum for Aircraft Electronics Technology and/or Electronics.

**Associate Degree or Certificate**

(Suggested sequence would be)

**FIRST SEMESTER**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AET 1</td>
<td>Scientific Calculator Electronics Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>AET 2</td>
<td>Aircraft Direct Current Theory and Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>AET 3</td>
<td>Aircraft Alternating Current Theory and Laboratory</td>
<td>4</td>
</tr>
</tbody>
</table>

**SECOND SEMESTER**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AET 4</td>
<td>Aircraft Semiconductor and Integrated Circuit Applications</td>
<td>4</td>
</tr>
<tr>
<td>AET 5</td>
<td>Aircraft Electronic Circuit Analysis I</td>
<td>4</td>
</tr>
<tr>
<td>AET 6</td>
<td>Aircraft Electronic Circuit Analysis II</td>
<td>4</td>
</tr>
</tbody>
</table>

**THIRD SEMESTER**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AET 7</td>
<td>Aircraft Receiver and Transmitter Principles I</td>
<td>4</td>
</tr>
<tr>
<td>AET 8</td>
<td>Aircraft Receiver and Transmitter Principles II</td>
<td>4</td>
</tr>
<tr>
<td>AET 9</td>
<td>Radio Communication</td>
<td>4</td>
</tr>
</tbody>
</table>

**FOURTH SEMESTER**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AET 10</td>
<td>Digital Computer Logic and Auto Pilot Systems</td>
<td>4</td>
</tr>
<tr>
<td>AET 11</td>
<td>Aircraft Multiplex Systems</td>
<td>4</td>
</tr>
<tr>
<td>AET 12</td>
<td>Aircraft Instruments and Intercom Systems</td>
<td>4</td>
</tr>
<tr>
<td>AET 51</td>
<td>1st, 2nd, 3rd, and 4th Semester</td>
<td>4</td>
</tr>
<tr>
<td>AET 52</td>
<td>Aircraft Modular Components &amp; Systems</td>
<td>4</td>
</tr>
</tbody>
</table>

Continued
Career Programs

AVIATION

MAINTENANCE TECHNICIAN ASSOCIATE IN SCIENCE DEGREE CERTIFICATE PROGRAM

To meet the aerospace industry’s demand for well-trained, certificated aircraft mechanics, the college offers an Aviation Maintenance Technician Associate Degree, an Airframe Maintenance Technician Certificate, and an Aircraft Powerplant Technician Certificate. Upon qualifying by written, oral, and practical examination, students are issued Federal Aviation Administration licenses.

NOTE: A student may attend classes for the AMT program eight hours per day or forty hours per week. This accelerated course will allow students to complete the requirements for the A&P license in only three semesters unless a scheduling conflict arises.

Associate Degree

FIRST SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 1</td>
<td>Maintenance Procedures</td>
</tr>
<tr>
<td>AMT 2</td>
<td>Maintenance Procedures Lab</td>
</tr>
<tr>
<td>AMT 3</td>
<td>Basic Aircraft Science</td>
</tr>
<tr>
<td>AMT 4</td>
<td>Basic Aircraft Science Lab</td>
</tr>
<tr>
<td>AMT 5</td>
<td>Basic Electricity and Auxiliary Systems</td>
</tr>
<tr>
<td>AMT 6</td>
<td>Basic Electricity and Auxiliary Systems Lab</td>
</tr>
</tbody>
</table>

SECOND SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 7</td>
<td>Electrical and Instrument Systems</td>
</tr>
<tr>
<td>AMT 8</td>
<td>Electrical and Instrument Systems Lab</td>
</tr>
<tr>
<td>AMT 9</td>
<td>Assembly, Rigging and Inspection</td>
</tr>
<tr>
<td>AMT 10</td>
<td>Assembly, Rigging and Inspection Lab</td>
</tr>
<tr>
<td>AMT 11</td>
<td>Aircraft Metal Assembly</td>
</tr>
<tr>
<td>AMT 12</td>
<td>Aircraft Metal Assembly Lab</td>
</tr>
</tbody>
</table>

THIRD SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>AMT 13</td>
<td>Hydraulic, Landing Gear and Fuel Systems</td>
</tr>
<tr>
<td>AMT 14</td>
<td>Hydraulic, Landing Gear and Fuel Systems Lab</td>
</tr>
<tr>
<td>AMT 15</td>
<td>Propeller and Powerplant Systems</td>
</tr>
<tr>
<td>AMT 16</td>
<td>Propeller and Powerplant Systems Lab</td>
</tr>
<tr>
<td>AMT 17</td>
<td>Ignition and Fuel Metering Systems</td>
</tr>
<tr>
<td>AMT 18</td>
<td>Ignition and Fuel Metering Systems Lab</td>
</tr>
</tbody>
</table>

FOURTH SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 19</td>
<td>Reciprocating Powerplant Overhaul</td>
</tr>
<tr>
<td>AMT 20</td>
<td>Reciprocating Powerplant Overhaul Lab</td>
</tr>
<tr>
<td>AMT 21</td>
<td>Powerplant Trouble Shooting and Testing</td>
</tr>
<tr>
<td>AMT 22</td>
<td>Powerplant Trouble Shooting and Testing Lab</td>
</tr>
<tr>
<td>AMT 23</td>
<td>Inspection and Evaluation</td>
</tr>
<tr>
<td>AMT 24</td>
<td>Inspection and Evaluation Lab</td>
</tr>
</tbody>
</table>

Certificate - Powerplant

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 1</td>
<td>Maintenance Procedures</td>
</tr>
<tr>
<td>AMT 2</td>
<td>Maintenance Procedures Lab</td>
</tr>
<tr>
<td>AMT 3</td>
<td>Basic Aircraft Science</td>
</tr>
<tr>
<td>AMT 4</td>
<td>Basic Aircraft Science Lab</td>
</tr>
<tr>
<td>AMT 5</td>
<td>Basic Electricity and Auxiliary Systems</td>
</tr>
<tr>
<td>AMT 6</td>
<td>Basic Electricity and Auxiliary Systems Lab</td>
</tr>
<tr>
<td>AMT 7</td>
<td>Electrical and Instrument Systems</td>
</tr>
<tr>
<td>AMT 8</td>
<td>Electrical and Instrument Systems Lab</td>
</tr>
<tr>
<td>AMT 10</td>
<td>Assembly, Rigging and Inspection</td>
</tr>
<tr>
<td>AMT 11</td>
<td>Assembly, Rigging and Inspection Lab</td>
</tr>
<tr>
<td>AMT 12</td>
<td>Aircraft Metal Assembly</td>
</tr>
<tr>
<td>AMT 13</td>
<td>Aircraft Metal Assembly Lab</td>
</tr>
<tr>
<td>AMT 15</td>
<td>Propeller and Powerplant Systems</td>
</tr>
<tr>
<td>AMT 16</td>
<td>Propeller and Powerplant Systems Lab</td>
</tr>
<tr>
<td>AMT 17</td>
<td>Ignition and Fuel Metering Systems</td>
</tr>
<tr>
<td>AMT 18</td>
<td>Ignition and Fuel Metering Systems Lab</td>
</tr>
<tr>
<td>AMT 19</td>
<td>Reciprocating Powerplant Overhaul</td>
</tr>
<tr>
<td>AMT 20</td>
<td>Reciprocating Powerplant Overhaul Lab</td>
</tr>
<tr>
<td>AMT 21</td>
<td>Powerplant Trouble Shooting and Testing</td>
</tr>
<tr>
<td>AMT 22</td>
<td>Powerplant Trouble Shooting and Testing Lab</td>
</tr>
<tr>
<td>AMT 23</td>
<td>Inspection and Evaluation</td>
</tr>
<tr>
<td>AMT 24</td>
<td>Inspection and Evaluation Lab</td>
</tr>
</tbody>
</table>

Certificate Airframe

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 1</td>
<td>Maintenance Procedures</td>
</tr>
<tr>
<td>AMT 2</td>
<td>Maintenance Procedures Lab</td>
</tr>
</tbody>
</table>

Certificate A&P

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 1</td>
<td>Introductory Accounting I</td>
</tr>
<tr>
<td>OR ACCT 21</td>
<td>Bookkeeping &amp; Accounting I</td>
</tr>
</tbody>
</table>

Continued
Career Programs

ACCT 22  Bookkeeping & Accounting II .......................... 3
ACCT 37  Accounting Machine Practice .......................... 1
CO SCI 1901 Introduction to Computers and Their Uses ............ 3
BUS 1  Introduction to Business .................................. 3
BUS 31  Business English ........................................... 3
BUS 32  Business Communications .................................. 3
BUS 38  Business Computations ..................................... 3
LAW 1  Business Law I ............................................... 3
MGMT 1  Principles of Management ................................ 3
MGMT 13 Small Business Management I .......................... 3
MKTG 1  Principles of Selling ...................................... 3
MKTG 21  Principles of Marketing ................................. 3
RE 1  Principles of Real Estate ..................................... 3

RECOMMENDED UNITS
MGMT 2  Organization and Management Theory .................. 3
RE 18  Real Estate Investments ..................................... 3

Certificate

REQUIRED COURSES Units
ACCT 1  Introductory Accounting .................................. 5
ACCT 21  Bookkeeping & Accounting I ............................. 3
AND
ACCT 22  Bookkeeping & Accounting II ............................. 3
CO SCI 1901 Introduction to Computers and Their Uses ............ 3
BUS 1  Introduction to Business .................................. 3
BUS 38  Business Computations ..................................... 3
LAW 1  Business Law I ............................................... 3
MGMT 1  Principles of Management ................................ 3
MGMT 2  Organization and Management Theory .................. 3
BUS 32  Business Communications .................................. 3
MKTG 1  Principles of Selling ...................................... 3
MKTG 21  Principles of Marketing ................................. 3
RE 1  Principles of Real Estate ..................................... 3

BUSINESS (LEGAL ASSISTANT/PARALEGAL OPTION)
ASSOCIATE IN ARTS DEGREE
CERTIFICATE PROGRAM

The continued growth of the legal profession has created a need for paralegals/legal assistants to combine some of the duties of a legal secretary with some of the duties of an attorney. These paragraphers are highly trained in various aspects of the law and work under the supervision of lawyers. The field of paralegal/legal assistant covers legal research, real estate law, probate, torts, wills, family law, insurance claims, personal injury and civil litigation. These duties were previously beyond the training of legal secretaries and, therefore, were performed by lawyers.

NOTE: This program is not designed for preparation for law school admission. Students should consult catalogs of law schools of their choice or a counselor when planning to attend law school.

Associate Degree

REQUIRED COURSES UNITS
LAW 1  Business Law I ............................................... 3
LAW 2  Business Law II .............................................. 3
LAW 3  Intro to Legal Assistant I .................................. 3
LAW 4  Intro to Legal Assistant II ................................ 3
LAW 12  Tort Law and Claims Investigation ...................... 3
LAW 13  Wills, Trusts, and Probate Administration ............... 3
LAW 14  Law Office Management ................................... 3
LAW 15  Property, Bankruptcy and Family Law .................. 3
LAW 16  Civil and Criminal Evidence* ............................ 3
LAW 17  Basic Probate Procedure .................................. 3
COOP ED  Field Practice in Law Office ........................... 1-4
OA 1  Typewriting* .................................................. 3
ENG 101  College Reading and Composition I .................... 3

NOTE: Students wishing to enroll in this program must take the WLAC English Placement Test.

RECOMMENDED COURSES UNITS
AJ 2  Concepts of Criminal Law .................................... 3
AJ 3  Legal Aspects of Evidence* ................................... 3
AJ 4  Principles and Procedures of the Justice System .......... 3
AJ 5  Criminal Investigation ........................................ 3
LAW 3  Civil Rights and the Law ................................... 3
OA 15  Word Processing Concepts in Information Systems* .... 3
RE 5  Legal Aspects of Real Estate I .............................. 3
RE 16  Income Tax Aspects of Real Estate ......................... 3

*Courses with an asterisk may be substituted for the courses with the asterisk in the RECOMMENDED COURSES listing.

Students who wish to earn the Associate Degree must take the above courses and also General Education courses specified in graduation requirements, Plan B.

Certificate

LAW 1  Business Law I ............................................... 3
LAW 2  Business Law II .............................................. 3
LAW 10  Introduction to Legal Assistant I ......................... 3
LAW 11  Introduction to Legal Assistant II ......................... 3
LAW 12  Tort Law and Claims Investigation ...................... 3
LAW 13  Wills, Trusts, and Probate Administration ............... 3
LAW 14  Law Office Management ................................... 3
LAW 15  Property, Bankruptcy and Family Law .................. 3
LAW 16  Civil and Criminal Evidence* ............................ 3
AJ 3  Legal Aspects of Evidence ................................... 3
LAW 20  Basic Probate Procedure .................................. 3
COOP ED  Field Practice in Law Office ........................... 1-4
OA 1  Typewriting* .................................................. 3
OA 35  Word Processing Concepts in Information Systems ....... 3
ENG 101  College Reading and Composition I .................... 3

Students wishing to enroll in this program must take the WLAC English Placement Test.

BUSINESS DATA PROCESSING
ASSOCIATE IN ARTS DEGREE
CERTIFICATE PROGRAM

The curriculum prepares students to enter the field of business data processing by providing background in data processing technology, accounting, marketing, and management.

Associate Degree

REQUIRED COURSES UNITS
ACCT 1  Introductory Accounting .................................. 5
CO SCI 1901 Introduction to Computers and Their Use ............ 3
CO SCI 1902 Introduction to Computer Science ................... 3
CO SCI 195  Beginning COBOL ....................................... 3
CO SCI 1930 Microcomputer Application Software ................. 3
CO SCI 1933 Micro Data Base Programming ......................... 3
BUS 1  Introduction to Business .................................. 3
MKTG 21  Principles of Marketing ................................ 3
MGMT 1  Principles of Management ................................ 3
CO SCI 1934 Operating Systems ................................... 3
CO SCI 1938 Advanced BASIC Programming ....................... 3
CO SCI 1945 Advanced COBOL Programming ....................... 3

Certificate UNITS
CO SCI 1901 Introduction to Computers and Their Use ........... 3
CO SCI 1902 Introduction to Computer Science ................... 3
CO SCI 1915 Beginning COBOL ....................................... 3

Continued


**Career Programs**

**BUSINESS MANAGEMENT**

**ASSOCIATE IN ARTS DEGREE AND CERTIFICATE PROGRAM**

The management program is designed to teach businessmen and businesswomen, public servants and professionals in all fields the process of effective decision-making. This is accomplished through understanding human interaction, finances, and other business disciplines. The central concepts of management (planning, organizing, staffing, directing and controlling) are applied. Completion of this program enables a future manager to perform effectively at an entry level in any organization.

**Associate Degree**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 1</td>
<td>5</td>
</tr>
<tr>
<td>BUS 1</td>
<td>3</td>
</tr>
<tr>
<td>BUS 38</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1</td>
<td>3</td>
</tr>
<tr>
<td>BUS 32</td>
<td>3</td>
</tr>
<tr>
<td>OR ENG 22</td>
<td>3</td>
</tr>
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**OR**

<table>
<thead>
<tr>
<th>Course</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>3</td>
</tr>
<tr>
<td>LAW 1</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 1</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 2</td>
<td>3</td>
</tr>
<tr>
<td>OR Any other Business Cooperative Education, Economics, Law or Management/Supervision course and/or 308 Course(s) of 3-credit (3)</td>
<td></td>
</tr>
</tbody>
</table>

**Certificate**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 1</td>
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</tr>
<tr>
<td>BUS 1</td>
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</tr>
<tr>
<td>BUS 38</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1</td>
<td>3</td>
</tr>
<tr>
<td>ENG 22</td>
<td>3</td>
</tr>
<tr>
<td>LAW 1</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 1</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 2</td>
<td>3</td>
</tr>
<tr>
<td>OR Any other Business Cooperative Education, Economics, Law or Management/Supervision course and/or 308 Course(s) of 3-credit (3)</td>
<td></td>
</tr>
</tbody>
</table>

*Please consult English Department for substitutions*

**BUSINESS MANAGEMENT**

**(SMALL BUSINESS)**

**ASSOCIATE IN ARTS DEGREE CERTIFICATE PROGRAM**

The small business management curriculum is for those men and women who someday may go into business for themselves and for those who are already in business for themselves but wish to strengthen their entrepreneurial and managerial skills. Course work is designed so that students understand the financial, managerial, marketing, accounting, legal and practical day-to-day decision-making concerns of those in small business.

**Associate Degree**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 1</td>
<td>5</td>
</tr>
</tbody>
</table>

**BUSINESS MARKETING**

**ASSOCIATE IN ARTS DEGREE AND CERTIFICATE PROGRAM**

The marketing program prepares individuals for such marketing positions as store manager, division manager, department manager, buyer, credit manager, and retail or industrial sales personnel.

**Associate Degree**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 1</td>
<td>5</td>
</tr>
<tr>
<td>BUS 1</td>
<td>3</td>
</tr>
<tr>
<td>BUS 38</td>
<td>3</td>
</tr>
<tr>
<td>LAW 1</td>
<td>3</td>
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<tr>
<td>MGMT 1</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 2</td>
<td>3</td>
</tr>
<tr>
<td>OR Any other Business Cooperative Education, Economics, Law or Management/Supervision course and/or 308 Course(s) of 3-credit (3)</td>
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**RECOMMENDED**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>ACCT 37</td>
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<tr>
<td>COOP. ED</td>
<td>1-4</td>
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<tr>
<td>MGMT 13</td>
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<tr>
<td>MKTG 32</td>
<td>3</td>
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**Certificate**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>BUS 1</td>
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</tr>
<tr>
<td>BUS 32</td>
<td>3</td>
</tr>
<tr>
<td>BUS 38</td>
<td>3</td>
</tr>
<tr>
<td>LAW 1</td>
<td>3</td>
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<td>MGMT 1</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 6</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 11</td>
<td>3</td>
</tr>
</tbody>
</table>

Continued
Career Programs

MKTG 1 Principles of Selling ........................................ 3
MKTG 11 Fundamentals of Advertising .................................. 3
MKTG 21 Principles of Marketing .................................... 3
COOP. ED. Work Experience ........................................ 1-4

Business Certificate Program for Graduates of a Four-year Institution

This program, specifically designed for those men and women with a Baccalaureate degree in a non-business subject, prepares individuals for employment in such areas as financial analysis, market analysis, sales, and general management. The program builds upon the student's previous education.

ACCT 1 Introductory Accounting I .................................. 5
BUS 1 Introduction to Business ........................................ 3
BUS 38 Business Computations ....................................... 3
CO SCI 110 Introduction to Computers and Their Uses .......... 3
LAW 1 Business Law I .................................................. 3
MGMT 1 Organization & Management Theory ........................ 3

CHILD DEVELOPMENT ASSOCIATE IN ARTS DEGREE CERTIFICATE PROGRAM

The Child Development program serves those entering and currently employed in the rapidly expanding field of Early Childhood Education. Students are prepared to teach in pre-school programs, including private schools, children's centers, Head Start, parent-cooperatives, and parochial schools, as well as to serve as educational aides in elementary schools. The program also benefits anyone interested in understanding children, their development, and their behavior. Child Development major should see a counselor.

Associate Degree

REQUIRED COURSES

CD 10 Child Growth and Development ................................ 3
CD 2 Early Childhood: Principles and Practices .................. 3
CD 3 Creative Experience for Children ............................. 3
CD 10 Child Health .................................................... 3
CD 11 Home, School and Community Relations .................. 3
CD 12 Parent-Teacher-Child Interaction ............................. 3
CD 21 Child Development Practice and Observation .............. 3
CD 22 Laboratory in Child Development ............................ 4
CD 28 Administration and Supervision of Early Childhood Programs ........................................ 3

FCS 21 Nutrition ...................................................... 3

RECOMMENDED

CD 30 Infant Studies .................................................. 3
CD 34 Observing and Recording Children's Behavior .......... 3
PSYCH 1 General Psychology ......................................... 3

OR

ANTHRO 102 Human Ways of Life: Cultural Anthropology .......... 3

OR

SOC 1 Introduction to Sociology .................................... 3

Certificate

CD 10 Child Growth and Development ................................ 3
CD 2 Early Childhood: Principles and Practices .................. 3
CD 3 Creative Experience for Children ............................. 3
CD 10 Child Health .................................................... 3
CD 11 Home, School and Community Relations .................. 3

CD 12 Parent-Teacher-Child Interaction ................................ 3
CD 21 Child Development Practice and Observation .............. 3
CD 22 Laboratory in Child Development ............................ 4
CD 28 Administration and Supervision of Early Childhood Programs ........................................ 3

FCS 21 Nutrition ...................................................... 3

PSYCH 1 General Psychology ......................................... 3

COMPUTER SCIENCE INFORMATION TECHNOLOGY ASSOCIATE IN ARTS DEGREE CERTIFICATE PROGRAM

This curriculum offers instruction to students interested in computer science or information technology as a career. Students entering this area should have a comprehensive background in mathematics, natural science or an allied area such as accounting or business.

Associate Degree

REQUIRED COURSES

CO SCI 110 Introduction to Computers and Their Uses .......... 3
CO SCI 192 Introduction to Computer Science ..................... 3
CO SCI 193 Beginning FORTRAN Programming .................... 3
CO SCI 195 Beginning COBOL Programming .......................... 3
CO SCI 197 Beginning Micro-Computer Assembly Language ....... 3
CO SCI 1933 Micro-Computer Database Systems ................... 3
CO SCI 1934 Operating Systems ...................................... 3
CO SCI 1936 Introduction to Data Structure ....................... 3
CO SCI 1938 Business BASIC Programming .......................... 3

Certificate

CO SCI 192 Introduction to Computers and Their Uses ............. 3
CO SCI 193 Beginning FORTRAN Programming .................... 3
CO SCI 195 Beginning COBOL Programming .......................... 3
CO SCI 197 Beginning Micro-Computer Assembly Language ....... 3
CO SCI 1933 Micro-Computer Database Systems ................... 3
CO SCI 1934 Operating Systems ...................................... 3
CO SCI 1936 Introduction to Data Structure ....................... 3
CO SCI 1938 Business BASIC Programming .......................... 3

Students who have taken advanced courses in the Department with an average of "B" or better but have not taken Co Sci 901 may request a waiver and may substitute MKT 21 or MGMT 11. If additional credits are required, approval of faculty for suitable courses must be obtained. Co Sci 930 may be substituted for any of the above classes, except for Co Sci 901 and 902.

DENTAL HYGIENE ASSOCIATE IN SCIENCE DEGREE ( Admission by Special Selection)

The Dental Hygienist, as a member of a modern dental health team, is qualified by education and license to provide primary care to patients for the maintenance of oral health and prevention of oral disease.

Under supervision of the dentist, the hygienist removes deposits and stains from teeth, applies agents to help prevent tooth decay, prepares clinical laboratory tests and provides oral health instruction.

The Dental Hygiene Program is accredited by the American Dental Association, Commission on Dental Accreditation. The California Board of Dental Examiners has certified our College faculty to teach the three legal training functions for dental hygiene: local anesthesia, soft-tissue curettage, and nitrous oxide and oxygen sedation. Admission to the dental hygiene program is highly
selective and by special examination. The admission requirement are available from the counseling office or the dental hygiene department.

In the curriculum below, courses are planned in sequence. Satisfactory completion of all courses, with a C grade or better in a given semester, is required before the student may continue to the next semester in dental hygiene. It is necessary to obtain at least a C grade in all courses in order to continue in the dental hygiene program. Candidates for graduation must satisfactorily complete the dental hygiene program, according to the State of California Dental Practice Act guidelines for curriculum. With the approval of the dental hygiene department, a candidate may qualify to take the Dental Hygiene National Board Examination, the State Board Examination, and earn an Associate in Science Degree.

### Associate Degree

**Prerequisites**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 10 or Chemistry 1</td>
<td>5</td>
</tr>
<tr>
<td>Microbiology 20</td>
<td>4</td>
</tr>
<tr>
<td>Anatomy 1</td>
<td>4</td>
</tr>
<tr>
<td>Physiology 1 4</td>
<td>3</td>
</tr>
<tr>
<td>English 101</td>
<td>3</td>
</tr>
<tr>
<td>Psychology 13</td>
<td>3</td>
</tr>
<tr>
<td>Sociology 1</td>
<td>3</td>
</tr>
<tr>
<td>American History</td>
<td>3</td>
</tr>
<tr>
<td>Speech 101</td>
<td>3</td>
</tr>
<tr>
<td>Active Red Cross C.P.R. Card</td>
<td></td>
</tr>
</tbody>
</table>

*This item may be obtained after acceptance into the dental hygiene program and before commencement of the fall semester of the first year.*

**NOTE:** Courses open only to students accepted in dental hygiene program.

**FIRST SEMESTER - Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DH 100 Principles of Clinical Dental Hygiene</td>
<td>2</td>
</tr>
<tr>
<td>DH 101 Introduction to Clinical Dental Hygiene I</td>
<td>2</td>
</tr>
<tr>
<td>DH 102 Radiology I - Introduction to Radiology</td>
<td>1</td>
</tr>
<tr>
<td>DH 103 Radiology I - Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>DH 105 General Pathology</td>
<td>2</td>
</tr>
<tr>
<td>DH 106 General and Dental Anatomy</td>
<td>2</td>
</tr>
<tr>
<td>DH 156 Head and Neck Histology</td>
<td>2</td>
</tr>
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</table>

**SECOND SEMESTER - Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>DH 104 Tooth Morphology</td>
<td>2</td>
</tr>
<tr>
<td>DH 109 Introduction to Period</td>
<td>2</td>
</tr>
<tr>
<td>DH 150 Preventive Dentistry</td>
<td>1</td>
</tr>
<tr>
<td>DH 151 Clinical Dental Hygiene II</td>
<td>1</td>
</tr>
<tr>
<td>DH 152 Special Patient Care</td>
<td>1</td>
</tr>
<tr>
<td>DH 153 Radiology II - Interpretation</td>
<td>1</td>
</tr>
<tr>
<td>DH 154 Oral Pathology</td>
<td>2</td>
</tr>
<tr>
<td>DH 155 Dental Materials</td>
<td>2</td>
</tr>
<tr>
<td>DH 207 Pain Control</td>
<td>1</td>
</tr>
<tr>
<td>DH 256 Biochemical Nutrition</td>
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</table>

**THIRD SEMESTER - Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>DH 155 Dental Materials</td>
<td>2</td>
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<tr>
<td>DH 200 Introduction to Dental Pathology</td>
<td>1</td>
</tr>
<tr>
<td>DH 201 Clinical Dental Hygiene III</td>
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<tr>
<td>DH 203 Dental Specialties and Expanded Functions - Lab</td>
<td>1</td>
</tr>
<tr>
<td>DH 204 Dental Health Education</td>
<td>1</td>
</tr>
<tr>
<td>DH 205 Dental Health Education - Practicum</td>
<td>1</td>
</tr>
<tr>
<td>DH 206 Periodontics</td>
<td>2</td>
</tr>
<tr>
<td>DH 208 Pharmacology</td>
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</tbody>
</table>

**FOURTH SEMESTER - Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>DH 202 Dental Specialties and Expanded Functions</td>
<td>2</td>
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<tr>
<td>DH 210 Emergencies in Dental Practice</td>
<td>1</td>
</tr>
<tr>
<td>DH 250 Advanced Periodontal Seminar</td>
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<tr>
<td>DH 251 Clinical Dental Hygiene IV</td>
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<tr>
<td>DH 252 Essentials of Dental Hygiene Practice</td>
<td>2</td>
</tr>
<tr>
<td>DH 253 Community Dental Health</td>
<td>2</td>
</tr>
<tr>
<td>DH 254 Community Dental Health - Practicum</td>
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</tr>
</tbody>
</table>

**ELECTRONICS ASSOCIATE IN SCIENCE DEGREE CERTIFICATE PROGRAM**

Designed to prepare students for entry level jobs, specialty training, and job skills upgrading, the electronics program emphasizes the use, manufacturing, and servicing of electronics equipment. Job opportunities may be found in the manufacturing, aerospace, and consumer markets.

Training in electronics includes work in mathematics, science, the study of solid state devices and their associated circuits, computers, television, and related subjects.

Two specialty areas of training may be offered beyond the general electronics technology program: computer technology and communications. The specialty training courses are often attended by people who are employed as technicians who wish to upgrade their skills.

**NOTE:** The core curriculum in electronics is indicated by asterisks below. These courses provide basic electronic training for technicians and are equivalent to Aviation Electronics Technology 1-6.

### Associate Degree

**REQUIRED COURSES:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELEC 2 Introduction to Electronics</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 4 Fundamentals of Electronics I</td>
<td>4</td>
</tr>
<tr>
<td>ELEC 6 Fundamentals of Electronics II</td>
<td>4</td>
</tr>
<tr>
<td><strong>ELEC 20 Electronic Circuits I</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>ELEC 22 Electronic Circuits II</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>ELEC 24 Electronic Circuits III</strong></td>
<td>4</td>
</tr>
<tr>
<td>ELEC 54 Computer Logic</td>
<td>4</td>
</tr>
<tr>
<td>ELEC 56 Computer Circuits</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 57 Computer Circuits Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>PHY 12 Physics Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>PHY 14 Physics Fundamentals Laboratory</td>
<td>1</td>
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<tr>
<td>General education requirements</td>
<td>21</td>
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</table>

### CERTIFICATE

**REQUIRED COURSES:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>*ELEC 4 Fundamentals of Electronics I</td>
<td>4</td>
</tr>
<tr>
<td>*ELEC 6 Fundamentals of Electronics II</td>
<td>4</td>
</tr>
<tr>
<td><strong>ELEC 20 Electronic Circuits I</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>ELEC 22 Electronic Circuits II</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>ELEC 24 Electronic Circuits III</strong></td>
<td>4</td>
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<tr>
<td><strong>CORE I</strong></td>
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<tr>
<td><strong>CORE II</strong></td>
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</table>

**Recommended courses beyond the certificate:**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>ELEC 54 Computer Logic</td>
<td>4</td>
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<tr>
<td>ELEC 56 Computer Circuits</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 77 Computer Circuits Laboratory</td>
<td>1</td>
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<tr>
<td>Communications</td>
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<td>ELEC 44 Communications Electronics</td>
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<td>PHY 12 Physics Fundamentals</td>
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<td>PHY 14 Physics Fundamentals Laboratory</td>
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<tr>
<td>Microwave</td>
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<td>ELEC 60 Microwave Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 61 Microwave Fundamentals Laboratory</td>
<td>1</td>
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</tbody>
</table>

Continued
Career Programs

CORE COURSES

CORE I
The mathematics portion of Core I courses parallel the content of Aviation Electronics 1, Scientific Calculator Electronics, Mathematics, Electronics 4 and 6 are the same as AET 2 and 3 in the treatment of DC and AC circuits.

CORE II
The prerequisite for Core II courses is satisfactory completion of Core I courses with a "C" or better or equivalent. Electronics 20, 22 and 24 present the same material as AET 4, 5, and 6.
For further information, students are directed to contact a counselor at the airport campus.

ENVIRONMENTAL HAZARDOUS MATERIALS TECHNOLOGY ASSOCIATE IN ARTS DEGREE

The EHM T Associate Degree Program is a two-year program. Students successfully completing this 60-unit program are prepared to either enter the workforce at the technician level or transfer into a Bachelors Degree program. Satisfactory completion of the 60 units of required and elective courses, coupled with the college’s general education requirements, are required for transfer or the EHM T Associate Degree.

Associate Degree

REQUIRED COURSES
(A suggested sequence would be)

FIRST SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>ENVI1</td>
<td>The Human Environment: Physical Processes</td>
<td>3</td>
</tr>
<tr>
<td>OR</td>
<td>ENVI2</td>
<td>The Human Environment: Biological Processes</td>
</tr>
<tr>
<td>CHEM3</td>
<td>Introductory Chemistry</td>
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</table>

SECOND SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>BIO5</td>
<td>Introduction to Human Biology</td>
<td>4</td>
</tr>
<tr>
<td>EHM T20</td>
<td>Introduction to Managing Hazardous Materials</td>
<td>3</td>
</tr>
<tr>
<td>EHM T30</td>
<td>Hazardous Waste General/Reduction/Treatment</td>
<td>3</td>
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THIRD SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>EHM T40</td>
<td>Health Effects of Environmental Hazardous Materials</td>
<td>3</td>
</tr>
<tr>
<td>EHM T60</td>
<td>Hazardous Waste Management Applications</td>
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FOURTH SEMESTER

<table>
<thead>
<tr>
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<th>Title</th>
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<tbody>
<tr>
<td>EHM T70</td>
<td>Safety and Emergency Response</td>
<td>4</td>
</tr>
<tr>
<td>EHM T80</td>
<td>Hazardous Materials Management Applications</td>
<td>4</td>
</tr>
<tr>
<td>ENG22</td>
<td>Technical English</td>
<td>3</td>
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STONGLY RECOMMENDED ELECTIVES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>CS901</td>
<td>Introduction to Computers and Their Use</td>
<td>3</td>
</tr>
<tr>
<td>POLSCI 4</td>
<td>Introduction to State and Local Governments</td>
<td>3</td>
</tr>
<tr>
<td>BUS1</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
</tbody>
</table>

The EHM T Certificate program is designed to be a one-year program that can either prepare students or upgrade working individuals with technician-level skills. Satisfactory completion of the 36-unit program is required for the awarding of the EHM T Certificate.

Certificate

REQUIRED COURSES
(A suggested sequence would be)

FIRST SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>ENVI1</td>
<td>The Human Environment: Physical Processes</td>
<td>3</td>
</tr>
<tr>
<td>OR</td>
<td>ENVI2</td>
<td>The Human Environment: Biological Processes</td>
</tr>
<tr>
<td>BIO5</td>
<td>Introduction to Human Biology</td>
<td>4</td>
</tr>
<tr>
<td>CHEM3</td>
<td>Introductory Chemistry</td>
<td>5</td>
</tr>
</tbody>
</table>

SECOND SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>EHM T20</td>
<td>Introduction to Managing Hazardous Materials</td>
<td>3</td>
</tr>
<tr>
<td>EHM T30</td>
<td>Hazardous Waste General/Reduction/Treatment</td>
<td>3</td>
</tr>
<tr>
<td>EHM T40</td>
<td>Health Effects of Environmental Hazardous Materials</td>
<td>3</td>
</tr>
<tr>
<td>EHM T60</td>
<td>Hazardous Waste Management Applications</td>
<td>4</td>
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SUMMER

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>EHM T70</td>
<td>Safety and Emergency Response</td>
<td>4</td>
</tr>
<tr>
<td>EHM T80</td>
<td>Hazardous Materials Management Applications</td>
<td>4</td>
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RECOMMENDED

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO SCI 901</td>
<td>Introduction to Computers and Their Use</td>
<td>3</td>
</tr>
<tr>
<td>POLSCI 4</td>
<td>Introduction to State and Local Governments</td>
<td>3</td>
</tr>
<tr>
<td>BUS1</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
</tbody>
</table>

LIBERAL ARTS ASSOCIATE IN ARTS DEGREE

The Liberal Arts major is designed for both transfer and career majors.

I. Liberal Arts major requires 30 Units of General Education Plan A in the current catalog.

II. No course may be used to fulfill more than one requirement.

III. 18 Units in any discipline in which West Los Angeles College is authorized to offer a career diploma. Courses clearly and logically related to or supportive of the discipline may also be used. Remedial and developmental courses may not be used toward a major. This pattern requires a contract signed by the student, a counselor, and the appropriate division or discipline chairperson.

OFFICE ADMINISTRATION (GENERAL OFFICE) ASSOCIATE IN ARTS DEGREE CERTIFICATE PROGRAM

The Office Administration curriculum prepares students for office occupations not requiring shorthand, such as receptionist, word processing secretaries and general typists and clerks. Emphasis is placed on training and skills leading to promotions and advanced positions in general office occupations.

Associate Degree

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT21</td>
<td>Bookkeeping and Accounting</td>
<td>3</td>
</tr>
</tbody>
</table>

Continued
Career Programs

Certificate

BUS38 Business Computations ........................................... 3
OA 1 Typewriting I ......................................................... 3
OA 2 Typewriting II ......................................................... 3
OA 3 Typewriting III ......................................................... 3
OA 6 Adding and Calculating Machines ................................. 1
OA 7 Machine Transcription .............................................. 3
OA 31 Business English .................................................... 3
OA 32 Business Communications ........................................ 3
OA 34 Business Vocabulary and Spelling ............................... 2
OA 35 Word Processing: Concepts in Information Systems ......... 3
OA 75A Word Processing: Equipment Operations .................... 1
OA 39 Word Processing: Keyboarding and Operations ............... 3

Certificate

BUS38 Business Computations ........................................... 3
OA 2 Typewriting II ......................................................... 3
OA 3 Typewriting III ......................................................... 3
OA 7 Machine Transcription .............................................. 3
OA 31 Business English .................................................... 3
OA 32 Business Communications ........................................ 3
OA 34 Business Vocabulary and Spelling ............................... 2
OA 35 Word Processing: Concepts in Information Systems ......... 3
OA 75A Word Processing: Equipment Operations .................... 1
OA 39 Word Processing: Keyboarding and Operations ............... 3

OFFICE ADMINISTRATION
(WORD PROCESSING OPTION)
ASSOCIATE IN ARTS DEGREE
CERTIFICATE PROGRAM

This program is designed for the student who desires to follow a career operating word processing software on a computer.

Associate Degree

REQUIRED COURSES

ACCT 1 Introductory Accounting I ...................................... 5
ACCT 21 Bookkeeping and Accounting I ................................ 3
CO SCI 1930 Computer Application Software .......................... 4
BUS 1 Introduction to Business ......................................... 3
OA 3 Typewriting III ......................................................... 3
OA 6 Adding and Calculating Machines ................................. 1
OA 7 Machine Transcription .............................................. 3
OA 31 Business English .................................................... 3
OA 32 Business Communications ........................................ 3
OA 34 Business Vocabulary and Spelling ............................... 2
OA 35 Word Processing: Concepts in Information Systems ......... 3
OA 39 Word Processing: Keyboarding and Operations ............... 3

RECOMMENDED ELECTIVES

MGMT 31 Human Relations for Employees ............................. 3
MGMT 33 Personnel Management ........................................ 3
LAW 1 Business Law I ...................................................... 3
BUS 38 Business Computations ......................................... 3
CO SCI 901 Introduction to Computers and Their Uses ............... 3

REAL ESTATE
ASSOCIATE IN ARTS DEGREE
CERTIFICATE PROGRAM

The Associate in Arts Degree in real estate is designed for the serious student who seeks a rewarding career as a real estate professional. The degree offers a rigorous academic program exploring all facets of the real estate profession. Completion of the degree program fulfills the education requirements for the California Real Estate Broker's License.

(Students should verify broker's license requirements with state Department of Real Estate.)

Associate Degree

REQUIRED COURSES

RE 1 Real Estate Principles ............................................ 3
RE 3 Real Estate Practice ............................................... 3
RE 5 Legal Aspects of Real Estate I .................................... 3
RE 7 Real Estate Finance I .............................................. 3
RE 9 Real Estate Appraisal I ............................................ 3
RE 21 Real Estate Economics ............................................ 3
Electives ........................................................................... 12

ELECTIVES (Select specialization desired)

RE 4 Real Estate Office Administration ................................ 3
RE 11 Escrow Principles .................................................. 3
RE 12 Escrow Practices .................................................... 3
RE 14 Property Management ............................................. 3
RE 16 Income Tax Aspects of Real Estate ............................... 3
RE 18 Real Estate Investments ............................................ 3
MGMT 2 Organization & Management Theory ........................ 3
MKTG 1 Principles of Selling ............................................ 3
ACCT 1 Introductory Accounting I ...................................... 5
BUS 5 Business Law I ...................................................... 3

Certificate - Real Estate

Students who satisfactorily complete 24 units of the courses listed below are granted a Real Estate Certificate. All of the required courses must be completed for the Certificate. Possession of the Certificate also fulfills the education requirements for the California Real Estate Broker's license.

(Students should verify broker's license requirements with state Department of Real Estate.)

Certificate - Real Estate

UNITS

RE 1 Real Estate Principles ............................................ 3
RE 3 Real Estate Practice ............................................... 3
RE 5 Legal Aspects of Real Estate I .................................... 3
RE 7 Real Estate Finance I .............................................. 3
RE 9 Real Estate Appraisal I ............................................ 3

Continued
Career Programs

RE 21  Real Estate Economics .............................................. 3
Electives .............................................................................. 6

ELECTIVES UNITS
RE 4  Real Estate Office Administration .................................. 3
RE 10 Real Estate Appraisal II .................................................. 3
RE 11 Escrows I ................................................................. 3
RE 14 Real Estate Property Management .................................. 3
ACCT 1 Introductory Accounting I ........................................ 5
LAW 1 Business Law I ....................................................... 3

Holders of the Certificate are eligible for membership in the Real Estate Certificate Institute, an organization which actively supports professional education in this field. As the Institute becomes increasingly visible in the real estate community, members may find enhanced opportunities for employment and/or advancement.

Certificate - Escrow

Students who satisfactorily complete 24 units as listed below qualify for the Escrow Certificate. The escrow field is constantly growing in the Los Angeles area, as the escrow officer holds a very responsible position in every real estate transaction. The holder of an Escrow Certificate is in an excellent position to obtain responsible employment in the field.

UNITS
RE 1 Real Estate Principles .................................................... 3
RE 5 Legal Aspects of Real Estate I .......................................... 3
RE 7 Real Estate Finance ..................................................... 3
RE 9 Real Estate Appraisal I ................................................. 3
RE 11 Escrow Principles ...................................................... 3
RE 12 Escrow Procedures .................................................... 3
RE 16 Income Tax Aspects of Real Estate ................................ 3
RE 18 Real Estate Investments .............................................. 3

Continuing Education in Real Estate

Every real estate licensee in California is required to complete 45 credit hours of Continuing Education every four years prior to license renewal. Courses qualify for Continuing Education credit, are offered by the College’s Center for Economic Development and Continuing Education (CEDCE), telephone 204-1832.

Students must enroll in these courses and take all examinations. Students who attend 90% of the class meetings will receive continuing education certificates attesting to this fact. Students may not use the same course to satisfy both the broker’s license education requirements and the continuing education requirements.

TRAVEL
ASSOCIATE IN ARTS DEGREE
CERTIFICATE PROGRAM

The travel industry is today a major economic and social force in the world. Travel by millions of people brings about relationships of enormous importance in domestic and international affairs.

The number of travel agencies in the United States has grown from 10,000 in 1972 to more than 30,000 in 1988. Today, the travel industry offers more challenging opportunities than ever before to the person who is prepared to meet the requirements of this interesting field. Instruction is offered for persons wishing to enter the travel industry, and for persons already in the travel industry who wish to develop greater competency in their profession. The college is fully accredited by the Western College Association of Schools and Colleges

TRAVEL 1 = TRAVEL 100
TRAVEL 2 = NO EQUIV
TRAVEL 3 = TRAVEL 105
TRAVEL 4 = NO EQUIV

Associate Degree

Students completing this curriculum should be prepared and available for opportunities for employment, and/or advancement in present employment, in various areas of the travel industry. The Degree requirements will be fulfilled by completing any of the 15 travel classes listed below, plus 18 semester units of general education subjects, as described in this catalog, for a total of 60 semester units.

REQUIRED COURSES
UNITS
TRAV 100 Introduction to the Travel Industry ................................ 3
TRAV 105 Basic Airline Ticketing-Domestic .................................. 3
TRAV 110 Airline Computer Reservations I (APOLLO) .................. 3
TRAV 115 Airline Computer Reservations II (SABRE) ..................... 3
TRAV 130 Travel Destination Geography I ................................ 3
TRAV 135 Travel Destination Geography II .................................. 3
TRAV 140 Travel Industry Marketing & Sales ................................ 3
TRAV 145 Basic Airline Ticketing - International ......................... 3
TRAV 150 Advanced Airline Ticketing - Domestic and International .... 3
TRAV 155 Tour Escorting, Planning & Operations ......................... 3
TRAV 160 Travel Agency Operations & Management ...................... 3
TRAV 165 Travel Agency Accounting & Profitmaking ..................... 3
TRAV 170 Travel Agency Ethics and Law ..................................... 3
TRAV 175 Meeting, Convention & Incentive ................................ 3
TRAV 180 Cruise Sales Specialization ........................................ 3

Certificate

The Basic Certificate serves newcomers in the field preparing for entry-level positions. To earn this Certificate, students must complete five of the following courses, for a total of 15 units.

REQUIRED COURSES
UNITS
TRAV 100 Introduction to the Travel Industry ................................ 3
TRAV 105 Basic Airline Ticketing-Domestic .................................. 3
TRAV 110 Airline Computer Reservations I (APOLLO) .................. 3
TRAV 115 Airline Computer Reservations II (SABRE) ..................... 3
TRAV 130 Travel Destination Geography I ................................ 3
TRAV 135 Travel Destination Geography II .................................. 3
TRAV 140 Travel Industry Marketing & Sales ................................ 3

ADVANCED CERTIFICATE

The Advanced Certificate is designed for persons who already have experience in the travel industry and who desire additional education in Travel, as well as for students who have completed the Basic Certificate program. Students must complete any six of the following courses, for a total of 18 units:

Choose any 6 of the following:

REQUIRED COURSES
UNITS
TRAV 110 Airline Computer Reservations I (APOLLO) .................. 3
TRAV 115 Airline Computer Reservations II (SABRE) ..................... 3
TRAV 130 Travel Destination Geography I ................................ 3
TRAV 135 Travel Destination Geography II .................................. 3
TRAV 145 Basic Airline Ticketing - International ......................... 3
TRAV 150 Advanced Airline Ticketing - Domestic and International .... 3
TRAV 155 Tour Escorting, Planning & Operations ......................... 3
TRAV 160 Travel Agency Operations & Management ...................... 3
TRAV 165 Travel Agency Accounting & Profitmaking ..................... 3
TRAV 170 Travel Agency Ethics and Law ..................................... 3
TRAV 175 Meeting, Convention & Incentive ................................ 3
TRAV 180 Cruise Sales Specialization ........................................ 3

TRAV 1 = TRAVEL 100
TRAV 2 = NO EQUIV
TRAV 3 = TRAVEL 105
TRAV 4 = NO EQUIV

Continued
To obtain the Advanced Certificate, students may not apply any course which was previously used to obtain their basic certificate. In order to receive a Certificate of Completion or Degree in Travel, students must submit a petition to the Admissions Office during the semester in which the requirements will be completed. All courses must be completed with a grade of C or better.

Cooperative Work Experience Education

CWEE combines on-the-job experience with regular classroom instruction. It is designed to expand skills and knowledge and to improve self understanding by integrating classroom study with planned supervised work experience.

CWEE is based on the principle that well educated individuals develop most effectively by incorporating related education and work experience. These structured experiences in business, industry, government and human services are an enrichment to college studies which enhance the student’s total development. It is called CWEE because the educational objectives are carefully planned and coordinated with the student’s employer to provide realistic employment experience. The objectives are:

1. To provide opportunity for the student to secure employment on a part-time or full-time basis,
2. To gain realistic work experience that is meaningfully related to the student’s college study program,
3. To provide the student opportunity to acquire knowledge, skills, and attitudes essential for successful employment.

BENEFITS OF COOPERATIVE WORK EXPERIENCE EDUCATION

The student:
1. Has the opportunity to learn or improve employment skills under actual working conditions.
2. Gains perspective on career goals through application of classroom theory to “real life experience.”
3. Builds self-identity and confidence as a worker through individual attention given by instructor/coordinates and employers.
4. Has opportunities to test personal abilities in work environments.
5. Has a more realistic approach to the job market.
6. Will gain a better understanding of human relations.
7. Will learn to apply Management by Objectives (MBO).
8. May refer to work experience education on future job applications.
10. Can begin a career earlier.

STUDENT QUALIFICATIONS

There are two plans for CWEE.

Parallel Plan

1. Pursue a planned program based on measurable learning objectives agreed to with CWEE Instructor/Coordinator.
2. Be enrolled in no less than 7 units (including CWEE units).
3. During summer sessions be enrolled in at least 1 other class in addition to CWEE.

Alternate Plan

The student will:
1. Pursue a planned program based on measurable learning objectives agreed to with the CWEE Instructor/Coordinator.
2. Have earned at least seven units of class work before enrolling.

Hours by Arrangement 1-8 units
Prerequisite: Approval of Work Experience Coordinator

*A program of on-the-job learning experience full-time one semester and work full-time the following semester. The work must relate directly to the student’s educational goal, and he must have satisfactorily completed at least seven units of credit and may not be enrolled concurrently in more than one other course. Eligibility determined by regulations in Title V, California Administrative Code. May be repeated three times for a maximum of 16 units.

continued
## Career Programs

**CALIFORNIA STATE UNIVERSITY:**
**APPROVED COOPERATIVE EDUCATION SUBJECT AREAS**

Los Angeles Community College District policy provides that a maximum of eight (8) semester units in Cooperative Education courses completed in the subject areas listed below may be applied toward the California State University 56 unit admission requirement.

<table>
<thead>
<tr>
<th>Accounting</th>
<th>Jewish Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration of Justice</td>
<td>Law</td>
</tr>
<tr>
<td>Afro-American Studies</td>
<td>Linguistics</td>
</tr>
<tr>
<td>Agriculture</td>
<td>Management</td>
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<tr>
<td>Air Conditioning Technology</td>
<td>Mathematics</td>
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<tr>
<td>Aircraft Electronics Technology</td>
<td>Mechanical Drafting</td>
</tr>
<tr>
<td>Animal Husbandry</td>
<td>Medical Record Science</td>
</tr>
<tr>
<td>Anthropology</td>
<td>Merchandise Display</td>
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<tr>
<td>Architecture</td>
<td>(Visual Merchandising &amp; Display)</td>
</tr>
<tr>
<td>Art</td>
<td>Merchandising (Marketing)</td>
</tr>
<tr>
<td>Astronomy</td>
<td>Meteorology</td>
</tr>
<tr>
<td>Aviation Maintenance Technician</td>
<td>Microbiology</td>
</tr>
<tr>
<td>Biology</td>
<td>Mineralogy</td>
</tr>
<tr>
<td>Botany</td>
<td>Music</td>
</tr>
<tr>
<td>Broadcasting</td>
<td>Natural Resources Management</td>
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<tr>
<td>Business</td>
<td>Nursing</td>
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<tr>
<td>Business Data Processing</td>
<td>Oceanography</td>
</tr>
<tr>
<td>Chemistry</td>
<td>Office Administration (Secretarial Science)</td>
</tr>
<tr>
<td>Chicano Studies</td>
<td>Philosophy</td>
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<tr>
<td>Child Development</td>
<td>Photography</td>
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<tr>
<td>Cinema</td>
<td>Photography, Commercial (Photography-T)</td>
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<tr>
<td>Commercial Art</td>
<td>Physical Education</td>
</tr>
<tr>
<td>Computer Maintenance Technician</td>
<td>Physics</td>
</tr>
<tr>
<td>Computer Science - Information Technology</td>
<td>Political Science</td>
</tr>
<tr>
<td>Computer Technology</td>
<td>Psychology</td>
</tr>
<tr>
<td>Dairy Husbandry</td>
<td>Public Service</td>
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<tr>
<td>Drafting</td>
<td>Real Estate</td>
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<td>Economics</td>
<td>Recreation</td>
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<td>Education</td>
<td>Respiratory Therapy</td>
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<td>Electronics</td>
<td>Restaurant Management</td>
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<td>Electronics Technician</td>
<td>Sign Graphics</td>
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<td>Electronics Technology</td>
<td>Social Science</td>
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<td>Engineering</td>
<td>Sociology</td>
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<tr>
<td>English</td>
<td>Speech</td>
</tr>
<tr>
<td>Environmental Science (Environmental Studies)</td>
<td>Statistics</td>
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<tr>
<td>Family and Consumer Studies</td>
<td>Technical Illustration</td>
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<tr>
<td>Fire Science</td>
<td>Television</td>
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<td>Foreign Languages</td>
<td>Theater</td>
</tr>
<tr>
<td>Geography</td>
<td>Transportation</td>
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<tr>
<td>Geology</td>
<td>Urban Planning</td>
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<tr>
<td>Health</td>
<td>Water Systems Technology</td>
</tr>
<tr>
<td>History</td>
<td>Zoology</td>
</tr>
<tr>
<td>Humanities</td>
<td></td>
</tr>
<tr>
<td>Industrial Arts</td>
<td></td>
</tr>
</tbody>
</table>
As explained under “Graduation Requirements,” the Associate Degree requires at least 18 semester units of study in a discipline or related disciplines. This section details the exact courses required in each major to fulfill this requirement. Four-year institution requirements may vary from graduation major requirements listed below. Students are urged to see a counselor for exact transfer requirements.

ANTHROPOLOGY
ASSOCIATE IN ARTS DEGREE

The Associate Degree program in anthropology is designed for those who wish to complete a Baccalaureate degree in the field at a four-year institution or a university. Professional opportunities with such curriculum could lead to occur in archaeology, linguistics, the social and natural sciences, international affairs, urban renewal, social welfare, museum work, the National Park Service, conservation programs, and zoological institutions. Anthropology also provides valuable background for those seeking careers in such fields as sociology, psychology, social work, medicine, nursing and mental health, the foreign service and trade, geriatrics, child development, journalism, documentary film production, and the legal professions.

Associate Degree

REQUIRED COURSES

- ANTH 101 Human Biological Evolution .................................. 3
- ANTH 102 Human Ways of Life: Cultural Anthropology ............. 3

AND

AT LEAST THREE UNITS FROM THE FOLLOWING: UNITS

- ANTH 103 Archaeology; Reconstructing the Human Past ............. 3
- ANTH 121 Anthropology of Religion, Magic, and Witchcraft ........ 3

AT LEAST NINE UNITS FROM THE FOLLOWING: UNITS

- HIST 1 Introduction to Western Civilization I ....... 3
- HIST 2 Introduction to Western Civilization II ........... 3
- PSYCH 1 General Psychology ........................................... 3
- PSYCH 13 Social Psychology ........................................... 3
- SOC 1 Introduction to Sociology ...................................... 3
- SOC 2 American Social Problems ...................................... 3

AT LEAST THREE UNITS FROM THE FOLLOWING: UNITS

- BIO 3 Introduction to Biology .......................................... 3
- ENV SCI 1 Man and his Environment: Physical Processes .......... 3
- ENV SCI 2 Man and his Environment: Biological Processes ........ 3
- GEOG 1 Physical Geography ........................................... 3
- GEOL 1 Physical Geology ................................................ 3

RECOMMENDED COURSES

- COSCI 101 Introduction to Computers and Their Uses .............. 3
- MATH 225 Introductory Statistics ..................................... 3
- PHIL 8 Deductive Logic .................................................. 3
- PHIL 9 Symbolic Logic .................................................... 3

ART
ASSOCIATE IN ARTS DEGREE

The Associate Degree program in art enables a student to transfer to a Baccalaureate program at a four-year institution. The art curriculum has been planned for those intending to enter the fields of design, illustration, art history, and art education.

Associate Degree

CORE PROGRAM (Required of all Art majors) UNITS

- ART 101 Survey of Art History I .................................. 3
- ART 102 Survey of Art History II ................................ 3
- ART 201 Drawing I ...................................................... 3
- ART 202 Drawing II ...................................................... 3
- ART 501 Beginning Two-Dimensional Design .................... 3
- ART 502 Beginning Three-Dimensional Design .................. 3

DRAWING AND PAINTING OPTION REQUIREMENTS:
Minimum of 12 units in addition to the above Core Program requirements.
- 6 units from Art 204, 205, 209
- 6 units from Art 300, 301, 305, 306, 307

CERAMICS OPTION REQUIREMENTS:
Minimum of 12 units in addition to the above Core Program requirements.
- 12 units from Art 502, 706, 708, 709, 710, 711

BIOLOGY
ASSOCIATE IN ARTS DEGREE

The Biology Associate Degree program is intended for those students who wish to transfer to a four-year institution and major in a biological science. This curriculum is generally required of pre-dental, pre-medical, pre-optometry, pre-pharmacy, and pre-veterinary students.

Associate Degree

REQUIRED COURSES

- BIO 6 General Biology I ............................................. 5
- BIO 7 General Biology II ............................................. 5

AND COMPLETE THE COURSES IN THREE OF THE FOLLOWING FOUR GROUPS

GROUP 1

- CHEM 1 General Chemistry I ..................................... 5

GROUP 2

- PHY 6 General Physics I ............................................ 4
- PHY 7 General Physics II ............................................ 4

GROUP 3

- CHEM 14 Introductory Organic Chemistry ....................... 5

GROUP 4

- MATH 260 Introduction to Analysis ................................ 5

BIOLOGY
(HEALTH SCIENCE OPTION) ASSOCIATE IN ARTS DEGREE

The Health Science option of the Biology Associate Degree program provides an orientation to the health sciences while including the general background required for the fields of nursing, dental hygiene, respiratory therapy, physical therapy, and other health fields.
### Associate Degree

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 1</td>
<td>Introduction to Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>BIO 5</td>
<td>Introduction to Human Biology</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 3</td>
<td>Introductory Chemistry OR</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 10</td>
<td>Introduction to General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>MICRO 20</td>
<td>General Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>PHYSIO 1</td>
<td>Introduction to Human Physiology</td>
<td>4</td>
</tr>
</tbody>
</table>

**RECOMMENDED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1</td>
<td>General Chemistry I</td>
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</tr>
<tr>
<td>CHEM 9</td>
<td>Introductory Organic and Biochemistry</td>
<td>4</td>
</tr>
<tr>
<td>PSYCH 1</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 1</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 2</td>
<td>American Social Problems</td>
<td>3</td>
</tr>
<tr>
<td>ANTHRO 102</td>
<td>Human Ways of Life: Cultural Anthropology</td>
<td>3</td>
</tr>
</tbody>
</table>

*NOTE: Always review requirements of institution to which you plan to transfer. For instance, Cal State Northridge requires Math 261 for Cellular and Molecular Option and Chemistry 5 for Medical Technology Option.*

### BUSINESS ADMINISTRATION ASSOCIATE IN ARTS DEGREE

The Associate Degree program in business administration enables the student to transfer to a Baccalaureate program at a four-year institution. Career opportunities are available in multiple fields, including accounting managers, stockbrokers, financial consultants, insurance brokers, marketing managers, and computer specialists. In addition, the prospective professor of business may get a start in the Associate and Baccalaureate programs in business administration.

**Associate Degree**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 1</td>
<td>Introductory Accounting I</td>
<td>5</td>
</tr>
<tr>
<td>ACCT 2</td>
<td>Introductory Accounting II</td>
<td>5</td>
</tr>
<tr>
<td>CO SCI 901</td>
<td>Introduction to Computers and Their Uses</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1</td>
<td>Principles of Economics I</td>
<td>3</td>
</tr>
<tr>
<td>ECON 2</td>
<td>Principles of Economics II</td>
<td>3</td>
</tr>
<tr>
<td>LAW 1</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 235</td>
<td>Mathematical Analysis for Business and Social Science</td>
<td>5</td>
</tr>
</tbody>
</table>

**RECOMMENDED**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO SCI 902</td>
<td>Introduction to Computer Science</td>
<td>3</td>
</tr>
<tr>
<td>LAW 2</td>
<td>Business Law II</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 1</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 2</td>
<td>Organization and Management Theory</td>
<td>3</td>
</tr>
<tr>
<td>MATH 236</td>
<td>Mathematical Analysis for Business and Social Science</td>
<td>4</td>
</tr>
<tr>
<td>MKTG 21</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>Language through level 2 is recommended.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### CHEMISTRY ASSOCIATE IN ARTS DEGREE

The Associate Degree in chemistry will provide most lower division requirements for the student planning to transfer to a four-year institution with a chemistry major while at the same time establishing a strong basic foundation in this science.

### CHILD DEVELOPMENT ASSOCIATE IN ARTS DEGREE

The following curriculum is a general pattern for students wishing to transfer to CSULB, CSULA, CSUN, or CSUSD.

**Associate Degree**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 1</td>
<td>Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>CD 2</td>
<td>Early Childhood: Principles and Practices</td>
<td>3</td>
</tr>
<tr>
<td>CD 3</td>
<td>Creative Experiences for Children</td>
<td>3</td>
</tr>
<tr>
<td>CD 10</td>
<td>Child Health</td>
<td>3</td>
</tr>
<tr>
<td>CD 11</td>
<td>Home, School and Community Relations</td>
<td>3</td>
</tr>
<tr>
<td>CD 21</td>
<td>Child Development Practice</td>
<td>3</td>
</tr>
<tr>
<td>CD 38</td>
<td>Organization and Administration of Nursing Schools</td>
<td>3</td>
</tr>
<tr>
<td>FCS 21</td>
<td>Nutrition (strongly recommended)</td>
<td>3</td>
</tr>
<tr>
<td>ANTHRO 102</td>
<td>Human Ways of Life: Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 1</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 1</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
</tbody>
</table>

**RECOMMENDED**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH DEV 30</td>
<td>Infant Studies</td>
<td>3</td>
</tr>
<tr>
<td>CH DEV 34</td>
<td>Observing and Recording</td>
<td>3</td>
</tr>
</tbody>
</table>

### ECONOMICS ASSOCIATE IN ARTS DEGREE

The following curriculum is a general pattern for students wishing to transfer to a four-year institution as an economics major. Careers in business, education, writing, and government are open to those with advanced work in this field.

**Associate Degree**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 1</td>
<td>Introductory Accounting I</td>
<td>5</td>
</tr>
<tr>
<td>ECON 1</td>
<td>Principles of Economics I</td>
<td>3</td>
</tr>
<tr>
<td>ECON 2</td>
<td>Principles of Economics II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 225</td>
<td>Introductory Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 235</td>
<td>Mathematical Analysis for Business and Social Sciences</td>
<td>5</td>
</tr>
<tr>
<td>MATH 261</td>
<td>Calculus I</td>
<td>5</td>
</tr>
</tbody>
</table>

**Recommended Courses:**

Social Science courses beyond the general education requirement, additional mathematics courses, and Computer Science-Information Technology 912.

*Continued*
Transfer Programs

ENGINEERING
ASSOCIATE IN ARTS DEGREE

The following curriculum is a general pattern for students wishing to transfer to CSULB, CSULA, CSUN, UCLA, or USC.

Associate Degree

REQUIRED COURSES

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>CHEM 2*</td>
<td>General Chemistry II</td>
</tr>
<tr>
<td>ENGR 2</td>
<td>Introduction to Engineering Drafting</td>
</tr>
<tr>
<td>ENGR 3</td>
<td>Engineering Descriptive Geometry</td>
</tr>
<tr>
<td>ENGR 5</td>
<td>Statistics</td>
</tr>
<tr>
<td>MATH 261</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 262</td>
<td>Calculus II</td>
</tr>
<tr>
<td>MATH 263</td>
<td>Calculus III</td>
</tr>
<tr>
<td>PHYS 37</td>
<td>Physics for Engineers and Scientists I</td>
</tr>
<tr>
<td>PHYS 38</td>
<td>Physics for Engineers and Scientists II</td>
</tr>
<tr>
<td>PHYS 39</td>
<td>Physics for Engineers and Scientists III</td>
</tr>
</tbody>
</table>

*Check with the appropriate university catalog to determine the need for CHEM 2.

ENGLISH
ASSOCIATE IN ARTS DEGREE

The English sequence is recommended for those who wish to obtain the Baccalaureate degree in this field. Emphasis is placed on meeting common lower division university requirements.

Associate Degree

REQUIRED COURSES

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>College Reading &amp; Composition I</td>
</tr>
<tr>
<td>ENG 102</td>
<td>College Reading &amp; Composition II</td>
</tr>
</tbody>
</table>

AND 6 UNITS FROM OPTIONS A or B

OPTION A

English 205 and 206 (English Literature I and II)
Recommended for students transferring to the UC system.

OPTION B

English 203, 204 (World Literature I and II)
Recommended for students transferring to private universities.

AND 6 UNITS OF ELECTIVES FROM THE FOLLOWING:

Foreign Language through Course 4
Philosophy 24 (Introduction to the Philosophy of Literature)

English 127, 203, 204, 205, 206, 215, 240.

NOTE: Always review requirements of institution to which you plan to transfer.
See a counselor for accurate planning and current information.

FRENCH
ASSOCIATE IN ARTS DEGREE

The Associate Degree program in French enables a student to transfer to a Baccalaureate program at a four-year institution. Professional opportunities which such a curriculum could lead to occur in foreign trade, travel, translating, teaching, and government (especially in the State Department). French also provides valuable background for those pursuing studies in art, music, cinema, and literature.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 1</td>
<td>Introduction to Western Civilization I</td>
</tr>
<tr>
<td>HIST 2</td>
<td>Introduction to Western Civilization II</td>
</tr>
<tr>
<td>HIST 11*</td>
<td>Political &amp; Social History of the U.S. I</td>
</tr>
<tr>
<td>HIST 12*</td>
<td>Political &amp; Social History of the U.S. II</td>
</tr>
</tbody>
</table>

HISTORY
ASSOCIATE IN ARTS DEGREE

The history sequence is designed for those who wish to complete a Baccalaureate degree in the field. Emphasis is placed on meeting lower division university requirements.

Associate Degree

REQUIRED COURSES

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 1</td>
<td>Introduction to Western Civilization I</td>
</tr>
<tr>
<td>HIST 2</td>
<td>Introduction to Western Civilization II</td>
</tr>
<tr>
<td>HIST 11*</td>
<td>Political &amp; Social History of the U.S. I</td>
</tr>
<tr>
<td>HIST 12*</td>
<td>Political &amp; Social History of the U.S. II</td>
</tr>
</tbody>
</table>

GEOGRAPHY
ASSOCIATE IN ARTS DEGREE

The following curriculum is a general pattern for students wishing to transfer to CSUDH, CSULB, CSULA, CSUSD, CSUN, UCB, UCLA, or USC.

Associate Degree

REQUIRED COURSES

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 1</td>
<td>Physical Geography</td>
</tr>
<tr>
<td>GEOG 2</td>
<td>Cultural Elements of Geography</td>
</tr>
<tr>
<td>GEOG 3</td>
<td>World Regional Geography</td>
</tr>
<tr>
<td>MATH 225</td>
<td>Introductory Statistics</td>
</tr>
<tr>
<td>MATH 226</td>
<td>Elementary Statistics Problem Solving</td>
</tr>
<tr>
<td>FOREIGN LANGUAGE (2 COURSES)</td>
<td></td>
</tr>
</tbody>
</table>

AND 6 UNITS FROM OPTIONS A or B

OPTION A

English 205 and 206 (English Literature I and II)
Recommended for students transferring to the UC system.

OPTION B

English 203, 204 (World Literature I and II)
Recommended for students transferring to private universities.

And 6 units of electives from the following:

Foreign Language through Course 4
Philosophy 24 (Introduction to the Philosophy of Literature)

English 127, 203, 204, 205, 206, 215, 240.

NOTE: Always review requirements of institution to which you plan to transfer.
See a counselor for accurate planning and current information.

Continued

57
Transfer Programs

AT LEAST 6 UNITS FROM THE FOLLOWING:

ANTH 101 Human Biological Evolution .................. 3

OR

ANTH 102 Human Ways of Life: Cultural Anthropology 3

ECON 1 Principles of Economics I .......................... 3

GEOG 1 Physical Geography .................................. 3

POL SC 1 Government of the United States and California ......................................................... 3

*For those transferring to UCLA, History 41 and 42 may be substituted for History 11 and 12 respectively.

JOURNALISM

ASSOCIATE IN ARTS DEGREE

The Associate Degree program in journalism enables a student to transfer as a journalism major to a four-year institution.

Associate Degree

REQUIRED COURSES

ENG 101 College Reading and Composition I .......... 3
JOURNAL 101 Collecting and Writing News ............. 3
JOURNAL 105 Mass Communication .......................... 2
JOURNAL 217 Publication Laboratory ...................... 3
JOURNAL 218 Practical Editing ............................ 3
PSYCH 1 General Psychology I ............................. 3
SOC 1 Introduction to Sociology .......................... 3

LIBERAL ARTS

ASSOCIATE IN ARTS DEGREE

The Liberal Arts major is designed for both transfer and career majors.

I. The Liberal Arts major requires 30 units of General Education Plan A in the current catalog.

II. No course may be used to fulfill more than one requirement.

III. A minimum of 18 units in the major is required in any one of the following patterns:

PATTERN A

Using Plan A as described in the appropriate catalog, at least three additional units from each of the following:

A  - Natural Science ....................................... (3 units)
B  - Social & Behavioral Science .......................... (3 units)
C  - Humanities ............................................. (3 units)
And nine additional units from A through C above or from Language & Rationale ......................... (9 units)

PATTERN B

For transfer students, 18 units to include courses in preparation for their transfer major at the university of their choice. Major sheets produced by the Counseling Center may be used as general guidelines.

(PACE is one option for satisfying the requirements for the Liberal Arts Major.)

PACE

Project for Adult College Education is a two-year college Associate of Arts degree program designed with the full-time worker in mind.

PACE is both fast and convenient. Students are able to finish an A.A. degree in Liberal Arts and complete all of the lower division requirements for transfer to the California State University System and to many private universities in five semesters (2 1/2 years or less). During each semester, students attend one evening a week for four hours, six to eight Saturdays from 8:00 a.m. to 6:00 p.m. and watch two hours of instructional broadcast per week. Twelve or thirteen units of college credits are completed each semester.

The PACE format is based upon a five semester cycle. Students may enter any semester. A student need not register for all semesters. Students are required to enroll in at least three of the four courses offered in any particular semester to benefit from PACE. Students are enrolled semester long for all courses although formal instruction is divided; half the semester instruction will be given in two of the courses and half in the other two. Each semester is organized around a particular theme.

MATHEMATICS

ASSOCIATE IN ARTS DEGREE

The following curriculum is a general pattern for students wishing to transfer to CSUDH, CSULB, CSULA, CSUSD, CSUN, UCB, UCLA, or USC.

Associate Degree

REQUIRED COURSES

CHEM 1 General Chemistry I ............................... 5
CHEM 2 General Chemistry II .............................. 5
MATH 270 Linear Algebra ..................................... 3
MATH 260 Introduction to Analysis .......................... 5
MATH 251 Calculus I ........................................ 5
MATH 262 Calculus II ........................................ 5
MATH 263 Calculus III ....................................... 5
PHY 37 Physics for Engineers and Scientists I .......... 5
PHY 38 Physics for Engineers and Scientists II ........ 5

MUSIC

ASSOCIATE IN ARTS DEGREE

The music curriculum is designed to meet the requirements for students matriculating to a Baccalaureate degree program at the four-year colleges and to prepare students for many music vocations and careers.

Associate Degree

REQUIRED COURSES

MUS 101 Fundamentals of Music ............................ 3
MUS 122 Music History & Literature II .................. 3
MUS 201 Harmony I .......................................... 3
MUS 202 Harmony II ......................................... 3
MUS 203 Harmony III ........................................ 3
MUS 211 Musicianship I ...................................... 2
MUS 212 Musicianship II ..................................... 2
MUS 213 *Performance Organization* ........................ 1
MUS 214 *Performance Organization* ........................ 1
MUS 321 Elementary Piano I ................................ 2
MUS 322 Elementary Piano II ................................ 2
MUS 323 *Performance Organization* ........................ 1
MUS 324 *Performance Organization* ........................ 1

The piano proficiency requirement may be met by examination if the student has had previous training or by MUS 184. Enrollment in the elementary voice sequence (MUS 411, 412, 413, 414), and/or the elementary piano sequence (MUS 321, 322, 323, 324) and/or the independent study in applied music (MUS 181, 182, 183, 184) is recommended for music majors who are preparing for performance or music education careers.

Continued
PHILOSOPHY
ASSOCIATE IN ARTS DEGREE

The philosophy sequence is recommended for those who wish to obtain a Baccalaureate degree in this field. Emphasis is placed on meeting common lower division university requirements.

**Associate Degree**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 1*</td>
<td>Introduction to Philosophy</td>
</tr>
<tr>
<td>PHIL 20*</td>
<td>Ethics</td>
</tr>
<tr>
<td>PHIL 8</td>
<td>Deductive Logic</td>
</tr>
<tr>
<td>OR</td>
<td>Symbolic Logic I</td>
</tr>
</tbody>
</table>

**AT LEAST 9 UNITS FROM THE FOLLOWING:**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTHRO 102</td>
<td>Human Ways of Life; Cultural Anthropology</td>
</tr>
<tr>
<td>ECON 1</td>
<td>Principles of Economics I</td>
</tr>
<tr>
<td>ENG 203</td>
<td>World Literature I</td>
</tr>
<tr>
<td>ENG 204</td>
<td>World Literature II</td>
</tr>
<tr>
<td>HISTORY 1</td>
<td>Introduction to Western Civilization I</td>
</tr>
<tr>
<td>HISTORY 2</td>
<td>Introduction to Western Civilization II</td>
</tr>
<tr>
<td>PHIL 3</td>
<td>History of Greek Thought</td>
</tr>
</tbody>
</table>

*For those transferring to CSUN, Philosophy 3 may be substituted for Philosophy 1.*

PHYSICS
ASSOCIATE IN ARTS DEGREE

The Associate in Arts Degree in physics will give the student a basic foundation in this field as well as meeting most lower division requirements for the Baccalaureate degree in this field.

**Associate Degree**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>CHEM 2</td>
<td>General Chemistry II</td>
</tr>
<tr>
<td>MATH 252</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 263</td>
<td>Calculus II</td>
</tr>
<tr>
<td>PHY 37</td>
<td>Physics for Engineers and Scientists I</td>
</tr>
<tr>
<td>PHY 38</td>
<td>Physics for Engineers and Scientists II</td>
</tr>
<tr>
<td>PHY 39</td>
<td>Physics for Engineers and Scientists III</td>
</tr>
</tbody>
</table>

**RECOMMENDED**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRENCH</td>
<td></td>
</tr>
</tbody>
</table>

POLITICAL SCIENCE
ASSOCIATE IN ARTS DEGREE

The political science sequence is for those who desire to complete a Baccalaureate degree in this subject area. Emphasis is on satisfying common lower division university requirements in this major.

**Associate Degree**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 11</td>
<td>Political and Social History of the United States I</td>
</tr>
<tr>
<td>HIST 12</td>
<td>Political and Social History of the United States II</td>
</tr>
<tr>
<td>POL SC 1</td>
<td>The Government of the United States and California</td>
</tr>
<tr>
<td>POL SC 2</td>
<td>Modern World Governments</td>
</tr>
<tr>
<td>POL SC 7</td>
<td>Contemporary World Affairs</td>
</tr>
</tbody>
</table>

**AT LEAST 6 ADDITIONAL UNITS FROM THE FOLLOWING:**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTHRO 101</td>
<td>Human Biological Evolution</td>
</tr>
<tr>
<td>SOC 1</td>
<td>Introduction to Sociology</td>
</tr>
<tr>
<td>ECON 1</td>
<td>Principles of Economics I</td>
</tr>
<tr>
<td>HIST 1</td>
<td>Introduction to Western Civilization I</td>
</tr>
<tr>
<td>HIST 2</td>
<td>Introduction to Western Civilization II</td>
</tr>
<tr>
<td>HIST 13</td>
<td>The United States in the Twentieth Century</td>
</tr>
<tr>
<td>HIST 14</td>
<td>Selected Issues of United States History (see catalog for History course limitations)</td>
</tr>
</tbody>
</table>

Continued
Transfer Programs

PSYCHOLOGY
ASSOCIATE IN ARTS DEGREE

The Associate in Arts Degree in psychology is designed for those who wish to complete a Baccalaureate degree in the field. Emphasis is placed on meeting lower division requirements at a four-year institution or university. Professional opportunities which the curriculum could lead to occur in the healing professions; natural sciences; marriage, child, and family counseling; industry and business; public health; social welfare; National Park Service; environmental improvement and conservation programs; and zoological institutions. Psychology also provides valuable background for those seeking careers in such fields as anthropology, sociology, social work, law, medicine, nursing and mental health facilities, the foreign service and trade, geriatrics, and child development.

Associate Degree
REQUERED COURSES

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYCH 1</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 2</td>
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<td>MATH 225</td>
<td>3</td>
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</table>

AND

AT LEAST SIX UNITS FROM THE FOLLOWING:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYCH 14</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 16</td>
<td>3</td>
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<tr>
<td>PSYCH 52</td>
<td>3</td>
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RECOMMENDED

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTHRO 101</td>
<td>3</td>
</tr>
<tr>
<td>BI 3</td>
<td>3</td>
</tr>
<tr>
<td>BIO 6</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 3</td>
<td>5</td>
</tr>
<tr>
<td>PHYSIO 1</td>
<td>4</td>
</tr>
<tr>
<td>SOC 1</td>
<td>3</td>
</tr>
<tr>
<td>PHYSICS 12</td>
<td>3</td>
</tr>
<tr>
<td>PHYSIO 1</td>
<td>4</td>
</tr>
</tbody>
</table>

SOCIOLOGY
ASSOCIATE IN ARTS DEGREE

The sociology curriculum meets common lower division requirements while emphasizing the cultural background and analytic skills required of sociology majors in four-year institutions.

A background in Sociology is useful in almost any career in government, law, business, and non-profit organizations. Advanced degrees in Sociology prepare one to do research or analysis of data for government agencies from the Census Bureau to the Center for Disease Control, to city planning agencies and local police forces. Sociologists are employed by large businesses, advertisers, management consultants, and life insurance companies. They work at "think tanks", do individual and family counseling, and work in education at the secondary level, as well as in colleges and universities.

Associate Degree
REQUERED COURSES

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 1</td>
<td>3</td>
</tr>
<tr>
<td>SOC 2</td>
<td>3</td>
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</table>

AND

AT LEAST ONE OF THE FOLLOWING:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO SCI 901</td>
<td>3</td>
</tr>
</tbody>
</table>

SPANISH
ASSOCIATE IN ARTS DEGREE

The Associate Degree program in Spanish enables a student to transfer into a Baccalaureate program at a four-year institution. In addition, this curriculum generates and upgrades professional opportunities in business, industry, education, and government work, as well as providing personal enrichment in understanding Hispanic language and culture.

Associate Degree
REQUERED COURSES

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPANISH 3</td>
<td>5</td>
</tr>
<tr>
<td>SPANISH 4</td>
<td>5</td>
</tr>
<tr>
<td>SPANISH 5</td>
<td>5</td>
</tr>
</tbody>
</table>

RECOMMENDED

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH 204</td>
<td>3</td>
</tr>
</tbody>
</table>

SPEECH
ASSOCIATE IN ARTS DEGREE

The Associate Degree program in speech enables a student to transfer into a Baccalaureate program at a four-year institution.

Associate Degree
REQUERED COURSES

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPEECH 102</td>
<td>3</td>
</tr>
<tr>
<td>SPEECH 121</td>
<td>3</td>
</tr>
<tr>
<td>SPEECH 104</td>
<td>3</td>
</tr>
<tr>
<td>SPEECH 151</td>
<td>3</td>
</tr>
</tbody>
</table>

A MINIMUM OF NINE UNITS FROM THE FOLLOWING:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPEECH 102</td>
<td>3</td>
</tr>
<tr>
<td>SPEECH 111</td>
<td>3</td>
</tr>
<tr>
<td>SPEECH 135</td>
<td>3</td>
</tr>
<tr>
<td>THEATRE 200</td>
<td>3</td>
</tr>
</tbody>
</table>

NOTE: Most CSU institutions and UCLA require Mathematics 225 for transfer students in Sociology.
Transfer Requirements

Students who plan to earn a Bachelor’s Degree should take a pattern of courses designed to complete the lower division preparation for their major and the general education pattern of the college to which they will transfer.

West Los Angeles College can provide the lower division preparation for most majors at most universities.

For purposes of classification, students who are paralleling the work of senior colleges and universities are indicated as “transfer students.”

Two principal kinds of requirements must be met in order to attain full junior standing at the University of California or other institutions maintaining equivalent standards to which students expect to transfer.

These are the following:
1. Completion of the specific requirements for junior standing in the proposed senior college or university.
2. Completion of the lower division prerequisites for upper division majors and minors. These vary according to the institution of higher education in which students expect to enroll.

NOTE: Students expecting to transfer to such institutions should see a West Los Angeles College counselor and consult the catalog of these institutions regarding specific requirements for upper division standing.

Transfer requirements for the University of California, California State Universities and Colleges, and independent California colleges and universities that can be pursued at West Los Angeles College follow.

University of California Transfer Core
General Education Requirements

Effective Fall 1989, transfer students may fulfill the general education requirements by completing the Transfer Core Curriculum prior to transfer to any campus of the University of California. Courses used to fulfill the Transfer Curriculum must be completed with a letter grade of C or better.

This Core is acceptable at all campuses. Students wishing to attend a specific UC campus must discuss these requirements for transfer with a West Los Angeles College counselor.

NOTE: Students who do not complete the Transfer Core Curriculum before transferring to the University will be subject to the regulations and general education requirements of the school or college of the campus to which they are admitted.

I. FOREIGN LANGUAGE: PROFICIENCY

This requirement may be fulfilled by one of the following:
A. Two years of a foreign language in high school with a grade of C or better.
B. Earn a minimum score of 550 on a College Board Achievement Test in a foreign language.
C. Advanced Placement foreign language examination with a score of 3 or higher.
D. Completion of two semesters of a foreign language taken at a college or university with a grade of C or better.
French 1,2,3,4,5,6; Spanish 1,2,3,4,5,6

Continued
Transfer Requirements

II. ENGLISH COMPOSITION:
2 Courses/At Least 6 Semester Units Total
English 101 and 102

III. MATHEMATICS/QUANTITATIVE REASONING:
1 Course/At Least 3 Units Total
This requirement may also be fulfilled by a minimum score of 600
on the Math SAT or 550 on the College Board Achievement Test
in Math (Level I or Level II).

IV. ARTS AND HUMANITIES:
9 Units - Select one course from Area A, one course from Area B,
and one course from either Area A or B.

A. ARTS
Art 101, 102, 103
Humanities 73
Music 111, 112, 122, 141
Theater 100

B. HUMANITIES
English 203, 204, 205, 206, 207, 208, 209, 210, 215, 219,
234, 250
French 10*
Humanities 1, 30, 31, 60
Philosophy 1, 3, 20, 23, 24

V. SOCIAL AND BEHAVIORAL SCIENCES:
3 Courses/At Least 9 Units Total
Anthropology 102, 103
Economics 1, 2
Geography 2, 7
History 1, 2, +11, +12, 13, 16, 22* +41, +42
Political Science 1, 2, 7
Psychology 1
Sociology 1

VI. PHYSICAL AND/OR BIOLOGICAL SCIENCES:
7 Units/Select two courses from the following.
At least one course must include a laboratory.
Anatomy 1
Anthropology 101
Astronomy 1
Biology +3, 4, +5, 6, 7
Chemistry 1, 2, +3, +10
Earth Science 1
Environmental Science 1, 2
Geography 1, 3*
Geology 1, 2, 6, 7
Meteorology 3*
Microbiology 20
Oceanography 1
Physics +6, +7, +12, 14, +37, +38, +39
Physiology 1
Psychology 2

Continued
Transfer Requirements

Note: Please check with a counselor for possible changes in this Transfer Core.

*Cross listed

Total units required for transfer to the University of California are 56 units (i.e., 34 semester units of G.E. courses as above, plus 22 units of transferable electives, or preparation for the major).

+Indicates that UC course credit may be limited. Please consult the counseling office for additional information.

Major Departmental Requirements

In addition to the preceding general requirements, students should complete the lower division courses required by each department or curriculum. Consult the particular University of California catalog for complete information on the lower division requirements for the desired major. The Counseling Office assists in determining the appropriate courses at West Los Angeles College which meet the major department requirements.

Completion of the above program with a total of 60 units and meeting graduation requirements as described in this catalog entitles students to the Associate Degree at West Los Angeles College.

California State University

Certification of General Education Requirements

Under agreement with the California State University system, West Los Angeles College can certify up to 39 units toward the general education requirements for the Baccalaureate degree at any one of the campuses of the State University system. Under this certification process the receiving college will accept the units certified toward completion of the general education requirements as the institution prescribes them. The college to which the student transfers would agree not to reduce this number nor to question the units certified. It is important for the student to follow the required patterns as listed below and to take courses in as many different areas as possible. Students planning to transfer should consult with the counselor concerning these general education requirements as soon as they have determined the college they wish to attend because the requirements are periodically revised.

CSU General Education Requirements

(No course may be used more than once.)

A. Communication in the English language
   9 units (3 units in each area)
   A1. Oral Communication
       Speech 101, 102, 121, 151
   A2. Written Communication
       English 101
   A3. Critical Thinking
       English 102; Philosophy 6, 8, 9; Speech 104

B. Physical Universe and Its Life Forms
   9 units (at least one course from each area; laboratory must be included in either B1 or B2)
Transfer Requirements

B1. Physical Universe
   Astronomy 1; Chemistry 1*, 3*, 10*; Earth Science 1; Environmental Science 1, 12; Geography 1, 3; Geology 1, 6*; Meteorology 3 (same as Geography 3); Oceanography 1; Physical Science 1; Physics 12, 14*

B2. Life Forms
   Anatomy 1; Anthropology 101; Biology 3*, 4, 5*; Environmental Science 2; Microbiology 20*; Physiology 1*; Psychology 2

B3. Mathematical Concepts
   Mathematics 215, 225, 226, 235, 236, 240, 260, 261
   (*indicates laboratory course)

C. Humanities
   9 units (at least 3 areas; no more than one course from any area)
   C1. History and Appreciation of the Arts
      Art 101, 102, 103; Music 101, 111, 112, 121, 122, 141; Theater 100
   C2. Literature
      English 203, 204, 205, 206, 207, 208, 209, 215, 218, 219, 239, 240
   C3. Philosophy
      Philosophy 1, 3, 20, 23, 24
   C4. Foreign Language
      French 1, 2, 3, 4, 5, 6; Spanish 1, 2, 3, 4, 5, 6
   C5. Creative Participation
      Art 201, 501, 502, 503, 504, 505; English 127; Music 501, 561, 725, 775; Physical Education 431, 434, 437, 814; Speech 135; Theater 200
   C6. Western Culture
      History 22; Humanities 1, 30, 31, 60, 61; French 10

D. Social, Political and Economic Institutions
   9 units (only one course from any area). Note: Courses to satisfy American Institutions requirements cannot also be used to satisfy general education requirements.
   D1. Social Institutions
      Administration of Justice 1; Anthropology 102, 121; Geography 2, 7; Psychology 1; Sociology 1
   D2. Political Institutions
      Political Science 1, 2, 4
   D3. Economic Institutions
      Business 1; Economics 1, 2
   D4. Contemporary Settings
      African-American Studies 2; History 2, 12, 13, 14, 42, 44; Journalism 105; Political Science 7; Sociology 2, 6, 11
   D5. Historical Settings
      History 1, 11, 41, 43
   D6. Western Context
      History 12, 13, 20
   D7. Non-Western Context
      Anthropology 121; History 68; Political Science 14

E. Life Understanding and Self-Development
   3 units (no more than one unit of Physical Education may be used)
   E1. Integrated Organism
      Family and Consumer Studies 21; Health 2, 9, 11; Psychology 16, 52
   E2. Activity
      Physical Education 102, 212, 222, 228, 229, 230, 259, 262, 289, 301, 310, 322, 431, 434, 437, 690

Continued
Transfer Requirements

NOTE: The CSU system accepts the following courses in fulfillment of its American Institutions graduation requirement: History 11, 12, 41, 42, 43, 44; Political Science 1.

Liberal Studies

Liberal Studies programs in the California State University are designed for students who desire a broad education in the Liberal Arts, often with a goal of teacher preparation, particularly on the elementary level. Students with the teaching credential objective must complete professional education requirements leading to the multiple subject credential and do so either simultaneously with, or subsequent to, completion of the Liberal Studies degree. Requirements for the B.A. Programs for prospective teachers require a minimum of 84 semester (126 quarter) units with approximately equal distribution among the following four areas:

1) English
2) Mathematics and the Physical and Life Sciences
3) Social Sciences and
4) Humanities and the Fine Arts.

Students in the Liberal Studies major who have career objectives other than teaching will generally find:

1) greater freedom in the use of electives
2) opportunities for course substitution within major requirements and
3) possibilities of accomplishing additional objectives, such as completion of a second major or of professional requirements.

All CSU Liberal Studies programs consist of both upper and lower-division course work. The distribution between these two levels is not the same in any two campus programs. In some programs upper-division course work is not based on any particular lower-division preparation. In others, certain upper-division courses may require specific lower-division prerequisites. General Education requirements are accommodated in Liberal Studies programs in different ways. However, in all cases it is possible for a student to complete general education and major requirements in such a manner as to eliminate or minimize the loss of transfer units.

Students, prior to transfer, should distribute their course work among all four subject areas listed below:

1. English students should complete course work distributed over the areas of composition, literature and speech, totaling nine to twelve semester units.
2. Mathematics and the physical and life sciences students should complete at least three semester units in mathematics beyond both elementary algebra and plane geometry. Two basic courses in the sciences, one in physical sciences and one in life sciences, should be completed. At least one should be a laboratory course with seven to nine semester units.
3. Nine semester units in social sciences should be completed. Recommended are one course each in U.S. history, political science and psychology, as well as courses in anthropology, economics, geography and sociology.
4. Humanities and the fine arts (including foreign languages) students should complete six to eight semester units divided between art and music. Additionally, one or two courses may be chosen from dance, drama, foreign language, humanities (general), non-European cultures, philosophy and religious studies.

Continued
Transfer Requirements

NOTE: Always review the requirements of the institution to which you wish to transfer. See a counselor for accurate planning and current information.

Other programs are performing arts, dance, economics, environmental studies, foreign language, law, philosophy, physical education, physics, political science, psychology, chemistry, education, geology, humanities, journalism, sociology and speech.

Independent California Colleges and Universities

California's fully accredited independent colleges and universities provide a host of options at undergraduate, graduate and professional levels for students planning to continue their education beyond community college.

Admission Policies

Students who transfer to independent colleges or universities find they are given academic credit for most, if not all, of their community college studies. Virtually all institutions give full credit for general education courses and usually other courses designated for transfer by the community college.

Some colleges and universities stipulate a certain number of completed units before considering students eligible for transfer. Others do not and will accept students at any time. The requirements are outlined in the respective college catalogs, available upon request from the college's Office of Admissions.

Independent institutions are generous in awarding credit. They invite students to make an appointment with their Office of Admissions in order to discuss transfer opportunities on a personal basis.

Financial Aid

The application is simple. Students are to complete the Student Aid Application for California (SAAC) and request a copy to be sent to the college of their choice. Forms are available in the Office of Financial Aid at West Los Angeles College. For further information, students should contact the Office of Financial Aid at the college of their choice.
Course Descriptions

The courses offered are listed alphabetically with brief course descriptions. The credit value of each course in semester units is indicated by the number in parentheses following the course title. Each unit represents one hour a week for lecture or recitation, or two or more hours per week of laboratory. Some courses may be repeated for credit. For example, RPT 3 indicates that the course may be repeated three times for credit. Prerequisites are stated if the course requires them. If the number of hours in which a class meets differs from the number of units, the course description states the actual number of lecture and/or laboratory hours.

All West Los Angeles College courses are offered for college credit. All courses which meet the major requirement of the educational programs listed in this catalog may be applied towards graduation requirements for the Associate Degree. All transfer courses may be applied to the Associate Degree. Some courses which are offered for college credit, but which cannot be applied toward graduation requirements for the Associate Degree are designated by the code NDA, non degree applicable. Transfer courses are acceptable for credit at the University of California and at the California State University according to the following codes:

University of California
UC - Courses so designated are acceptable for credit at all campuses of the University of California.

California State University
CSU - Courses so designated are acceptable for credit at all campuses of the California State University. Courses designated CSU are certified as being appropriate for baccalaureate degree credit for determining admission eligibility as an undergraduate transfer. If nothing appears after the course title, then the course is not transferable. For specific course equivalents, see a counselor.

California Articulation Numbering System (CAN)
Courses listed with a "CAN" designate those that are identically listed in the California State University and University of California higher education systems. The basic premise of the CAN numbering system is that identically numbered CAN courses are acceptable "in lieu of" each other and will assist students and counselors in decisions concerning transfer to those systems. While the courses are comparable, they are not necessarily identical. The numbering system was recently implemented and additional courses with the CAN designation will be added on an ongoing basis.

Course Repeatability for Credit
The symbol RPT identifies courses which may be taken more than once for credit. The number which follows RPT symbol indicates the number of times a course may be repeated for credit.

ACCOUNTING
(See Business Also)

1 Introductory Accounting I (5) UC:CSU
Prerequisite: Business 38, one year high school algebra or Math 115 and consent of instructor. Business Administration majors are advised to take Accounting 1 in their third semester.
This course emphasizes basic accounting theory and practices which include an analysis of records of original entry and their relationship to the general ledger, controlling accounts and their subsidiary ledgers, voucher system, periodic adjustments, work sheet, financial statements and closing the ledger. Students complete a simulated set of books of records for a sole proprietorship form of mercantile firm using business papers.

Note: Same as Accounting 21 with Accounting 22

2 Introductory Accounting II (5) UC:CSU
Prerequisite: Accounting 1 or Accounting 22 with a grade of C or better or equivalent or consent of instructor
Accounting principles and procedures relating to partnerships and corporations, accounting for manufacturing, cost accounting, branch and departmental accounting, interpretation of financial statements, supplementary statements, data processing and management controls are covered. Students complete a manufacturing firm practice set.
Acceptable for Management 1B credit, UCLA

15 Tax Accounting I (3) CSU
Prerequisite: Accounting 1 or equivalent and permission of instructor
Credit allowed for only one of Accounting 15 or Business 10.
The laws, accounting procedures, and preparation of returns required for federal and California State individual income taxes are covered.

16 Tax Accounting II (3) CSU
Prerequisite: Successful completion of Accounting 15 or consent of instructor.
This course deals with state taxes, accounting procedures and preparation of state and federal tax returns required for partnerships, corporations, estates and trusts. Federal and state returns for inheritance and gift taxes will also be considered along with review of individual tax returns to update the student on new tax laws and forms.

17 Payroll Accounting (2)
Prerequisite: Concurrent enrollment in Business 38 or consent of instructor.
This course presents methods and procedures of compiling payroll records and preparation of payroll tax returns required by state and federal laws, including state and federal unemployment and social security, insurance and workers' compensation reports.

20 Managerial Accounting (3) CSU
The application of accounting analysis to business decision, planning, and control is presented. The emphasis is on the usefulness and appropriateness of data.

21 Bookkeeping and Accounting I (3) UC:CSU
Prerequisite: Business 38, which may be taken concurrently.
Fundamentals of double entry bookkeeping, preparation of the trial balance, work sheets and for the financial statements, use of controlling accounts, the control of cash and bank reconciliation statements are presented. Students complete a mercantile firm practice set. Credit allowed only for either Accounting 1 or 21.
Accounting 21 and 22 together equal Accounting 1 and are acceptable for Management 1A credit, UCLA.

22 Bookkeeping and Accounting II (3) UC:CSU
Prerequisite: Accounting 21 or equivalent and permission of instructor.
The voucher system, payroll accounting, accounting of notes, bad debts, inventories, cost of goods sold, fixed assets, depreciation, adjustments and interim statements are dealt with. Students complete a mercantile firm practice set. Together with Accounting 21, equals Accounting 1.

25 Automated Accounting Methods and Procedures (3)
Prerequisite: Completion of one semester of Accounting Principles (or equivalent), through and including material on payroll accounting with a grade of C or better.

Continued
Course Descriptions

This Introduction to Accounting, using the microcomputer, will provide information and practice in the basic machine operations, plus instruction in the following areas: general ledger, depreciation, accounts receivable, accounts payable, and payroll. Real-world applications will be stressed throughout the course.

37 Accounting Machine Practice (1-1)
Prerequisite: Basic arithmetic skills, Business 38 or high school math.
Laboratory 2 hours.
This laboratory course offers instruction in touch-key operation of ten-key and electronic printing and display calculators. Students are taught to use timesaving features on standard electronic calculators, including memory keys, constant and accumulative modes and decimal controls.

Cooperative Work Experience Education
Accounting is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.

ADMINISTRATION OF JUSTICE

1 Introduction to Administration of Justice (3) UC:CSU
Philosophy and history of law enforcement, overview of crime and police problems, organization and jurisdiction of local, state and federal law enforcement agencies, survey of professional career opportunities and qualifications required for entry into a career in Administration of Justice are presented.

2 Concepts of Criminal Law (3)UC:CSU
Structure, definitions, and the most frequently used sections of the Penal Code and other criminal statutes pertaining to law enforcement are covered.

3 Legal Aspects of Evidence (3) CSU
A careful study of the kinds and degrees of evidence and the rules governing the admissibility of evidence in court is made.

4 Principles and Procedures of the Justice Systems (3) CSU
Procedures from incident to final disposition including the police, prosecution court and correctional process, principles of constitutional, federal, state and civil laws are considered as they apply to and affect law enforcement. Theories of crime and punishment are included.

5 Criminal Investigation (3) CSU
This course covers the fundamentals of investigation; crime scene search and recording, collection and presentation of physical evidence; scientific aids; modus operandi; sources of information; interviews and interrogation; follow up and case preparation.

6 Patrol Procedures (3) CSU
Prerequisite: Administration of Justice 1 or consent of instructor.
This course is a study of the responsibility, techniques and methods of police patrol. Topics include patrol distribution, selective enforcement, pull-over and approach methods, emergency pursuit driving, search of suspects and buildings, field interrogations, procedures in the handling of calls for police service and special police problems.

7 Traffic Control (3) CSU
This course covers traffic law enforcement regulation and control, fundamentals of traffic accident investigation, and the California Vehicle Code.

8 Juvenile Procedures (3) CSU
This course is a study of the organization, functions and jurisdiction of juvenile agencies; the processing and detention of juveniles; juvenile case disposition; juvenile statutes and court procedures.

6214 Report Writing for Peace Officers (3) CSU
Lecture 3 hours.
This course includes the study of and practice in preparing various types of reports required by the criminal justice system; review of basic writing skills, technical and legal terminology, and the requirements for preparation of legally admissible documents.

15 Police Supervision (3) CSU
Prerequisite: Employment in law enforcement or consent of instructor or Department Chair.
This course is specifically designed to prepare law enforcement officers for the duties and responsibilities of the police supervisor. It is primarily concerned with supervisory functions, techniques and the underlying principles governing their applications.

18 Recruitment and Selection Process (3)
An in-depth coverage of the legal selection process designed to assist students with employment into a law enforcement agency. Course includes written exam techniques, agility exam, explanation of background investigation, psychology test, medical exam, and practical ways to assist the candidate through the academy.

42 Advanced Criminal Law (3) CSU
Prerequisite: Administration of Justice 2 or consent of instructor.
This course is the study of criminal law with special emphasis on major crimes of particular interest to peace officers and examines penal provisions in state codes and leading case law.

60 Arrest, Search and Seizure (3) CSU
This course covers the history and development of the laws and custom of arrest, search and seizure and the "Exclusionary Rules." Consideration is given to landmark decisions and current case law which directs the applications of procedures and techniques as they relate to law enforcement officers and others in the apprehension of criminals and the procuring of evidence.

62 Fingerprint Classification (3) CSU
A practical course which covers the technical terminology of fingerprinting, pattern interpretation, classification of fingerprinting, searching and filing procedures. Time will also be devoted to laboratory work in the classroom. A certificate will be awarded on completion.

67 Community Relations I (3) UC:CSU
An in-depth exploration of the roles of the Administration of Justice practitioners and their agencies is offered. Through interaction and study the student becomes aware of the relationships and role expectations among the various agencies and the public. Principal emphasis is placed upon the professional image of the system of Justice Administration and the development of positive relationships between members of the system and the public.

75 Introduction to Corrections (3) CSU
This basic course deals with the nature of correctional work; aims and objectives of Correctional Administration; probation and practices; skills, knowledge and attitudes required for employment in this field; types of institutions and services and career opportunities.

86 Issues in Law Enforcement (3)
Lecture 3 hours.
This course surveys literature and media presenting the issues, problems and perceived image of law enforcement.

Cooperative Work Experience Education
Administration of Justice is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.
AEROSPACE PRODUCTION TECHNOLOGY

(Requirements for the certificate of completion are met by completing courses 1 through 6, listed below and AMT 11 & 12.)

102 Fabrication and Repair of Advanced Composites (5)
NDA
This is a basic course in composites with hands-on training plus theory. Projects completed represent both aerospace and aircraft structures, emphasizing construction and repair methods. Also included are basic layup procedures covering fiberglass, kevlar, and carbon fiber materials, using both pre-preg, dry film, and wet matrix methods. This class has been created with input from industry to supply beginning fabricator procedures.

122 Technical Mathematics II (3) NDA
This course surveys the elements of advanced technical and vocational mathematics with application to problems commonly found in industrial and technological settings, including strength of materials and work and power.

Cooperative Work Experience Education
Aerospace Production Technology is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.

AFRICAN-AMERICAN STUDIES

2 The African-American in Contemporary Culture (3) UC:CSU
A survey of the urbanization of African-Americans with emphasis on social and political contemporary problems, proposed solutions to civil rights, and equality of opportunity.

AIRCRAFT ELECTRONICS TECHNOLOGY

1 Scientific Calculator Electronics Mathematics (4) CSU
Lecture 3 hours; laboratory 3 hours.
A review of arithmetic, graphs, algebra and trigonometry as performed on the scientific calculator and their application to aircraft electronics circuits is presented.

Lecture: 3 hours; laboratory: 3 hours.
Prerequisite: Aircraft Electronics Technology 1 or equivalent.

2 Aircraft Direct Current Theory and Laboratory (4) CSU
Prerequisite: Aircraft Electronics Technology 1 or equivalent.
Lecture 3 hours; Laboratory 3 hours.
A study is made of series, parallel, semiparallel and complex circuits involving more than one source of EFM voltage dividers, and the construction of basic meters is stressed. In the laboratory, practice is provided in the application of the basic laws of electricity to aircraft DC equipment.

Lecture: 3 hours; laboratory: 3 hours.
Prerequisite: Aircraft Electronics Technology 1 or equivalent.

3 Aircraft Alternating Current Theory and Laboratory (4)
Prerequisite: Aircraft Electronics Technology 2 or equivalent.
Lecture 3 hours; laboratory 3 hours.
A study of Inductance, transformers, filters, reactance, resonant circuits, power factors and impedance matching, with motor and generator applications, graphical and vector representations is made. The laboratory instruction is offered in the construction and testing of aircraft electronics equipment using oscilloscopes, frequency meters, probe measurements, bridges and “Q” meters.

Lecture: 3 hours; laboratory: 3 hours.
Prerequisite: Aircraft Electronics Technology 2 or equivalent.

4 Aircraft Semiconductor and Integrated Circuit Applications (4)
Prerequisite: Aircraft Electronics Technology 3 or equivalent
Lecture 3 hours; laboratory 3 hours.
This course presents basic principles of semiconductors, crystal diodes, metallic rectifiers, transistors, Zener diodes, tunnel diodes and vacuum tubes. Instruction is offered in audio amplifier calculations, analysis of amplifier circuits using vacuum tubes and transistors. In the laboratory experience is provided in construction and testing of voltage and power amplifier and audio and RF amplifiers using vacuum tubes and transistors, including plotting characteristic curves, dynamic measurement, techniques of troubleshooting, gain and signal transfer measurements and distortion measurements.

Note: This course is similar to Electronics 20 and is part of CORE II of the Electronics curriculum.

5 Aircraft Electronic Circuit Analysis I (4) CSU
Prerequisite: Aircraft Electronics Technology 4 or equivalent.
Lecture 3 hours; laboratory 3 hours.
A study is offered in the special electronic circuits that include multivibators, blocking oscillators, integrators, differentiators, clippers, clamps, sweep and counter circuits. In the laboratory practice is offered in the wave form analysis of these circuits and soldering techniques, including solderless connections, wiring harness, harness construction and repair.

Note: This course is similar to Electronics 22 and is part of CORE II of the electronics curriculum.

6 Aircraft Electronic Circuit Analysis II (4) CSU
Prerequisite: Aircraft Electronics Technology 5 or equivalent.
Lecture 3 hours; laboratory 3 hours.
A study is offered in the special electronic circuits that include multivibators, blocking oscillators, integrators, differentiators, clippers, clamps, sweep and counter circuits. In the laboratory practice is offered in the wave form analysis of their circuit.

Note: This course is similar to Electronics 24 and is part of CORE II of the electronics curriculum.

7 Aircraft Receiver and Transmitter Principles I (4) CSU
Prerequisite: Aircraft Electronics Technology 6 or equivalent.
Note: Students must have a minimum G.P.A. of 2.0 in AET or equivalent prior to enrollment in AET 7.8.9.
Lecture 3 hours; laboratory 3 hours.
Instruction is offered in the theory of operation of aircraft AM, FM, and single sideband receivers and transmitters for communication and navigation equipment. In the laboratory practice is provided in testing, alignment and troubleshooting procedures for aircraft communication receivers, transmitters and navigation receivers.

8 Aircraft Receivers and Transmitters Principles II (4) CSU
Prerequisite: Aircraft Electronics Technology 7 or equivalent.
Note: Students must have a minimum G.P.A. of 2.0 in AET or equivalent prior to enrollment in AET 7.8.9.
Lecture 3 hours; laboratory 3 hours.
Advanced instruction is offered in the operation and maintenance of aircraft AM, FM, and single sideband receivers and transmitters for communication and navigation equipment. In the laboratory experience is provided in testing, alignment and troubleshooting procedures for aircraft communication receivers, transmitters and navigation receivers.

9 Radio Communications (4) CSU
Prerequisite: Aircraft Electronics Technology 8 or equivalent.
Note: Students must have a minimum G.P.A. of 2.0 in AET or equivalent prior to enrollment in AET 7.8.9.
Lecture 3 hours; laboratory 3 hours.
Instruction is offered in FCC regulations, radio broadcast transmitter licensing, operation and maintenance leading to FCC first class radio telephone license. In the laboratory the students will analyze, align, troubleshoot and repair AM, FM, SSB and pulse-modulated radio transmitters.

10 Digital Computer Logic, and Auto Pilot Systems (4)
Note: Student must have minimum 2.0,0.G.P.A. in Aircraft Electronics Technology prior to enrollment in AET 11,12.
Prerequisite: Aircraft Electronics Technology 1 through 6 or equivalent.
Lecture 3 hours; laboratory 3 hours.
Instruction is offered in symbolic logic for digital and analog computers, basic concepts, operating techniques and circuit

Continued

69
Course Descriptions

components of magnetic amplifiers, as well as closed servo loop data, transmission systems. In the laboratory experience is gained in construction of digital circuits, truth tables and troubleshooting techniques, also analysis and troubleshooting servo loops.

11 Aircraft Multiplex Systems (4) CSU
Note: Student must have minimum 2.0 G.P.A. in Aircraft Electronics Technology prior to enrollment in AET 10, 11, 12.
Prerequisites: Aircraft Electronics Technology 10 or equivalent.
Lecture 3 hours; laboratory 3 hours.
Instruction is offered in the theory, operation and maintenance of multiplex systems as applied to modern aircraft. In the laboratory the student analyzes, tests and performs troubleshooting repair and alignment on multiplex systems.

12 Aircraft Entertainment and Intercom Systems (4) CSU
Note: Student must have minimum 2.0 G.P.A. in Aircraft Electronics Technology prior to enrollment in AET 10, 11, 12.
Prerequisites: Aircraft Electronics Technology 11 or equivalent.
Lecture 3 hours; laboratory 3 hours.
This course includes a study of the intercommunication system of pilot to crew and pilot to passengers, as well as music, video, and skyphones systems. In the laboratory the students will analyze PA systems, AM, FM, and video units.

51 Aircraft Electronic Multiplexing (4)
Prerequisites: Aircraft Electronics Technology 4 through 12 or F.C.C. (G.R.O.L.) General Radio Operator's License or equivalent or permission of the instructor.
Lecture 3 hours; laboratory 3 hours.
This course offers instruction in the theory, operation, testing, alignment, and troubleshooting procedures for airborne communication systems.

52 Avionic Modular Components & Systems (4) RPT 3
Prerequisites: Aircraft Electronics Technology 1 through 12 or F.C.C. (G.R.O.L.) General Radio Operator's License or equivalent or permission of the instructor.
Lecture 3 hours; laboratory 3 hours.
This course offers instruction in the theory, operation, testing, alignment, and troubleshooting procedures for airborne pulse systems.

53 Current Communication/Navigation Circuit Applications (4)
Prerequisites: Aircraft Electronics Technology 1 through 12 or F.C.C. (G.R.O.L.) General Radio Operator's License or equivalent or permission of the instructor.
Lecture 3 hours; laboratory 3 hours.
This course offers instruction in the theory, operation, testing, alignment, and troubleshooting procedures for airborne navigation systems.

Cooperative Work Experience Education
Aircraft Electronics Technology is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course description and credit limits.

ANATOMY
(See also: Physiology)

1 Introduction to Human Anatomy (4) UC:CSU
Recommended: College Biology and English 28.
Lecture 3 hours; laboratory 3 hours.
This course presents the structure of the human body by subdividing it into individual body systems. The functional anatomy of each level of organization is then studied from the microscopic level of organization to the gross level. In addition, the embryological development of each body system and selected pathologies will be examined. Laboratory exercises include the study of histological slides, photomicrographs, x-rays, human skeleton, and the dissection of a cat. This course is intended to meet the requirements of students majoring in nursing, dental hygiene, occupational therapy, psychology, physical education and life sciences, or for those who wish to extend their knowledge of the human body beyond the scope of introductory biology. Note: Anatomy 1 and Physiology 1 taken together equal Physiology 6.

Cooperative Work Experience Education
Anatomy is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course description and credit limits.

ANTHROPOLOGY

101 Human Biological Evolution (3) UC:CSU
(CAN ANTHI 2)
The course focuses on the relationship between human biology, culture and the physical environment, as interpreted within the framework of evolutionary theory and the science of genetics. It traces man's place in the animal kingdom, with special emphasis on primates. Archeological evidence, associated with human fossils, is examined and human physical variability is probed within the context of Mendelian and population genetics, Acceptable for Anthropology 1-2. Credit UCLA

102 Human Ways of Life: Cultural Anthropology (3) UC:CSU
(CAN ANTHI 4)
The course presents an anthropological understanding of the varieties of life styles in human societies throughout the world, from nomadic hunting-gathering tribes to highly technologically-developed societies such as ours. The varied forms of marriage and the family, economic, political, and legal arrangements; religious expressions; and art forms are examined in their own contexts and compared to others. Extensive use is made of audio-visual materials. Acceptable for Anthropology 5, Credit UCLA

103 Archaeology: Reconstructing the Human Past (3) UC:CSU
The course focuses on the discovery and reconstruction of the ways of life of extinct societies through the excavation, analysis and interpretation of their material remains, including refuse, stone tools, pottery, burials, housing. By examining these remains within the context of the environment and change over time, students acquire a means of understanding the human past. Extensive use is made of audio-visual materials. Acceptable for Anthropology 6, Credit UCLA

121 Anthropology of Religion, Magic, and Witchcraft (3) UC:CSU
This course provides a socio-cultural understanding of religious behaviors. It deals with the components, function and symbolism of religious behavior, as manifested through practices such as magic, witchcraft, totemism, divination, shamanism, ancestor worship and cults. Belief in gods, demons, ghosts, spirits, mana, the other world, and the soul are probed. Special emphasis is given to tribal religious systems through the use of information gathered by anthropologists in the field, Nontribal religious systems are included for comparative purposes. Extensive use is made of audio-visual materials.

Cooperative Work Experience Education
Anthropology is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course description and credit limits.

ART
(Outstanding works of students' art may be retained for a maximum of two years by the college art gallery.)
TRANSFER CREDIT: UC comparise have established the following transfer credit minimums: 12 units from Art 709, 710, 711, 712; 16 units from Art 201, 202, 203, 204, 205, 209, 300, 301, 302, 304, 305. Continued
Course Descriptions

101 Survey Of Art History I (3) UC:CSU
In this chronological survey of the visual arts from pre-history through the European Middle ages, early civilizations in the Middle East, Egypt, India, China, the Mediterranean, Africa, Meso-America, Japan, and Western Europe are studied.

102 Survey Of Art History II (3) UC:CSU
NOTE: Art 101 is not a prerequisite to Art 102. This course surveys the visual arts of Western Europe, pre-Columbia, America, Africa, and Japan chronologically from the Italian Renaissance to modern times.

103 Art Appreciation I (3) UC:CSU
This broad introduction to the nature, vocabulary, media, and history of art, with selections from western and non-western cultures is designed to expand awareness and understanding of the visual forms that are part of the environment.

201 Drawing I (3) UC:CSU
(CAN ART 8)
Lecture 2 hours; studio 2 hours.
This introduction to drawing places emphasis upon fundamental rendering of three dimensional form in space. Pencil, pen and charcoal are used. Students are expected to complete an additional 2 hours per week of studio homework.
Acceptable for Art 10A credit, UCLA.

202 Drawing II (3) UC:CSU
Prerequisite: Art 201 with a grade of C or better or equivalent.
Lecture 2 hours; studio 2 hours.
Compositional aspects of drawing as applied to still life, natural forms, landscape and the human figure are explored. Students are expected to complete an additional 2 hours per week of studio homework.

203 Drawing III (3) UC:CSU
Prerequisite: Art 202 with a grade of C or better or equivalent.
Lecture 2 hours; studio 2 hours.
This course is a continuation of Art 202. Students are expected to complete an additional 2 hours per week of studio homework.

204 Life Drawing I (3) UC:CSU
Prerequisite: Art 201 with a grade of C or better or equivalent.
Lecture 2 hours; studio 2 hours.
An introductory study of human structure and proportion is provided. Fundamental drawing approaches are explored in black and white media with emphasis upon the development of observation and skill in graphic representation. Students are expected to complete an additional 2 hours per week of studio homework.

205 Life Drawing II (3) UC:CSU
Prerequisite: Art 204 with a grade of C or better or equivalent.
Lecture 2 hours; studio 2 hours.
This course consists of drawing from the human figure with emphasis upon the development of observation, structure and draftsmanship. Various media are explored stressing line and tone. Students are expected to complete an additional 2 hours per week of studio homework.

206 Life Drawing III (3) UC:CSU
Prerequisite: Art 205 with a grade of C or better or equivalent.
Lecture 2 hours; studio 2 hours.
This course is a continuation of Art 205. Students are expected to complete an additional 2 hours per week of studio homework.

300 Introduction to Painting (3) UC:CSU
Prerequisite: Art 201 or 501 with a grade of C or better or equivalent.
Lecture 2 hours; studio 2 hours.
This course continues the development of craftsmanship and exposure to art concepts related to imagery, paint quality, color and composition. This course includes traditional and mixed media in drawing and painting are explored with emphasis upon specific techniques. Students are expected to complete an additional 2 hours per week of studio homework.
Acceptable for Art 20A credit, UCLA

301 Watercolor Painting I (3) UC:CSU
Prerequisite: Art 300 with a grade of C or better or equivalent.
Lecture 2 hours; studio 2 hours.
This course is an introduction to and an exploration of watercolor media in varied styles, techniques and pictorial methods. Students are expected to complete an additional 2 hours per week of studio homework.

302 Watercolor Painting II 3 UC:CSU
Prerequisite: Art 301 with a grade of C or better or equivalent.
Lecture 2 hours, studio 2 hours.
This is a continuation of Art 301. Students are expected to complete an additional 2 hours per week of studio homework.

304 Acrylic Painting I (3) UC:CSU
Prerequisite: Art 300 or 501 with a grade of C or better or equivalent.
Lecture 2 hours; studio 2 hours.
This course is an introduction to fundamental skills in acrylic media, canvas preparation and brush techniques. Composition and color theory are studied as applied to still life, landscape and natural forms. Students are expected to complete an additional 2 hours per week of studio homework.

305 Acrylic Painting II (3) UC:CSU
Prerequisite: Art 304 with a grade of C or better or equivalent.
Lecture 2 hours; studio 2 hours.
This course is a continuation of Art 304. Students are expected to complete an additional 2 hours per week of studio homework.

501 Beginning Two-Dimensional Design (3) UC:CSU
Lecture 2 hours; studio 2 hours.
This course provides an introduction to organization on the two dimensional plane. Scale, shape, texture, motion and color are focused upon. Fundamentals of modulations, modification and variation are explored. Students are expected to complete an additional 2 hours per week of studio homework.

502 Beginning Three-Dimensional Design (3) UC:CSU
Prerequisite: Art 501 with a grade of C or better or equivalent. Art 503 may be taken concurrently.
Lecture 2 hours; studio 2 hours.
This course provides an introduction to the organization of forms in three dimensions. Experimental problems in a variety of materials using various spatial constructions are dealt with. Students are expected to complete an additional 2 hours per week of studio homework.

503 Intermediate Design (3) UC:CSU
Prerequisite: Art 501 with a grade of C or better or consent of instructor.
Lecture 2 hours; studio 2 hours.
This continuation of Art 501 stresses the individual's sensitivity to color enabling the painter, designer or layperson to utilize color for expression. Students are expected to complete an additional 2 hours per week of studio homework.

708 Introduction to Ceramics (3) UC:CSU
Lecture 1 hour; studio 5 hours.
Instruction in wheel throwing and hand construction is provided. Simple experiments are conducted in the formulation of clay bodies and glazes. Analysis of form, function and decoration emphasizing the proper use of materials and tools in the basic methods of clay construction is stressed.

709 Ceramics I (3) UC:CSU
Prerequisite: Art 708 with a grade of C or better or equivalent.
Lecture 1 hour; studio 5 hours.
Development of students' technical skills is continued with emphasis on individual growth in creative design abilities. Loading and firing of kilns and the study of ceramic raw materials are included.

710 Ceramics II (3) UC:CSU
Prerequisite: Art 709 with a grade of C or better or equivalent.
Lecture 1 hour; studio 5 hours.
This course is a continuation of Art 709.

Continued
Course Descriptions

711 Ceramics III (3) UC:CSU
Prerequisite: Art 710 with a grade of C or better or equivalent.
Lecture 1 hour; studio 5 hours.
This course is a continuation of Art 710.

712 Ceramics Workshop (2)
This course provides a studio experience for beginning and advanced potters. A variety of construction methods are undertaken simultaneously, including handbuilding, wheel-throwing and simple mold production. Techniques for surface enrichment, glazing and firing are explored at various levels of ability.

185 Directed Study - Art Honors (1) UC:CSU
285 Directed Study - Art Honors (2) UC:CSU
385 Directed Study - Art Honors (3) UC:CSU
Prerequisite: Consent of Instructor.
Conference 1 Hour Per Unit
Allows students to pursue Directed Study in Art on a contract basis under the direction of a supervising instructor. Credit Limit: A maximum of 3 units in Directed Study may be taken for credit.

COOPERATIVE WORK EXPERIENCE EDUCATION
Art is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course description and credit limits.

ASTRONOMY

1 Elementary Astronomy (3) UC:CSU
All areas of modern astronomy are discussed in this introductory course. Major topics include: the sun, moon and planets; stars and galaxies; telescopes and other instruments; constellations; and the history of astronomy. Acceptable for Astronomy 3 credit, UCLA.

Cooperative Work Experience Education
Astronomy is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course description and credit limits.

AVIATION

MAINTENANCE TECHNICIAN

Note: Subject credit for courses in this program may be obtained at California State University, San Jose and at National University after transfer.

1 Maintenance Procedures (3)
Prerequisite: Must be taken concurrently with Aviation Maintenance Technician 2.
Lecture 3 hours.
Instruction is offered in ground operation, servicing airplanes, maintenance publications, forms, records, and mechanic’s privileges and limitations. Aircraft materials and processes are identified with emphasis on inspection procedures.

2 Maintenance Procedures Laboratory (2)
Prerequisite: Must be taken concurrently with Aviation Maintenance Technician 1.
Laboratory 6 hours.
Instruction and practice is offered in the ground operations and servicing of airplanes. Maintenance publications, forms, and records are used in conjunction with inspection and repair procedures. Materials are identified and inspected to specifications.

3 Basic Aircraft Science (3)
Prerequisite: Must be taken concurrently with Aviation Maintenance Technician 4.
Lecture 3 hours.
Instruction is offered in applied mathematics, physics, aircraft drawing, application of aircraft coverings, doped, and corrosion control.

4 Basic Aircraft Science Laboratory (2)
Prerequisite: Must be taken concurrently with Aviation Maintenance Technician 3.
Laboratory 6 hours.
Instruction and practical application is offered in basic mathematics, physics, aircraft drawings and prints. Instruction and practice is also given in wood structures, aircraft coverings, aircraft finishing and corrosion control.

5 Basic Electricity and Auxiliary Systems (3)
Prerequisite: Must be taken concurrently with Aviation Maintenance Technician 6.
Lecture 3 hours.
Instruction is offered in basic electricity, Ohm’s law, DC and AC circuits, semi-conductors, metric prefixes, and scientific notation. Communication and navigation systems, cabin atmophere control, position and warning systems and ice and rain control systems are also covered.

6 Basic Electricity and Auxiliary System Laboratory (2)
Prerequisite: Must be taken concurrently with Aviation Maintenance Technician 5.
Laboratory 6 hours.
This course describes relationships between voltage, current and power and explains how to use testing and measuring equipment in the inspection, checking, servicing and repair of the following systems: air-conditioning, communication and navigation, position and warning, and ice and rain control.

7 Electrical and Instrument Systems (3)
Prerequisite: Must be taken concurrently with Aviation Maintenance Technician 8 and satisfactory completion of AMT 5.
Lecture 3 hours.
Instruction is offered in the function of aircraft electrical systems and components, generators, and aircraft instruments, including flight, navigation, and engine instruments.

8 Electrical and Instrument Systems Laboratory (2)
Prerequisite: Must be taken concurrently with Aviation Maintenance Technician 7 and satisfactory completion of AMT 6.
Laboratory 6 hours.
An analysis is made of series, parallel and complex electrical circuitry in D.C. and in A.C., supplemented by discussion of testing and measuring equipment. Description, operation, and maintenance procedures for aircraft instrumentation are also explained.

9 Assembly, Rigging and Inspection (3)
Prerequisite: Must be taken concurrently with Aviation Maintenance Technician 10.
Lecture 3 hours.
Instruction is offered in assembly and rigging techniques, with weight and balance theory and procedure emphasized, and in the fabrication and installation of fluid lines and fittings.

10 Assembly, Rigging and Inspection Laboratory (2)
Prerequisite: Must be taken concurrently with Aviation Maintenance Technician 9.
Laboratory 6 hours.
Instruction is provided in the skills and techniques needed for the assembly and rigging of airframe structures, including weight and balance computation. Opportunity is provided to fabricate fluid lines and fittings.

11 Aircraft Metal Assembly (3)
Prerequisite: Must be taken concurrently with Aviation Maintenance Technician 12.
Lecture 3 hours.
This course offers a study of metal and non-metal repair procedures, including the materials and methods of fastening by welding, riveting, and other accepted techniques.

12 Aircraft Metal Assembly Laboratory (2)
Prerequisite: Must be taken concurrently with Aviation Maintenance Technician 11.
Laboratory 6 hours.

Continued
Course Descriptions

Instruction and practice is offered in cutting, bending, forming, welding and fastening metal structures. Plastic enclosures, honeycomb and composites are evaluated. Structural repairs using various fastening and bonding techniques are emphasized.

13 Hydraulic, Landing Gear, and Fuel Systems (3)
Prerequisite: Must be taken concurrently with Aviation Maintenance Technician 14.
Lecture 3 hours.
Instruction is offered in the study of hydraulic landing gear, and aircraft fuel systems. Emphasis is placed on component design, operation, relationships, and system troubleshooting.

14 Hydraulic, Landing Gear, & Fuel Systems Laboratory (2)
Prerequisite: Must be taken concurrently with Aviation Maintenance Technician 13.
Laboratory 6 hours.
Hydraulic, landing gear, and fuel systems are studied and operated, with components removed and reinstalled. Emphasis is placed on procedure and techniques, troubleshooting, and diagnosis.

15 Propeller and Powerplant Systems (3)
Prerequisite: Must be taken concurrently with Aviation Maintenance Technician 16.
Lecture 3 hours.
Instruction is offered in propellers, powerplant lubrication, cooling, induction, and exhaust systems. Fire protection, including fire detection and extinguishing systems, is included.

16 Propeller and Powerplant Systems Laboratory (2)
Prerequisite: Must be taken concurrently with Aviation Maintenance Technician 15.
Instruction and practice is offered in identifying lubrication; troubleshooting engine lubricating systems; servicing and repairing propellers and control systems; troubleshooting and repairing powerplant cooling, induction and exhaust systems; and inspecting and servicing powerplant fire protection systems.

17 Ignition and Fuel Metering Systems (3)
Prerequisite: Must be taken concurrently with Aviation Maintenance Technician 18.
Lecture 3 hours.
Instruction is offered in the principles and practices of aircraft powerplant ignition systems and fuel metering systems.

18 Ignition and Fuel Metering Systems Laboratory (2)
Prerequisite: Must be taken concurrently with Aviation Maintenance Technician 17.
Laboratory 6 hours.
Instruction and practice is offered in inspecting, checking, servicing, troubleshooting, and repairing aircraft ignition and fuel metering systems.

19 Reciprocating Powerplant Overhaul (3)
Prerequisite: Aviation Maintenance Technician 15 and 17. Must be taken concurrently with Aviation Maintenance Technician 20.
Instruction is offered in maintenance, publications, basic engine theory and overhaul procedures of reciprocating engines.

20 Reciprocating Powerplant Overhaul Laboratory (2)
Prerequisite: Aviation Maintenance Technician 16 and 18. Must be taken concurrently with Aviation Maintenance Technician 19.
Laboratory 6 hours.
Instruction and practice is offered in use of maintenance publication records relative to overhaul procedure. Complete engine overhaul procedures and methods and practice are presented.

21 Powerplant Trouble Shooting and Testing (3)
Prerequisite: Aviation Maintenance Technician 19. Must be taken concurrently with Aviation Maintenance Technician 22.
Lecture 3 hours.
Instruction is offered in power plant inspection and troubleshooting procedures for power plants. Course includes turbine engine theory and operation.

22 Powerplant Trouble Shooting and Testing Laboratory (2)
Prerequisite: Aviation Maintenance Technician 20. Must be taken concurrently with Aviation Maintenance Technician 21.
Laboratory 6 hours.
Instruction and practice is offered in the installation, operation, and troubleshooting of aircraft powerplants.

23 Inspection and Evaluation (3)
Note: Student must have a minimum 2.0 GPA in Aviation Maintenance Technology prior to enrollment in AMT 23, 24.
Prerequisite: Aviation Maintenance Technician 1 through Aviation Maintenance Technician 22 or authorization for written exams and/or consent of instructor. Must be taken concurrently with Aviation Maintenance Technician 24.
Lecture 3 hours.
Instruction is offered in conducting 100-hour inspections. General airframe and powerplant subjects for the Airframe and/or Powerplant License are reviewed. Emphasis is placed on preparation for Federal Aviation Administration written examinations.

24 Inspection and Evaluation Laboratory (2)
Note: Student must have a minimum 2.0 GPA in Aviation Maintenance Technology prior to enrollment in AMT 23, 24.
Prerequisite: Aviation Maintenance Technician 1 through Aviation Maintenance Technician 22 or authorization for written exams and/or consent of instructor. Must be taken concurrently with Aviation Maintenance Technician 23.
Laboratory 6 hours.
Instruction and practice is offered in conducting a 100-hour inspection on an airframe and powerplant using the appropriate reference material and correct procedures to determine airworthiness of an airframe or powerplant. Students perform general, airframe, and powerplant practical projects.

31 Inspection Authorization for Aviation Mechanics (3)
NDA
Prerequisite: FAA Mechanic Certificate with Airframe and Powerplant ratings.
Lecture 3 hours.
Instruction is offered on the Certificated Aviation Mechanic reviewing regulations, inspection procedures and preparation for the Federal Aviation Administration Mechanic Inspection Authorization.

32 Aviation Management (3)
NDA
This course surveys general aviation management principles and practices, including airport and airline management. Among specific topics are repair station requirements, flight operations, aircraft maintenance, safety, regulations, personnel management, marketing, office administration, and trends.

BIOLOGY
(See also: Anatomy, Environmental Science, Microbiology, and Physiology)

3 Introduction to Biology (4) UC:CSU
Lecture 3 hours; laboratory 3 hours.
This is a course in general biology designed to fulfill a laboratory science requirement for students not majoring in biology. Students must be enrolled concurrently in a lecture and a lab section. The lecture portion of the course (Biology 3A) emphasizes the basic principles in biology and the fundamental characteristics of all living organisms. Lecture topics include the scientific method, cell structure and function, levels of organization of living organisms, heredity, the genetic control of cellular processes, evolution, and ecology. The laboratory portion of the course (Biology 3B) emphasizes the diversity of living organisms. Laboratory topics include an introduction to the microscope, study of the cell, a survey of the microorganisms, plants, and animals that comprise the kingdoms of life, and the anatomic study of the earthworm, grasshopper, and fetal pig.

4 Heredity and Human Development (3) UC:CSU
Lecture 3 hours.
This is an introductory genetics course for nonscience majors. Emphasis is placed on the facts and functions of heredity including its relationship to evolution, reproduction, genetic counselling and various human conditions and diseases. This course fulfills a non-laboratory science requirement.

Continued
Course Descriptions

5 Introduction to Human Biology (4) UC:CSU
Lecture 3 hours; laboratory 3 hours.
This is a course in biology, emphasizing the human. It is
designed to fulfill a laboratory science requirement and will also
provide a foundation for advanced courses in biology, including
human anatomy, physiology, and microbiology. Students must
be enrolled concurrently in a lecture and a lab section. The
lecture portion of the course (Biology 5A) emphasizes the funda-
mental principles in biology, cell structure and function, and the
levels of organization in the human body. Lecture topics include
the scientific method, an introduction to biological chemistry,
heredity, the genetic control of cellular processes, and the organ
systems of the body. The laboratory portion of the course (Biology
5B) includes an introduction to the microscope, detailed study of
cells and tissues, and the dissection of the fetal pig.

6 General Biology I (5) UC:CSU
Prerequisite: Chemistry 1 with a grade of C or better.
Lecture 3 hours; laboratory 6 hours.
The principles of molecular biology, cell structure and function,
genetics, evolution and organization at the tissue level in plants
and animals are studied. Biological science, pre-medical, pre-
dental and pre-pharmacy majors.
Acceptable for Biology 7 credit, UCLA.

7 General Biology II (5) UC:CSU
(Biology 7 may be taken before Biology 6.
Prerequisite: none
Recommended: UCLA and CSUN recommend the completion of
both Biology 6 and 7 as a core program.
Lecture 3 hours; laboratory 6 hours.
This course covers the principles of organ and organ system
physiology in plants and animals, ecology and the course of
evolution. A survey of the various plant and animal groups is
included.
Acceptable for Biology 5 credit, UCLA

185 Directed Study - Biology (1) UC:CSU
285 Directed Study - Biology (2) UC:CSU
385 Directed Study - Biology (3) UC:CSU
Prerequisite: Consent of Instructor.
Conference 1 hour per unit.
Allows students to pursue Directed Study in Biology on a
contract basis under the direction of a supervising instructor.
Credit Limit: A maximum of 3 units in Directed Study may
be taken for credit.

Cooperative Work Experience Education
Biology is approved for Cooperative Work Experience Education
credit. See Cooperative Education courses for prerequisites,
course description and credit limits.

BROADCASTING

1 Fundamentals of Radio and Television Broadcasting (3)
CSU
Required of all Broadcasting majors. Open to others.
Lecture 3 hours.
This course focuses on the basic phases of radio and television
broadcasting, including its history, legal aspects, networks,
FCC, programming, use of motion pictures and videotapes,
sales, public service, studio procedure and station personnel.

46 Fundamentals of Television Production (4) CSU RPT 1
Prerequisite: Completion of, or concurrent enrollment in Broadcast-
ing 1 or consent of Instructor.
Lecture 3 hours; laboratory 3 hours.
This course emphasizes all major elements of television produc-
tion work, including studio camera set-up and operation, light-
ing, set design, microphones, crew positions, video taping, and
striking. Students practice in crews, rotating positions. The
development of television as a communications medium is also
discussed, along with the language of visual literacy. Acceptable
for credit: 12 units maximum from Broadcasting 46 and Theater
267, 270, and 271, UC campuses.

83 Field Work III (3) CSU
Prerequisite: Broadcasting 1, Broadcasting 46. Enrollment in broad-
casting program and consent of instructor.
Co-requisite: None
Lecture 5-8 hour per week field work.
A 20-week, 2 to 8 hours per week Fieldwork program designed to
acquaint the student with the career field of broadcasting.
Emphasis is on the student working in the industry, radio,
television, or cable TV, and observing and reporting what is
learned in the programs of Internship offered by virtually all of
the major production/broadcasting corporations.
Students learn to handle production staff positions and the
empowerment of the television team. Accepted for credit at the
California State University System.

Cooperative Work Experience Education
Broadcasting is approved for Cooperative Work Experience
Education credit. See Cooperative Education courses for pre-
requisites, course description and credit limits.

BUSINESS

Also listed alphabetically in this catalog: Accounting, Business, Business Data Processing, Finance, Law,
Management, Marketing, Office Administration, Real
State, Supervision.

1 Introduction to Business (3) CSU
(NOTE: Students who are business majors or who are considering
a change to this major are advised to take this course as a
foundation. It is a survey of the fundamental aspects of all phases
of business.)
Forms of business organization, finance, personnel problems,
marketing, managerial aids and business-government relations
are surveyed. Students are given an overview of all facets of
business.

5 Business Law I (3) UC:CSU (Same as Law I)
Essentials of the law of contracts, agency, employment, personal
property, bailments, sales and real property in their application
to everyday problems pertaining to business and to the indivi-
dual. Elementary safeguards regarding sales and sales contracts.
Case discussion and lecture method.

31 Business English (3)
NOTE: English Placement exam required.
This course offers intensive review of the mechanics of English:
spelling, grammar, punctuation, sentence structure and word
usage. These principles are applied to the writing of sentences
and paragraphs. Business 31 also develops business vocabulary
skills.

32 Business Communications (3) CSU
Prerequisite: Business 31 with a grade of C or better and the ability
to type. English Placement Test required.
Business 32 develops the ability to use techniques of expository
and argumentative writing when composing business letters,
memos, and reports. Emphasis is placed on the fundamentals of
clear, direct expression, correct English usage, and the psychol-
ogy of business letter composition and communication.

38 Business Computations (3) CSU
This course provides a brief review of the fundamentals of
computations followed by applications of non-algebraic mathe-
matics to wage payment methods and payroll preparation;
percentage, markon, markup, markdown and turnover, cash
and trade discounts; simple interest and applications of comp-
ound interest principles to investment, annuity and depreci-
ation problems.

185 Directed Study - Business (1) CSU
285 Directed Study - Business (2) CSU
Continued
Course Descriptions

385 Directed Study - Business (3) CSU
Course 1 hour per unit.
Allows students to pursue Directed Study in Business on a contract basis under the direction of a supervising instructor.
Credit Limit: A maximum of 3 units in Directed Study may be taken for credit.

Cooperative Work Experience Education
Business is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.

CHEMISTRY

1 General Chemistry I (5) UC:CSU
(CAN CHEM 2)
Prerequisites: 1. Either high school chemistry or Chemistry 10 with a grade of C or better, and a satisfactory score on a chemistry placement examination given in advance of registration. Students should consult the Admissions Office, the Counseling Office or the Chemistry Department for dates of examinations.
2. A minimum of two years of high school mathematics or completion of Mathematics 125 or its equivalent. Both prerequisites must have been completed within the last two years. Recommended: Completion of English 21 or a more advanced reading and composition course with a grade of C or better, or eligibility for English 101.

Lecture and conference 5 hours; laboratory 4 hours.
This is a basic course emphasizing principles and theories. It includes discussions of chemical stoichiometry, atomic and molecular structure and the periodic table, gases, liquid solids, solutions, oxidation-reduction, acid and bases, and an introduction to chemical thermodynamics. The laboratory emphasizes basic laboratory skills, chemical principles, and quantitative relationships.
Chemistry 1 and Chemistry 2 are acceptable for Chemistry 11 ABC, BL, CL credit, UCLA. No credit for Chemistry 3 or 10 if taken after Chemistry 1. One course maximum credit for 3 or 10.

2 General Chemistry II (5) UC:CSU
(CAN CHEM 4)
Prerequisite: Chemistry 1 with a grade of C or better for the last two years.
Lecture and conference 5 hours; laboratory 4 hours.
This course is a continuation of Chemistry 1, with an introduction to chemical kinetics, chemical equilibrium with emphasis on aqueous equilibria, electrochemistry, nuclear chemistry, organic chemistry, and descriptive inorganic chemistry. The laboratory includes both quantitative experiments and qualitative analysis.
Chemistry 1 and Chemistry 2 are acceptable for Chemistry 11 ABC, BL, CL credit, UCLA. No credit for Chemistry 3 or 10 if taken after Chemistry 1.

3 Introductory Chemistry (5) UC:CSU
Prerequisites: A knowledge of basic arithmetic as taught in Mathematics 10S (Arithmetic for College Students) is essential; Mathematics 15 (Elementary Algebra) or one year of high school algebra is highly recommended. Also recommended is completion of English 21 or a more advanced reading and composition course with a grade of C or better, or eligibility for English 28
Lecture and conference, 4 hours; laboratory, 3 hours.
This introductory course emphasizes the principles of chemistry, including inorganic and organic chemistry. It is intended for students in nursing, home economics, physical education, elementary education, and for liberal arts majors who need a physical science laboratory course. Students intending to take Chemistry 1 should take Chemistry 10 rather than Chemistry 3.
Acceptable for Chemistry 2 with Lab, credit UCLA.

9 Introductory Organic and Biochemistry (4) UC:CSU
Prerequisite: Chemistry 1, 3 or 10, with a grade of C or better.
Lecture 3 hours; laboratory 3 hours.
This course is designed for students who are majoring in dental hygiene, home economics or nursing. Emphasis is placed on organic chemistry and the processes that occur in living tissues.
The relationship between organic and biochemistry is presented at the molecular as well as the cellular level.

10 Introduction to General Chemistry (5) UC:CSU
Prerequisite: One year of high school algebra or Mathematics 115 and a satisfactory score on an entrance examination testing background for this course.
Recommended: Completion of English 21 or a more advanced reading and composition course with a grade of C or better, or eligibility for English 28.
Lecture and conference 5 hours; laboratory 2 hours.
This basic chemistry course presents elementary principles of general chemistry, including nomenclature and problem solving. Students whose previous chemistry background is inadequate for Chemistry 1 should take this course in preparation for Chemistry 1. Chemistry 10 is also recommended for students who have been away from high school chemistry for more than two years.
Acceptable for Physical Science M2 or Chemistry M2 credit, UCLA
Maximum of one course from Chemistry 3 or 10. Maximum of 4 credits transferable to UC. No credit for Chemistry 3 or 10 if taken after Chemistry 1.

14 Introductory Organic Chemistry (5) UC:CSU
Prerequisite: Chemistry 2 with a grade of C or better.
Lecture 3 hours; laboratory 6 hours.
The student is introduced to structure, bonding, stereochemistry and functional group chemistry with emphasis on mechanisms. In the laboratory the essential skills of preparation, isolation, purification and identification of organic compounds are presented.
Chemistry 14 acceptable for Chemistry 21 with Lab credit, UCLA.

15 Introductory Biochemistry (5) UC:CSU
Prerequisite: Chemistry 14 with a grade of C or better.
Lecture 3 hours; laboratory 6 hours.
An introduction to the structure, properties, and metabolism of carbohydrates, fats, proteins, nucleic acids, vitamins and hormones. Relationships between metabolism and energy are presented. In the laboratory, the preparation and reactions of biologically important compounds, both chemical and enzymatic, are investigated.
Chemistry 14 with 15 acceptable for Chemistry 21, 23, 24 credit, UCLA.

185 Directed Study - Chemistry (1) UC:CSU
285 Directed Study - Chemistry (2) UC:CSU
385 Directed Study - Chemistry (3) UC:CSU
Prerequisite: Consent of instructor.
Conference 1 hour per unit.
Allows students to pursue Directed Study in Chemistry on a contract basis under the direction of a supervising instructor.
Credit Limit: A maximum of 3 units in Directed Study may be taken for credit.

Cooperative Work Experience Education
Chemistry is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course description and credit limits.

CHILD DEVELOPMENT

1 Child Growth and Development (3) UC:CSU
Lecture 3 hours.
The process of human development from pre-birth to adolescence is studied. Emphasis is placed on development which enables children to reach physical, mental, emotional and social maturity.

2 Early Childhood: Principles and Practices (3) CSU
Prerequisite: Verification of annual tuberculosis test.
Lecture 3 hours.
This is a survey course of preschool education. The student becomes aware of various types of schools offering experiences to

Continued
Course Descriptions

children between 2 and 5 years of age. The personal characteristics of preschool teachers and opportunities for careers in the field are studied. Curriculum suitable for preschool children is included.

3 Creative Experiences for Children I (3) CSU
Recommended: Child Development 1 and 2.
Lecture 3 hours.
Many types of creative experiences for young children are explored including painting, clay, music, drama, art materials and language development. The student has an opportunity to learn to set up, control and evaluate children's experiences in a classroom setting.

10 Child Health (3) CSU
Recommended: Child Development 1 and 2.
Lecture 3 hours.
This course includes information on the nutritional needs and physical and mental well-being of children from birth to adolescence. Information dealing with special problems/ handicaps is included. Habits and attitudes toward health are discussed. Community resources which are available to assist in the physical and mental well-being of the child are explored.

11 Home, School and Community Relations (3) CSU
Recommended: Child Development 1 and 2
Lecture 3 hours.
A study is made on the effect of children's homes, schools and communities on children's development. Special emphasis is placed on the dynamics of human relations in the multicultural urban setting. The cooperation between all agencies connected with the young child is studied in depth.

12 Parent-Teacher-Child Interaction (3) CSU
Recommended: Child Development 1 and 2
Lecture 3 hours.
Emphasis is placed on familiarizing students with techniques used in parent-teacher conferences to enable them to relate better to the families of the children in their classrooms. Techniques such as role-playing and personal interviews are utilized to give students confidence in working with parents and their specific problems.

21 Child Development Practices and Observation (3) CSU
Prerequisite: Child Development 1 and 2 or consent of instructor.
Verification of annual tuberculosis test and fingerprinting required.
Lecture 2 hours; laboratory 3 hours.
Teaching methods and program planning for preschool students are examined along with the use of materials and equipment in the classroom. Observation and limited participation in the preschool classroom are included as well as discussions on the development of well-adjusted personality during the preschool years.

22 Laboratory in Child Development I (4) CSU
Prerequisite: Child development 1,2 and 21, Verification of annual tuberculosis test and fingerprinting required.
Lecture 2 hours; laboratory 6 hours.
Work with nursery school children is conducted under the direction of a nursery school staff member and is supplemented by the supervision of the course instructor. Emphasis is placed on developing, implementing and evaluating classroom experiences for young children.

30 Infant Studies (3) CSU
Prerequisite: Child Development 1.
Lecture 3 hours.
A survey of infant-toddler development and current educational programs is provided. Principles of infant-toddler care and environmental and curricular design are studied. An opportunity for observation and participation in field and clinical work is offered.

34 Observing and Recording Children's Behavior (3) CSU
Lecture 2 hours; laboratory 1 hour.
This course includes observing, recording and interpreting children's behavior in a variety of settings. Diaries, anecdotes and other forms of written and oral records are explored and used.

38 Administration and Supervision of Early Childhood Programs (3) CSU
Prerequisite: Child Development 1 and 11 or consent of instructor. Recommended: Child Development 2.
Lecture 3 hours.
The principles and practices of nursery school organization and administration covered include organizational structure, budgeting, personnel policies and practices, records, statistics, reporting and relationship with community resources.

Cooperative Work Experience Education
Child Development is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.

CINEMA
See Theatre

COMPUTER SCIENCE
INFORMATION TECHNOLOGY
For all Computer Science-Information Technology courses, a maximum of 3 courses (9 units) regardless of department is acceptable for transfer to UC campuses.

901 Introduction to Computers and Their Use (3) CSU
(Formerly Computer Science-Information Technology 1)
Lecture 3 hours.
This course introduces students to fundamental computing and programming concepts. Students will learn to use the operating system on the IBM-PC's and IBM PS-2 computers in the computer lab will be used to develop student skills.

902 Introduction to Computer Science (3) CSU
(Formerly Computer Science-Information Technology 3)
Prerequisite: Computer Science-Information Technology 901 or equivalent experience with consent of instructor.
This course is an introduction to modern programming techniques for students interested in majoring in computer science. It covers algorithm design using pseudo-code and top-down programming methods using the Pascal programming language. Students will use IBM-XT and PS-2 computers and the Turbo Pascal compiler to write their programs.

913 Beginning Fortran (3) UC-CSU
(Formerly Computer Science-Information Technology 27)
Prerequisite: Computer Science-Information Technology 902 or equivalent experience with consent of instructor.
Lecture 3 hours.
This class will cover the FORTRAN 77 programming language with applications to typical engineering, scientific, and business problems. It is assumed that students understand fundamental algorithm design - this course concentrates on FORTRAN programming techniques.

915 Beginning COBOL (3) UC-CSU
(Formerly Computer Science-Information Technology 11)
Prerequisite: Computer Science-Information Technology 902 or equivalent experience with consent of instructor.
Lecture 3 hours.
This course covers COBOL Programming as applied to typical business data processing problems. It is assumed that students understand fundamental algorithm design; this course concentrates on COBOL programming techniques.

917 Beginning Micro Assembly Language (3) UC-CSU
(Formerly Computer Science-Information Technology 17)
Prerequisite: Computer Science-Information Technology 902 or equivalent experience with consent of instructor.
Lecture 3 hours.
This course will cover the assembly language for the IBM-PC, AT, and PS-2 computers. Processor architecture as it relates to the assembly language programmer as well as the interaction between the assembly language and the operating system will be explained. It is assumed that students understand fundamental

Continued
Course Descriptions

algorithm design; this course concentrates on assembly language programming techniques.

**930 Computer Application Software (4) CSU**
(Formerly Computer Science-Information Technology 65)
Prerequisite: Computer Science-Information Technology 901 or equivalent experience with consent of instructor and knowledge of business arithmetic.
Lecture 3 hours; laboratory 2 hours.
This course illustrates how the most commonly used application software packages (spreadsheet, word-processing, and database management systems) can be used to enhance productivity in the business setting. Students will use LOTUS 1-2-3, WordPerfect, and DBASE III over OS/IT 930. This course will concentrate on more advanced DBASE concepts and DBASE programming.

**934 Operating Systems (3) UC-CSU**
(Formerly Computer Science-Information Technology 38)
Prerequisite: Computer Science-Information Technology 901 or equivalent experience with consent of instructor.
Lecture 3 hours.
This course covers the common microcomputer operating systems, such as programming languages MC 10 and DOS. The course will be covered with emphasis on hard disk organization and batch file creation. Significant features of OS/2 and UNIX will be discussed.

**936 Introduction to Data Structures (3) UC-CSU**
(Formerly Computer Science-Information Technology 19)
Prerequisite: Computer Science-Information Technology 902 or equivalent experience with consent of instructor.
Lecture 2 hours; laboratory 2 hours.
This course covers the concepts of data structure design and encapsulation. Arrays, stacks, queues, linked lists, and binary search trees are discussed. Dynamic memory allocation and recursive programming techniques are covered. Programs are written in the Pascal language.

**937 Teleprocessing Systems (1) UC-CSU**
Prerequisite: Computer Science-Information Technology 901 or equivalent experience with consent of instructor.
Lecture 3 hours.
This course introduces students to basic concepts of telecommunication. Modems, protocols, telecommunications software and hardware, and network hardware and software will be covered. Students will work with a personal computer (PC) and UNIX as well as PC to mainframe communications.

**938 Advanced Basic Programming (3) UC-CSU**
(Formerly Computer Science-Information Technology 39)
Prerequisite: Computer Science-Information Technology 902 or equivalent experience with consent of instructor.
Lecture 3 hours.
This course covers the use of the BASIC programming language on the IBM-PC, AT and PS-2 computers in solving typical business data processing problems. It is assumed that students understand fundamental algorithm design. This course concentrates on BASIC language programming techniques.

**945 Advanced COBOL Programming (3) US-CSU**
(Formerly Computer Science-Information Technology 12)
Prerequisite: Computer Science-Information Technology 915 or equivalent experience with consent of instructor.
Lecture 3 hours.
This course covers the application of advanced COBOL features to business programming applications. Tables, sorting, use of the COPY library, screen design, and use of called and calling programs will be covered.

**948 Advanced Spreadsheet (3) UC-CSU**
(Formerly Computer Science-Information Technology 89)
Prerequisite: Computer Science-Information Technology 930 or equivalent experience with consent of instructor.
Lecture 2 hours; laboratory 2 hours.
This course covers spreadsheet financial functions, graphing, data base function and file manipulation techniques as well as the use of MACROS. These techniques will be applied to the solution of typical business problems.

**Cooperative Work Experience Education**
Computer Science-Information Technology is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.
See also: Office Administration 76, Keyboarding for Data Processing

**COOPERATIVE EDUCATION**
The following courses provide Cooperative Work Experience Education credit. See Cooperative Work Experience Education in the Educational Program Section of the Catalog. Limits to transfer credit are explained in the Cooperative Education Credit Guide.

**911 Work Experience in Major (1) CSU RPT 3**
**921 Work Experience in Major (2) CSU RPT 3**
**931 Work Experience in Major (3) CSU RPT 3**
**941 Work Experience in Major (4) CSU RPT 3**
Prerequisite: Employment in a field related to the student's major as verified by the signature of the Cooperative Education Advisor. Supervised training is conducted in the form of on-the-job training in an employment area that will enhance the students' educational goals on campus.
Limits to transfer credit: See Cooperative Education Credit Guide.

**DENTAL HYGIENE**
(Courses are open to enrolled Dental Hygiene Majors only.)

**88 Dental Hygiene Development Clinic (1) NDA**
Lecture 1 hour.
Discussions and exercises presented will center on case reasoning for Clinical Dental Hygiene. Accumulated theoretical knowledge will be related to practical clinical applications.

**100 Principles of Clinical Dental Hygiene (2)**
Lecture 2 hours.
The course will provide beginning dental hygiene students with the scientific knowledge and understanding of the basic principles of dental hygiene and procedures for applying comprehensive dental hygiene practices.

**101 Clinical Dental Hygiene I (2)**
Laboratory 6 hours.
The pre-clinical Dental Hygiene Services course is designed to develop the skills and technique required for performing dental hygiene services and orienting the student to the role of the clinical dental hygienist.

**102 Radiology I - Introduction to Radiology (1)**
Lecture 1 hour.
A study of the principles and techniques of exposing and processing dental radiographs. Emphasis is placed on radiation safety and protection.

**103 Radiology I - Laboratory (1)**
Laboratory 3 hours.
This laboratory course is designed to provide experience in exposing, processing, mounting and interpreting dental radiographs on a manikin.

**104 Tooth Morphology (2)**
Lecture 2 hours.
Through lecture and demonstration, the morphological characteristics and development of the teeth and oral structures are presented. Emphasis is on comparative crown and root anatomy. Some drawing and wax carving of teeth may be required.

**105 General Pathology (2)**
Lecture 2 hours.
This lecture course focuses on the basic pathologic mechanisms in human disease. Major diseases and disorders encountered in practice are discussed with emphasis on the clinical aspects of the diseases.

**106 Anatomy and Embryology of the Head and Neck (2)**
Lecture 2 hours.
A detailed study of the anatomy and embryology of the human head, neck, face and jaw through lecture and demonstration.

Continued
Course Descriptions

108 Introduction to Periodontics (2)
Lecture 2 hours.
This course is designed to provide the dental hygiene student with an introduction to periodontics. Periodontics will be presented in health and in disease historically and clinically. Etiology, prevention, diagnosis and Phase I therapy will be discussed.

150 Preventive Dentistry (1)
Prerequisite: Open only to Dental Hygiene students who have completed all Dental Hygiene program courses attempted with a grade of C or better.
Lecture 1 hour.
This course provides the fundamentals for the clinical application of primary preventive dentistry procedures. Content centers on the strategies to prevent plaque diseases and the skills required for effective patient education and motivation.

151 Clinical Dental Hygiene II (3)
Prerequisite: Open only to Dental Hygiene students who have completed all Dental Hygiene program courses attempted with a grade of C or better.
Clinic 9 hours
At UCLA School of Dentistry, students apply knowledge and basic clinical skills learned in DH 101 and other related classes toward proficiency in performing dental hygiene service. Emphasis will be on the periodontal maintenance and recall patient, and the patient with mild to moderate active periodontal involvement.

152 Special Patient Care (1)
Prerequisite: Open only to Dental Hygiene students who have completed all Dental Hygiene program courses attempted with a grade of C or better.
Lecture 1 hour.
The role of the hygienist in the care of the special dental patient is the focus of this lecture course. The determining factors and treatment considerations for medically, physically and emotionally handicapped patients will be explored.

153 Radiology II - Interpretation (1)
Prerequisite: Open only to Dental Hygiene students who have completed all Dental Hygiene program courses attempted with a grade of C or better.
Lecture 1 hour
The clinical discipline of Radiographic interpretation of oral and maxillofacial disease is presented for the dental hygienist. Techniques in extradental and specialized radiography are discussed.

154 Oral Pathology (2)
Prerequisite: Open only to Dental Hygiene students who have completed all Dental Hygiene program courses attempted with a grade of C or better.
Lecture 2 hours.
Introduction to the interpretation of clinical and histological pathological conditions with emphasis on clinical signs and symptoms. Oral abnormalities are presented through the use of color slides and case histories.

155 Dental Materials (2)
Prerequisite: Open only to Dental Hygiene students who have completed all Dental Hygiene program courses attempted with a grade of C or better.
Lecture 2 hours.
The purpose of this course is to study the properties, composition and manipulation of materials used in dentistry. The study of dental materials enables the dental hygienist to understand the behavior of these materials and provides a scientific rationale for selecting, using and understanding the varied relationships of dental bio-materials.

156 Histology of Oral Tissues (2)
Prerequisite: Open only to Dental Hygiene students who have completed all Dental Hygiene program courses attempted with a grade of C or better.
Lecture 2 hours.
Through lecture and demonstration, the histological structure of oral tissues is presented.

200 Cariology and Occlusion (1)
Prerequisite: Open only to Dental Hygiene students who have completed all Dental Hygiene program courses attempted with a grade of C or better.
Lecture 1 hour.
This course provides understanding, recognition and proper treatment of dental tissue pathology. Lectures and discussion cover the aspects of occlusal dysfunction, dental caries, dental desensitization and traumatic injuries to the teeth.

201 Clinical Dental Hygiene III (4)
Prerequisite: Open only to Dental Hygiene students who have completed all Dental Hygiene program courses attempted with a grade of C or better.
Clinic 12 hours.
In a clinical setting students apply specific knowledge and skills learned in preclinical and didactic courses. Emphasis will be on treating the patient with moderate active periodontal involvement. Rotating assignments into dental specialty clinics at UCLA offer the opportunity to learn of the role of the dental hygienist in these areas.

203 Expanded Functions - Laboratory (1)
Laboratory 3 hours.
This laboratory course is designed to provide experience in selected functions and manipulations or various dental materials with emphasis on the role of the dental hygienist as a member of the health team. Procedures include: Placement and removal of rubber dam; sizing of stainless steel crowns; seating, placement and removal of temporary crowns and restorations; mouth-gear construction placement and removal of anterior and posterior matrices; finishing of amalgam restoration; intro-oral photographs; placement of pit fissure sealants, placement and removal of periodontal dressings, placement and removal of sutures; vitality testing, placement of temporary wire ligation and taking amalgam impression.

204 Dental Health Education (1)
Prerequisite: Open only to Dental Hygiene students who have completed all Dental Hygiene program courses attempted with a grade of C or better.
Lecture 1 hour.
This course in dental health education is designed to orient dental hygiene students in the role of dental health educator. The course focuses on the concepts of school program planning, development of evaluation mechanisms and coordinating efforts with educational and community systems in teaching elementary and pre-school aged children and those with special handicaps.

205 Dental Health Education - Practicum (1)
Prerequisite: Open only to Dental Hygiene students who have completed all Dental Hygiene program courses attempted with a grade of C or better.
Practicum 3 hours.
This practicum course to dental health education, DH 204, is designed to provide the dental hygiene student with experiences in dental health education.

206 Periodontics (1)
Prerequisite: Open only to Dental Hygiene students who have completed all Dental Hygiene program courses attempted with a grade of C or better.
Lecture 1 hour.
Lectures on anatomy, histology and pathology of the periodontum are correlated with the clinical aspects of periodontal disease and the various therapeutic measures currently in use. Rationale and procedures for sub-gingiva curettage will be discussed.

207 Pain Control (1)
Prerequisite: Open only to Dental Hygiene students who have completed all Dental Hygiene program courses attempted with a grade of C or better.
Laboratory 3 hours

Continued
Management of pain control through the use of local anesthetics and nitrous oxide and oxygen sedation is studied through lectures and laboratory exercises.

208 Pharmacology (3)
Prerequisite: Enrollment limited to 2nd year Dental Hygiene students. Lecture 3 hours.
This course presents the general principles of pharmacology including the pharmacodynamics, pharmacokinetics adverse reactions, and contraindications of drugs. Emphasis will be placed on those drug groups especially relevant to dental practice including the general anesthetics, local anesthetics, sedatives, analgesics, antiseptics, autonomic drugs, anti-inflammatory drugs and antibiotics.

210 Emergencies in Dental Practice (1)
Prerequisite: Enrolled student in Dental Hygiene. Lecture 1 hour.
This course is designed to provide the student with the background and skill to recognize and manage any emergency situation that might develop. Emphasis will be placed on prevention, prompt recognition, and effective treatment of life-threatening emergency situations that can occur in the practice of dentistry.

250 Advanced Periodontal Seminar (1)
Prerequisite: Open only to Dental Hygiene students who have completed all Dental Hygiene program courses attempted with a grade of C or better. Lecture 1 hour.
This course is designed to provide the dental hygienist with an advanced background in periodontics. The development of a periodontal treatment philosophy will be accomplished through reading in the classical and current literature. Emphasis will be placed on nuances of periodontal care, controversies and state of the art understanding developed through the reading of scientific literature.

251 Clinical Dental Hygiene IV (4)
Prerequisite: Open only to Dental Hygiene students who have completed all Dental Hygiene program courses attempted with a grade of C or better. Clinic 12 hours.
In a clinical setting students apply specific knowledge/skills learned in clinical/didactic courses. Emphasis will be on treating the patient with moderate to advanced active periodontal involvement. Clinical experiences at higher levels of skill/proficiency are required to prepare the student for licenses. Rotating assignments into dental specialty clinics at UCLA provide the opportunity to learn of the role of the dental hygienist in these areas.

252 Essentials of Dental Hygiene Practice (2)
Prerequisite: Open only to Dental Hygiene students who have completed all Dental Hygiene program courses attempted with a grade of C or better. Lecture 2 hours.
Lecture, discussion and group activities will focus on the legal, ethical and managerial aspects of dental hygiene practice.

253 Community Dental Health (2)
Prerequisite: Open only to Dental Hygiene students who have completed all Dental Hygiene program courses attempted with a grade of C or better. Lecture 2 hours.
This course is a study of the concepts and methods of preventive dentistry as they relate to the oral health of groups. Issues central to community dental health such as access to care, supply and demand, quality assurance, health financing and health policy are discussed.

254 Community Dental Health - Practicum (1)
Prerequisite: Open only to Dental Hygiene students who have completed all Dental Hygiene program courses attempted with a grade of C or better. Practicum 2 hours.
The purpose of this practicum is to provide experiences in program planning and implementation at various governmental and voluntary community agencies.

256 Biochemical Nutrition (3)
Prerequisite: Open only to Dental Hygiene students. Lecture 3 hours.
The relationship of diet and nutrition to various diseases such as periodontal disease, cancer, diabetes, and obesity will be considered as will the nutritional considerations of patients with special needs. Each major nutrient group will be covered along with its biological role.

90 Special Project in Dental Hygiene (2)
Prerequisite: Permission of the instructor, enrolled dental hygiene student or graduate of an approved dental hygiene program. Laboratory 6 hours.
This course allows dental hygiene students and graduates to pursue Special Projects in Dental Hygiene on a contract basis under the direction of a supervising instructor.

91 Special Project in Dental Hygiene (4)
Prerequisite: Permission of the instructor, enrolled dental hygiene student or graduate of an approved dental hygiene program. Laboratory 12 hours.
This course allows dental hygiene students and graduates to pursue Special Projects in Dental Hygiene on a contract basis under the direction of a supervising instructor.

92 Special Project in Dental Hygiene (6)
Prerequisite: Permission of the instructor, enrolled dental hygiene student or graduate of an approved dental hygiene program. Laboratory 18 hours.
This course allows dental hygiene students and graduates to pursue Special Projects in Dental Hygiene on a contract basis under the direction of a supervising instructor.

Cooperative Work Experience Education
Dental Hygiene is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course description and credit limits.
Course Descriptions

DRAFTING

1 General Drafting I (3) CSU
Prerequisite: None.
Lecture 1 hour; laboratory 5 hours.
This course provides basic training in the preparation of industrial drawings, including the underlying principles of mechanical drawing, the use of drawing instruments, geometric construction, frehand technical sketching, single-view and multiview drawings, sectioning, and dimensioning.

3 Applied Technical Drafting II (4) CSU
Prerequisite: Drafting 2
Lecture 1 hour; laboratory 5 hours.
Emphasizing advanced detail drawings, this course includes secondary auxiliary drawings, advanced developments and intersections, comprehensive treatment of section views and an introduction to positional and geometrical tolerancing.

55 Computer Aided Design and Drafting (3) CSU
Prerequisite: General Engineering 52.
Lecture 3 hours; laboratory 3 hours.
This course is an introduction to computer-aided drafting and design (CADD). Students will learn to use typical menu oriented systems to prepare drawings (two dimensional and produce industrial quality prints on a plotter).

185 Directed Study - Drafting (1) CSU
285 Directed Study - Drafting (2) CSU
385 Directed Study - Drafting (3) CSU
Prerequisite: Consent of instructor
Conference 1 hour per unit.
Allows students to pursue Directed Study in Drafting on a contract basis under the direction of a supervising instructor. Credit Limit: A maximum of 3 units in Directed Study may be taken for credit.

Cooperative Work Experience Education
Drafting is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course description and credit limits.

EARTH SCIENCE

See also: Environmental Science, Geography, and Oceanography

1 Earth Science (3) UC-CSU
Lecture 3 hours.
This course provides a broad-based, integrated introduction to the geosciences. The course content include a survey of topics from geology, geography, oceanography, meteorology, and astronomy. This course is designed to fulfill a natural science requirement.

ECONOMICS

1 Principles of Economics I (3) UC-CSU
This introductory microeconomics course provides the student with an understanding of the basic economic principles and forces which govern the production and distribution of goods and services. Topics include: forms of business organizations, the role of government in the economic system, value and price in a free enterprise system, labor-management relations, and contemporary economic developments. Acceptable for Economics 1 credit, UCLA.

2 Principles of Economics II (3) UC-CSU
This is an introductory course in the principles of macroeconomics. Topics considered include: the national income, business fluctuations, the financial system, public finance, international economics and application of economic principles to contemporary economic developments. Acceptable for Economics 2 credit, UCLA.

ELECTRONICS

Applicable laboratory material fees will be announced by the instructor.

2 Introduction to Electronics (3) CSU
Recommended: Concurrent enrollment in Math 115.
Lecture 3 hours.
An overview of the field of applied electronics and its employment opportunities is presented. Along with an introduction to components, nomenclature and symbols and a familiarization of equipment specifications and physical units.

4 Fundamentals of Electronics I (4) CSU
Prerequisite: One year of high school algebra or Mathematics 115.
Day Students: Recommended that Electronics 2 and 10 be taken concurrently. Evening Students: Recommended concurrent enrollment in Math 115.
Lecture 3 hours; laboratory 3 hours.
The detailed study of direct current theory and applications is made. Topics include DC circuits, Ohm's Law, power sources, magnetism, magnetic circuit and magnetic circuits. Emphasis is placed on solving DC circuits using Kirchoff's Laws, mesh and nodal methods, Thévenin's and Norton's Theorems. This course prepares the student for alternating current circuits. Laboratory experience in Ohm's Law and Kirchoff's Laws and instrumentation circuits is given. Laboratory practices include component evaluation and identification, breadboard construction of basic circuits, resistor and capacitor color codes, schematic reading and an introduction to the theory and use of electronic instruments. Students begin measurements with the volt-ohm-milliammeter and digital voltmeter. A scientific pocket calculator is required.

6 Fundamentals of Electronics II (4) CSU
Prerequisite: Electronics 4 or equivalent with at least a grade of C or better, Math 115 with a grade of C or better.
Recommended: Electronics 6 and 12 should be taken concurrently.
Lecture 3 hours; laboratory 3 hours.
As study of the theory and practice of alternating current principles providing a foundation for understanding transistor circuits is presented. Topics include series and parallel LCR circuits, resonance, transformers, coupling, filters and an introduction to pulse waveform terms and values. The laboratory course includes experiments covering material discussed in the lecture. Extensive use is made of signal generators, the laboratory time-base oscilloscope, the digital voltmeter, Q-meter and the impedance bridge.
As scientific pocket calculator is required.

20 Electronic Circuits I (4) CSU
Prerequisite: Electronics 6, concurrent enrollment or consent of instructor.
Lecture 3 hours; laboratory 3 hours.
This is the first course in linear circuit analysis and design. The lecture develops and analyzes transistor circuits. It includes a study of the theory and the operation of solid state diodes and bipolar and field-effect transistors with a complete analysis of their basic circuitry. Circuits include voltage and power amplifiers, oscillators and power source circuits. Integrated circuits are introduced. The laboratory supports the principles of the solid state circuits studied in the lecture. Students study, test and evaluate power sources, audio, video and DC amplifiers. Extensive use is made of the transistor curve tracer, signal generator and the time-base oscilloscope.
A scientific pocket calculator is required.

22 Electronic Circuits II (4) CSU
Prerequisite: Electronics 20 or consent of instructor.
Lecture 3 hours; laboratory 3 hours.
A continuation of solid-state linear circuit analysis and design from Electronics 20 includes design details of cascade resistance and direct coupled amplifiers, integrated differential and operational amplifiers, power amplifiers and sine wave oscillators. There is an introduction to feedback and distortion. The laboratory provides test and evaluation of the circuits and systems studied in lecture. Extensive use of the digital voltmeter time-base oscilloscope and signal generator are continued.
A scientific pocket calculator is required.

Continued
Course Descriptions

24 Electronic Circuits III (4) CSU
Prerequisite: Electronics 20 and 22 and/or completion of Core I and II or consent of instructor.
Lecture 3 hours; laboratory 3 hours.
This is the third course in the circuit design and analysis sequence of solid state switching circuits, pulse techniques, bistable and monostable multivibrators, blocking and time-base oscillators, waveshaping and sweep circuits. Digital logic circuit introduction is made. The laboratory permits the students to breadboard and test advanced solid-state switching circuits using high performance test equipment. Use of the pulse generator, function generator and delayed time-base oscilloscope are made.
A scientific pocket calculator is required.

44 Communications Electronics (3) CSU
Prerequisite: Electronics 20 and/or completion of Core I and II or consent of instructor.
Lecture 3 hours.
This course includes electronic circuit analysis relative to data/information transmission and reception and aids students to attain one of various FCC commercial or amateur licenses. Topics of study include electromagnetic waves, propagation, antennas, amplitude and frequency modulation. Emphasis is on the analysis of AM and FM radio receivers and transmitters, including methods of testing alignment and adjustment. A study is made of radio laws and operating procedures.

54 Computer Logic (4) CSU
Prerequisite: Electronics 20 and/or completion of Core I and II or consent of instructor. Concurrent enrollment in Electronics 22 is desirable.
Lecture 3 hours; laboratory 3 hours.
An introduction to electronic computers is made. A brief treatment of programming, number systems and Boolean Algebra is presented. Analysis, design and utilization of principal computer circuits such as logic gates, flipflops and memory networks are presented. Design of binary counters and application of Boolean Algebra to perform binary arithmetic are presented. Laboratory work verifies logic circuit design and includes basic computer circuit breadboarding and analysis methods with fault location techniques.

56 Computer Circuits (3) CSU
Prerequisite: Electronics 22 and/or completion of Core I and II or consent of instructor. Concurrent enrollment in Electronics 24 is desirable.
Lecture 3 hours.
Detailed study of the function of digital computers and logic requirements is done along with instruction in logic tables and trees. An introduction to programming and numbering systems is presented. The laboratory includes the application and evaluation of the logic equations and requirements developed in lecture class. Microcomputers, CRT terminals and other hardware are utilized with high performance instrumentation to teach the standard fault location techniques in computer systems.

57 Computer Circuits Laboratory (1) CSU
Prerequisite: Concurrent enrollment in Electronics 56.
Laboratory 3 hours.
The laboratory provides evaluation of digital computer circuits through the use of computer trainers. Stored program concepts are covered using machine programming to develop software diagnostics. The analysis of fault location in computer circuits is also covered.

60 Microwave Fundamentals (3) CSU
Prerequisite: Coursework in linear circuits or consent of instructor.
This course presents theory and application of the generation, control, and propagation of electromagnetic energy on the upper frequency ranges, along with modulation, techniques, transmission medium, oscillators, transmitters, and receivers.

61 Microwave Fundamentals Laboratory (1) CSU
Prerequisite: Concurrent enrollment in Electronics 60 or consent of instructor.
This course provides practical, hands-on experience in theoretical areas covered in Electronics 60.

Cooperative Work Experience Education
Electronics is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.

ENGINEERING, GENERAL

2 Introduction to Engineering Drafting (3) UC:CSU
Prerequisite: High school drafting, college drafting or General Engineering 52.
Lecture 1 hour; laboratory 5 hours.
Intermediate level multi-view and pictorial drawings are covered. Introduction to Descriptive Geometry. Sketching, auxiliary views, developments, intersection and linear tolerancing are included.

4 Engineering Descriptive Geometry (3) UC:CSU
Prerequisite: General Engineering 2
Lecture 1 hour; laboratory 5 hours.
This course presents a fundamental principles of engineering descriptive geometry and their application to engineering problems; orthographic projection, including auxiliary views and oblique views; point, line and plane problems; and intersections and developments.

7 Statics (3) UC:CSU
Prerequisite: Mathematics 261
Lecture 2 hours; laboratory 3 hours.
Force systems and equilibrium conditions are studied, with emphasis on engineering problems covering structures, machines, distributed forces and friction. This course is required of all engineering majors.

52 Elementary Engineering Drafting (3)
Lecture 1 hour; laboratory 5 hours.
Instruction is provided in the proper use and care of drawing instruments, in technical lettering, geometric construction, orthographic and pictorial views, sectional views, developments, fasteners and dimensioning.

Cooperative Work Experience Education
Engineering is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.

ENGLISH

20 College Reading Skills (6) NDA
Prerequisite: Appropriate score on English placement test.
This course provides students with entry level opportunities to improve reading comprehension, critical thinking, vocabulary, and related skills necessary for success in college classes.

21 English Fundamentals (3) NDA
Prerequisite: Satisfactory performance on English placement exam or completion of English 20 with a grade of C or better.
This course stresses instruction in writing for the student who needs to improve basic communication skills. The primary objective of the course is the mastery of the basic sentence and its variations. The term "mastery of the sentence" implies more than the ability to choose correct answers in exercise books; it implies competence at writing related clusters of sentences and simple paragraphs.

22 Technical English (3)
Technical English is designed for students in the business, industrial and technical fields. Instruction covers writing, reading and speaking. Emphasis is placed upon the writing of business and technical correspondence, procedures and a variety of reports; the summarizing of trade reports, technical reports and other technical data and the preparation and presentation of oral reports.

Continued
Course Descriptions

23 Advanced Vocabulary (3) NDA
Eligibility for English 28 or English 101 or consent of the instructor. [Beginning students may wish to take English 33.]
This beginning course is in the technique of enlarging and enriching the individual vocabulary to a more adequate understanding and use of words. It includes the history of language and a survey of the varied elements which make up our individual vocabularies. The student is given an introduction to the laws of word formation, derivatives from Latin, Greek and Old English and the application of prefixes and suffixes to the roots of words.

29 Intermediate Reading and Composition (3)
Prerequisite: Completion of English 21 with a grade of C or better or satisfactory score on English placement test.
English 28 is a composition course designed for two types of students: those who need additional help and preparation before continuing with English 101 and those who wish to improve their basic English skills in a terminal writing course. The primary stress in English 28 is on writing - short paragraphs at hand and at the end of the course to two or three full length compositions, a total of ten to fifteen papers.

31 Composition and Critical Reading (5)
Prerequisite: Successful completion of English 21, results of placement test, or consent of instructor.
English 31 is a five-unit five-hour class, equivalent credit to English 28. This course focuses on academic reading and writing with particular emphasis on writing full length essays. Analytic reading techniques are taught using a variety of sources, including subject area textbooks, magazine, articles, essays, and a variety of literature. Students discuss and analyze these sources as basis for eight to ten full length papers and several short papers.

33 Basic Vocabulary (3) NDA
This course familiarizes students with the wealth of information contained in dictionaries, and instructs them in their usage as a tool for communication. The student's vocabulary is increased through a systematic study of word structure, prefixes, suffixes and combining forms. The student becomes aware of the utility and beauty of language.

46 Reading and Study Improvement (3) NDA
Prerequisite: Satisfactory score on English placement test or completion of English 20 with a grade of C or better.
This course is designed to aid the student in increasing reading and study efficiency. Each student is assisted in analyzing reading skills and, by means of intensive practice with a variety of reading equipment, learns how to read more effectively for a variety of purposes: textbook reading, on-the-job reading tasks and other situations where rapid reading and high retention are desirable.

61 Reading and Writing: Personal Experience (3)
Prerequisite: Completion of English 21 with a grade of C or better or satisfactory score on the English placement test.
This composition course is designed for three types of students: those who need additional help and preparation before continuing into English 101, those who wish to improve their basic English skills in a terminal writing course, and those who wish to learn the use of the personal journal for increased academic and professional success. Students write essays based on personal journal entries, starting with paragraphs and progressing to full-length essays.

62 Reading and Writing: Contemporary Issues (3)
Prerequisite: Completion of English 21 with a grade of C or better or satisfactory score on the English placement test.
Using current issues of newspapers and magazines, this course emphasizes skills in reading and writing compositions dealing with contemporary ideas and events. Writings include both paragraphs and essays requiring summary of articles, analysis of evidence, and expression of opinion.

64 Reading and Writing: Basic Skills (3) RPT 1 NDA
No placement test is needed.
This course provides instruction in reading comprehension skills, grammar and punctuation emphasizing the reading and writing of sentences, phonics for spelling and comprehension improvement. Students who have completed any other English course may elect to take English 64 to reinforce their skills.

67 Writing Laboratory (.5) NDA
Prerequisite: None.
Laboratory: 1 hour.
This course is designed to improve the student's writing abilities by providing supervised instruction. English 67 emphasizes individual conferences and completion of specific assignments based on personal needs and skills required in both English and other college courses.

73 Beginning College Reading and Writing (3) NDA
Provides integrated methods of reading, writing and critical thinking in preparation for college reading and composition courses (English 28 and English 101). Teaches basic language conventions and editing skills.

101 College Reading and Composition I (3) UC:CSU
(Can Eng 2)
(Formerly English 1)
Prerequisite: Satisfactory score on placement test or successful completion of English 28 and a score of 4 or better on the English 28 Competency Exam.
This course develops skills in writing essays and in reading nonfiction materials critically. The prerequisite to these techniques is an understanding of the elements of punctuation, sentence structure, spelling and paragraph development. Acceptable for English 203 credit, UCLA.

102 College Reading and Composition II (3) UC:CSU
(Can Eng 4)
(Formerly English 2)
Prerequisite: English 101 with a grade of C or better.
This course extends the reading and writing skills obtained in English 101. Critical reading and interpretation of literary works in the genres of the novel, the short story, the plays and the poems are emphasized. Students are required to write critical essays about these literary forms. Acceptable for English 204 credit, UCLA.

127 Creative Writing (3) UC:CSU RPT 2
(Formerly English 27)
Prerequisite: English 101 or equivalent.
English 127 deals with the writing of poetry, fiction and drama by introducing the student to the basic elements of each genre through reading and writing assignments. Class discussion of student writing is an important part of the course.

203 World Literature I (3) UC:CSU
(Formerly English 3)
Prerequisite: English 101
This survey of world literature in translation begins with works of the Near and Far East, continues with the Greek epic and drama, follows with Latin and Italian literature and closes with major writings from Spain, France and Germany through the sixteenth century. Critical papers are required. Acceptable for Humanities 1A credit, UCLA.

204 World Literature II (3) UC:CSU
(Formerly English 4)
Prerequisite: English 101
This course surveys continental and oriental literature which has been translated, from the seventeenth century to the present and emphasizes works from France, Germany, Scandinavia, Russia, Japan and China. Critical papers are required. Acceptable for Humanities 1B credit, UCLA.

205 English Literature I (3) UC:CSU
(Formerly English 5)
Prerequisite: English 102 or consent of instructor.
This survey of English literature begins with Beowulf and continues to the major medieval and classical literature of the 18th century, with special emphasis on the major figures and works. The writing of critical papers is required. Acceptable for English 10A credit, UCLA.

Continued
Course Descriptions

206 English Literature II (3) UC:CSU
(Formerly English 6)
Prerequisite: English 102
This survey of English literature includes writings from the Romantic Age to the English writers of the present. The writing of critical papers is required.
English 205, 206 acceptable for English 10ABC credit, UCLA.

207 American Literature I (3) UC:CSU
(Formerly English 8)
Prerequisite: English 101.
This survey of American literature, from the earliest period through the Civil War, includes major literary works which express the social and political concerns of a pluralistic society. The writing of critical papers is required.

208 American Literature II (3) UC:CSU
(Formerly English 8)
Prerequisite: English 101.
This survey of the United States' literature, from the Civil War to the present, places special emphasis upon those writers who significantly treat the social, political and philosophical problems of the period. The writing of critical papers is required.

200 California Literature (3) UC:CSU
This course surveys literary works by and about Californians, ranging from Indian myths to poems to short stories and novels. The course introduces students to writing critical essays about literature and explores - through reading, writing, and class discussion - the archetypal patterns reflected in the literature of California.

210 The Twentieth Century Novel (3) UC:CSU
Prerequisite: English 101
This course is a study of the Twentieth Century novel from 1910 to the present. Landmark European, British and American novels are read and discussed, with written critical papers required.

215 Shakespeare I (3) UC:CSU
(Formerly English 15)
Prerequisite: English 101.
Poems and plays selected from the works of Shakespeare are studied. Some attention is paid to the background of his times and to the Renaissance theater. The writing of critical papers is required.
Acceptable for English 90 credit, UCLA.

218 Children's Literature (3) CSU
(Formerly English 18)
Prerequisite: English 101
This course is a survey of the literature suitable for children of different age levels and is recommended for prospective nursery, kindergarten and elementary teachers. Parents will also find the course material helpful in discovering what reading material is available for a child's home library.

219 The Literature of American Ethnic Groups (3) UC:CSU
(Formerly English 19)
Prerequisite: English 28 or equivalent.
This course considers noteworthy fiction and other literature arising from the traditions and contemporary problems of several ethnic groups, each of which offers a unique contribution to American life.

234 Afro-American Literature (3) UC:CSU
Prerequisite: English 101 or equivalent.
This course surveys the literary, social and historical aspects of essays, novels, dramas, short stories and poetry written by Afro-Americans. Critical papers are required.

239 Women in Literature (3) UC:CSU
Prerequisite: English 101 or consent of instructor.
This course is a survey of literature by and about women from early times to the present. Poetry, autobiographical writings, short stories and novels will be analyzed from the viewpoint of women's roles and images. Critical writing is required.

240 Literature and the Motion Picture I (3) UC:CSU
(Formerly English 40)
Prerequisite: English 28 or equivalent.
Lecture 3 hours.
This course is designed to develop skills in analyzing and evaluating the comparative arts of literature and the motion picture. The student will be given the opportunity to view feature length films of cultural and artistic significance and read related works of literature including novels, short stories, plays, and film scripts.

250 Mythology and Literature (3) UC:CSU
(Formerly English 50)
Prerequisite: English 101.
An introduction to the mythology of Western and Middle Eastern civilizations. The course treats these Western and Middle Eastern myths as they appear in epics, plays, and other literature, both ancient and modern, and shows how myths relate to folk stories, dreams, and fantasy through powerful symbols shared by people all over the world.

185 Directed Study - English (1) UC:CSU
285 Directed Study - English (2) UC:CSU
385 Directed Study - English (3) UC:CSU
Prerequisite: A grade of C or better in English 101 and/or consent of instructor.
Conference 1 hour per unit.
Allows students to pursue Directed Study in English on a contract basis under the direction of a supervising instructor. Credit Limit: A maximum of 3 units in Directed Study may be taken for credit.

Cooperative Work Experience Education
English is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.

ENGLISH AS A SECOND LANGUAGE

2 College English as a Second Language (12)
Prerequisite: Appropriate placement score or consent of instructor.
Level 3 is divided into modules 3A, 3B and 3C.

Level 3A Writing/Grammar (6)
Corequisite: ESL 3B and 3C are recommended.
This is a high beginning course in academic English as a Second Language for non-native speakers of English. It emphasizes the development of writing through guided and free composition. Reading, speaking and listening activities reinforce writing and grammar-in-context lessons.

Level 3B Reading/Vocabulary (3)
Corequisite: ESL 3A and 3C are recommended.
This is a high beginning course in academic English as a Second Language for non-native speakers of English. It emphasizes the development of reading and vocabulary skills leading to college-level proficiency.

Level 3C Listening/Speaking (3)
Corequisite: ESL 3A and 3B are recommended.
This is a high beginning course in academic English as a Second Language for non-native speakers of English. It emphasizes the pronunciation principles, listening strategies and conversational skills.

4 College English as a Second Language (12)
Prerequisite: Completion of ESL 3 with a C or better, appropriate placement score, or consent of the instructor.
Level 4 is divided into modules 4A, 4B and 4C.

Level 4A Writing/Grammar (6)
Corequisite: ESL 4B and 4C are recommended.
This is an intermediate course in academic English as a Second Language for non-native speakers of English. It emphasizes the development of skills leading to college-level writing proficiency.

Continued

83
Course Descriptions

Level 4B Reading/Vocabulary (3)
Corequisite: ESL 4A and 4B are recommended.
This is an intermediate course in academic English as a Second Language for non-native speakers of English. It emphasizes the development of skills leading to college-level proficiency in reading and vocabulary.

Level 4C Listening/Speaking (3)
Corequisite: ESL 4A and 4B are recommended.
This is an intermediate course in academic English as a Second Language for non-native speakers of English. It emphasizes the development of listening comprehension and conversational skills and pronunciation to improve communication.

5 College English as a Second Language (12)
Prerequisite: Completion of ESL 4 with a C or better, appropriate placement score, or consent of the instructor.
Level 5 is divided into modules 5A, 5B and 5C.

Level 5A Writing/Grammar (6)
Corequisite: ESL 5A and 5B are recommended.
This is a high intermediate course in English as a Second Language for non-native speakers of English. It emphasizes the development of skills leading to college-level writing proficiency. Coursework includes paragraph and short essay writing.

Level 5B Reading/Vocabulary (3)
Corequisite: ESL 5A, 5B, and 5C are recommended.
This is a high intermediate course in English as a Second Language for non-native speakers of English. It emphasizes the development of skills leading to vocabulary expansion and college-level reading proficiency.

Level 5C Listening/Speaking (3)
Corequisite: ESL 5A, 5B, and 5C are recommended.
This is a high intermediate course in English as a Second Language for non-native speakers of English. Students will improve listening comprehension, conversational skills, and pronunciation in conversational situations and brief formal presentations. Coursework includes idiomatic expressions.

6 College English as a Second Language (12)
Prerequisite: Completion of ESL 5 with a C or better, appropriate placement score, or consent of the instructor.
Level 6 is divided into modules 6A, 6B and 6C.

Level 6A Writing/Grammar (6)
Corequisite: ESL 6B and 6C are recommended.
This is an advanced course in English as a Second Language for non-native speakers of English. It emphasizes the development of writing and grammar skills necessary for college-level writing. Coursework includes paragraph and essay writing.

Level 6B Reading/Vocabulary (3)
Corequisite: ESL 6A, 6B, and 6C are recommended.
This is an advanced course in English as a Second Language for non-native speakers of English. It emphasizes the development of college-level reading and vocabulary skills.

Level 6C Listening/Speaking (3)
Corequisite: ESL 6A, 6B, and 6C are recommended.
This is an advanced course in English as a Second Language for non-native speakers of English. Students will improve listening comprehension skills, oral skills and pronunciation within a wide range of communication tasks. Coursework includes idiomatic expressions.

ENVIRONMENTAL HAZARDOUS MATERIALS TECHNOLOGY

20 Introduction to Managing Hazardous Materials (3)
This course is designed to give the student a general overview of the hazardous materials technology area. A discussion of past and current sources of pollution and introduction to the technologies that could be used to alleviate environmental problems; a presentation of the management systems, source controls, attenuating methodologies, etc. which are designed to protect the human community from potentially harmful substances; a historical perspective of the legislative process that has led to current regulations, and where to find and how to read these regulations will be presented. Discussion of career opportunities will also be included.

30 Hazardous Waste General/Reduction/Treatment (3)
The study of industrial processes and their generation of waste streams in seven selected industries: electronics, metal finishing and printed circuitboard production, oil refining and chemical production, steel production, general manufacturing, printing and graphic reproduction, agriculture, and consumer services. The course will center on various raw materials and chemicals used in industry, examining the changes that occur as they move through the industrial process, and understanding the material balance concept of inventory. Through the course, discussion of applicable regulations will be included, and the importance of waste minimization concepts will be stressed.

40 Health Effects of Environmental Hazardous Materials (3)
Prerequisite: Human Biology (Biology 5) or equivalent
This course covers the acute and chronic health effects produced by exposure to chemical, physical, and biological agents. Emphasis will be on those hazardous materials commonly associated with industrial operations, waste disposal and remediation sites. Topics will include routes of entry, toxic effects, risk evaluation, permissible exposure limits, medical surveillance, control methods for reducing exposure, and understanding an MSDS.

50 40-Hours Safety and Emergency Response Training for Hazardous Wastewater Workers (2)
This course introduces principles in recognizing and identifying hazardous materials, personal protection and emergency response using lectures, discussions, simulations and actual training exercises. This course fulfills OSHA Standard 1910.120.

60 Hazardous Waste Management Applications (4)
Prerequisite: Introduction to Environmental Hazardous Materials Technology 20
Lecture 3 hours; Laboratory 3 hours.
This course provides an overview of hazardous waste regulation with emphasis in general compliance, site investigation and remediation, permitting, enforcement, and liability. The lecture portion of the course explains the hazardous waste regulatory framework, introduces the student to the wide variety and types of technologies, resources available, and develops research skills in the hazardous waste area. The laboratory portion of the course complements the lectures by providing "hands-on" application of the regulations at the technician level. Project methods of preparing a hazardous waste manifest, labeling of storage containers, sampling and analysis, preparing a Phase I Environmental Audit, and selecting environmental consultants are among the many skills developed in the laboratory.

70 Safety and Emergency Response (4)
Prerequisite: Health Effects of Environmental Hazardous Materials Lecture 3 hours; Laboratory 3 hours.
This course will provide "hands-on" instruction in safety and emergency response to chemical and physical exposures in industrial and field settings. Topics will include: hazard analysis, contingency planning, housekeeping and safety practices including the proper use and selection of PPE. In addition, site control and emergency response to chemical and physical hazards, field sampling and monitoring, and the proper use of equipment will be covered. Also, incident response planning, emergency response (including search and rescue equipment), and an understanding of the ICS system will be covered. This course satisfies the requirements for general OSHA training under OSHA (1910.120).

80 Hazardous Materials Management Application (4)
Prerequisite: Health Effects of Environmental Hazardous Materials Technology 40 or equivalent
Lecture 4 hours; Laboratory 3 hours.
A study of the requirements and applications of federal, state and federal regulations, etc. which are designed to protect the human community from potentially harmful substances; a historical perspective of the legislative process that has led to current regulations, and where to find and how to read these regulations will be presented. Discussion of career opportunities will also be included.

Continued
Course Descriptions

local laws and regulations relating to hazardous materials. This course will emphasize compliance with OSHA, OSHA Hazard Communication, SARA Title III Community Right-To-Know, Underground Tank, Asbestos, Proposition 65, and Air Toxics Regulations. The lecture portion of the course will provide the student with an understanding of the legal framework of hazardous materials laws; the laboratory portion will focus on applications of these laws, such as: proper labeling, shipping, and handling of hazardous materials; using MSDS’s; permitting and monitoring functions, as well as planning and reporting functions.

ENVIRONMENTAL SCIENCE
See also: Earth Science, Environmental Hazardous Materials Technology.

1. The Human Environment: Physical Processes (3) UC/CSU
This introductory course discusses the effects of humans on their physical environment. Particular emphasis is placed upon modifications of physical processes due to industrialization and urbanization. Energy and pollution are stressed. Topics include energy sources and the environment, air pollution, climatic change, solid waste and water pollution as well as topics of current interest.

2. The Human Environment: Biological Process (3) UC/CSU
This is a course in basic ecology and natural history which fulfills a nonlaboratory science requirement. Topics to be covered include ecosystem structure and function, use of natural resources, and survival of plant and animal species. Environmental problems such as population and pollution will be discussed as well as local plant and animal species.

12 Environmental Chemistry (3) UC/CSU
This is an introductory course in chemistry emphasizing those inorganic and organic substances released into the environment that are hazardous to human and environmental health. Topics will include an introduction into chemical symbols and formulas; physical properties of chemicals including density, solubility, and states of matter; chemical properties including reactivity, stability and chemical compatibility; energy in chemical reaction; acids, bases and pH; the naming of organic groups of chemicals, including the alcohols, aldehydes, ketones, and esters, and their physical and chemical properties.

20 Introduction to Environmental Hazardous Materials Technology (3)
(Same as EHM 20)
This course is designed to give the student a general overview of the hazardous materials technology area. A discussion of past and current sources of pollution and introduction to the technologies that could be used to alleviate environmental problems, a presentation of the management systems, control methods, and regulations, etc., which are designed to control the human community from potentially harmful substances, a historical perspective of the legislative process that has led to current regulations, and where to find and how to read these regulations will be presented. Discussion of career opportunities will also be included.

Cooperative Work Experience Education
Environmental Science is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.

FAMILY AND CONSUMER STUDIES

21 Nutrition (3) UC/CSU
Lecture 3 hours.
This basic survey course is important to all those interested in nutrition. The fundamentals of nutrition which affect human growth and health maintenance, including weight control and dietary requirements, throughout the life cycle are studied. Food compositions and the nutritional aspects of food preparation are explored.

Cooperative Work Experience Education
Family and Consumer Studies is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.

FINANCE

2 Investments (3) CSU
The principles of investment, the various types of investments, and the operations of investment markets and sources of information are covered.

6 Personal Finance and Investments (3) CSU
This course includes lectures and practice in applying the principles of accounting, banking, finance office methods, management, production and merchandising to one's personal affairs. Family budgeting, consumer credit, home ownership, life and property insurance, investment and savings plans, social security and retirement plans and personal record keeping are stressed.

Cooperative Work Experience Education
Finance is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.

FRENCH

1 Elementary French I (5) UC/CSU
This course stresses the fundamentals of pronunciation and grammar, practical vocabulary, useful phrases and the ability to understand, read, write and speak simple French. Extensive use is made of films, slides and tapes to convey the language, culture and customs of France.
Acceptable for French 1, credit, UCLA. French 1-2 together are equivalent to French 1,2,3 credit, UCLA.

2 Elementary French II (5) UC/CSU
Prerequisite: French I with a grade of C or better, two years of high school French or equivalent.
This course completes the basic grammar of the French language. Films and filmstrips are employed to improve comprehension; enrich vocabulary and to serve as topics for oral discussion and written composition. Same as French 52 with French 62. Acceptable for French 3, credit, UCLA. French 1-2 together are equivalent to French 1,2,3 credit, UCLA.

3 Intermediate French I (5) UC/CSU
Prerequisite: French II with a grade of C or better, three years of high school French or equivalent.
This course provides a review of the fine points of grammar and seeks to perfect fluency, comprehension and cultural knowledge through dramatic films, short novels, poetry, plays, music and magazines.
Acceptable for French 4 credit, UCLA.

4 Intermediate French II (5) UC/CSU
Prerequisite: French 3 or four years of high school French.
This course continues to refine speaking, reading and writing comprehension skills through the literary and visual media. Acceptable for French 5 credit, UCLA.

5 Advanced French I (5) UC/CSU
Prerequisite: French 4
This course continues the study of advanced composition and grammar through literature, film and music. The readings are the basis for regular composition work and student discussion in French.

Continued
85
Course Descriptions

6 Advanced French II (5) UC:CSU
Prerequisite: French 5
This course completes the study of advanced composition and grammar through literature, film, and music. The readings are the basis for regular composition work and student discussion in French.

10 French Civilization (3) UC:CSU
Same as History 22
This course consists of lectures and discussions in English on the geography, history, government and institutions of France; the life and customs of its people; its literature, arts and sciences and its contributions to civilization. It is especially recommended to all students of French.

101 French Language Lab (1) CSU RPT2
A mediated, independent study course which allows students to enhance their French language skills through audio, video, and computer work in the language lab.

185 Directed Study - French (1) UC:CSU
285 Directed Study - French (2) UC:CSU
385 Directed Study - French (3) UC:CSU
Prerequisite: Consent of instructor.
Conference 1 hour per unit.
Allows students to pursue Directed Study in French on a contract basis under the direction of a supervising instructor.
Credit Limit: A maximum of 3 units in Directed Study may be taken for credit.

GEOGRAPHY
See also: Earth Science, Environmental Science, and Oceanography

1 Physical Geography (3) UC:CSU
(CAN GEOG 2)
A systematic study of the elements of the physical environment (e.g. weather, climate, landforms, water, soil and vegetation) and an analysis of their interrelationships and patterns of world distribution are considered.
Acceptable for Geography 1 credit, UCLA

2 Cultural Elements of Geography (3) UC:CSU
(CAN GEOG 4)
Geography 1 is not a prerequisite for Geography 2.
The cultural elements of geography and their correlation with the physical environment are introduced. Population patterns, cultural diversity, livelihood, settlement, environmental modification and perception are emphasized.
Acceptable for Geography 3 credit, UCLA

3 Introduction to Weather and Climate (3) UC:CSU
Atmospheric elements and controls, storms, human modification and the regional distribution of climates are studied.
Acceptable for Atmospheric Science 3 credit, UCLA. Same as Meteorology 3.

7 World Regional Geography (3) UC:CSU
This introductory course provides information about the major regions of the world including their occupancy and modification by man. It is especially recommended for teaching majors and anyone desiring a general understanding of contemporary world conditions.

Cooperative Work Experience Education
Geography is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.

HAZARDOUS MATERIAL TECHNOLOGY
See Environmental Hazardous Materials Technology

HEALTH

2 Fitness and Health (3) UC:CSU
Lecture 2 hours; laboratory 2 hours.
This course surveys issues that particularly affect physical fitness and health. Laboratory activities develop an understanding of activities that promote lifelong fitness.

9 Health for the Mature Individual (3) CSU
This course is designed to meet the personal needs and interests of the mature, older student in the area of protection, preservation and prolongation of physical and emotional health during the later years of life. Emphasis is placed upon those personal methods and public institutional services which can promote greater freedom from the discomforts and anxieties associated with aging. This course does not duplicate Health 10 and meets the graduation requirements.
Maximum 1 course from 9 and 10, UC campuses.

11 Principles of Healthful Living (3) UC:CSU
This course will survey information regarding personal and community health and basic principles of healthful living. Such subjects as drug and alcohol abuse, cancer, AIDS, nutrition, diet, personal care and consumer health will be covered.

Continued
Course Descriptions

Maximum one course from Health 9, 11, UC campuses. Health 11 meets the Health Education requirements for Associate in Arts Degree.

12 Safety Education and First Aid (3) UC:CSU
The prevention of accidents, care of common injuries and emergency procedures at the scene of accidents are dealt with. This course meets the certification requirements of both the standard and advanced first aid courses offered by the American Red Cross.

Cooperative Work Experience Education
Health is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.

HEBREW

21 Fundamentals of Hebrew I (3) UC:CSU
This course introduces the fundamentals of pronunciation and grammatical structure. Hebrew 21 and Hebrew 22 together are equivalent to Hebrew I. 21 and 22 are acceptable for Near East Language 1A credit, UCLA.

22 Fundamentals of Hebrew II (3) UC:CSU
Prerequisite: Hebrew 21.
This course completes the elementary grammar of Hebrew. Hebrew 21 and Hebrew 22 together are equivalent to Hebrew I. 21 and 22 are acceptable for Near East Language 1A credit, UCLA.

Cooperative Work Experience Education
Hebrew is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.

HISTORY

1 Introduction to Western Civilization I (3) UC:CSU
(CAN HIST 2)
This course provides a broad historical study of the main cultural, economic and political trends and events, from the rise of civilization in the Near East to the Age of Absolutism. Acceptable for History 1A credit, UCLA. History 1 with 2 acceptable for History 1ABC credit, UCLA.

2 Introduction to Western Civilization II (3) UC:CSU
(CAN HIST 4)
The course encompasses major developments in western history over the past three centuries. Emphasis is given to political, economic, cultural and diplomatic thoughts and actions of peoples and nations. Special attention is placed upon the impact of ideas: nationalism, democracy, capitalism, socialism, communism, imperialism, etc. Acceptable for History 1C credit, UCLA. History 1 with 2 acceptable for History 1ABC credit, UCLA.

11 Political and Social History of the United States I (3) UC:CSU
The political, social, economic and constitutional history of the United States from the colonial settlements through the Civil War is surveyed. Credit not granted for History 11 if credit is obtained for History 14, or 41. NOTE: One course maximum from 11, 14, 16, 33 and 41 transferable to UC. One course maximum from 12, 13, 16 and 42 transferable to UC. Acceptable for History 7A credit, UCLA.

12 Political and Social History of the United States II (3) UC:CSU
The course encompasses major developments in U.S. history since 1865. Emphasis is given to political, economic, cultural, and diplomatic thoughts and actions.

Credit not granted for History 12 if credit is obtained for History 13, 16, or 42. See NOTE History 11. Acceptable for History 7B credit, UCLA.

13 The United States in the Twentieth Century (3) UC:CSU
A survey of major political, economic, cultural and foreign relation aspects of twentieth century America.

14 Selected Issues of United States History (3) UC:CSU
A topical study of major issues in American history from its beginning to the present. Areas of concentration include/religion in colonial America, causes of the revolution, drafting the Constitution, Jeffersonian America, literary Renaissance, slavery and abolitionism, causes for the Civil War, Industrial Revolution and labor, U.S. emergence as a world power. Progressives in America, the New Deal, the Cold War, and others. Credit not granted for History 14 if credit is obtained for History 11 or 41. See Note History 11.

22 French Civilization (3) UC:CSU
Same as French 10.

25 History of the Jewish People (3) UC:CSU
This course traces the development of the Jewish people from the time of Abraham to the present day, describing their experiences in all important countries of the world. Special emphasis on the holocaust and Zionism.

41 The Afro-American in the History of the United States I (3) UC:CSU
This course provides a survey of U.S. History from early Colonial Era through the Civil War, with special emphasis on the contribution of the Afro-American. It provides a background in the political and social development of the United States for students majoring in the Social Sciences and for those who wish to gain a better understanding of the Afro-American in American civilizat. Credit not granted for History 41 if credit is obtained for History 11 or 14. See NOTE: History 11. Acceptable for History 7A credit, UCLA.

42 The Afro-American in the History of the United States II (3) UC:CSU
A survey of U.S. History from the end of the Civil War to the present time, this course provides information about the Afro-American's part in the social and political development of American Civilization. Credit not granted for History 42 if credit is obtained for History 11, 13 or 16. See NOTE: History 11. Acceptable for History 7B credit, UCLA.

43 The Mexican-American in the History of the United States I (3) UC:CSU
Meets the State requirements and A.A. degree requirements in U.S. History, U.S. Constitution, and California State and Local Government. Credit allowed for only one of History 43 or History 11. A survey of U.S. History from the early Colonial Era through the Civil War with special emphasis on the contribution of the Mexican-American. Included is a survey of the United States Constitution. This course provides a background in the political and social development of the United States for students majoring in the Social Sciences and, in addition, for those who wish to gain a better understanding of the Mexican-American in American civilization. Acceptable for History 7A credit, UCLA; UC accepts only one of History 43 or History 11.

44 The Mexican-American in the History of the United States II (3) UC:CSU
Meets the State requirements and A.A. degree requirements in U.S. History, U.S. Constitution, and California State and Local Government. Credit allowed for only one of History 44 or History 12. A survey of the U.S. History from the end of the Civil War to the present time, with special emphasis on the Mexican-American in
Course Descriptions

the social, economic and political development of American civilization. Included is a continued survey of the United States Constitution.
Acceptable for History 7B credit, UCLA; UC accepts only one of History 44 or History 12.

68 Introduction to the Pacific Rim (3) CSU
An introduction to the history and culture of the nations of the Pacific Rim in Eastern Asia. This course is designed to introduce Pacific Rim cultures and history.

185 Directed Study - History (1) UC-CSU
285 Directed Study - History (2) UC-CSU
385 Directed Study - History (3) UC-CSU
Prerequisite: Consent of instructor.
Conference 1 hour per unit.
Allows students to pursue Directed Study in History on a contract basis under the direction of a supervising instructor.
Credit Limit: A maximum of 3 units in Directed Study may be taken for credit.

Cooperative Work Experience
Education
History is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.

HUMANITIES

1 Cultural Patterns of Western Civilization (3) UC-CSU
This course is designed to introduce the student to the general concepts or principles of the humanities as evidenced in the ideas of applied aesthetics. Music, literature, painting, sculpture, architecture and other art forms are studied in relation to their background, function, medium, organization and style.

5 Interdisciplinary Studies in the Liberal Arts (3) UC-CSU
This course provides an opportunity for an interdisciplinary study of a particular historical era, its leading themes and definitive issues, or it provides an opportunity for an interdisciplinary study of one or more of the timeless themes of human kind. Art, music, literature, philosophy and science of the age are stressed. The specific age or themes will be announced in the Schedule of Classes.

30 The Beginnings of Civilization (3) UC-CSU
This survey of the cultural heritage of Western civilization from ancient Greece to the 17th century presents a history of ideas through emphasis on philosophical, religious, artistic, and literary traditions, using a wide variety of visual materials.

31 People in Contemporary Society (3) UC-CSU
Presenting a history of ideas, this course surveys the cultural heritage of western civilization from the 17th century to the present, including philosophical, religious, artistic, and literary traditions, as it analyzes the changing relationship with varied visual materials.

60 People and Their World: Technology and the Humanities (3) UC-CSU
Prerequisite: English 28 recommended
This course provides opportunities to examine the interaction between society and technology. Challenging and stimulating questions about cultural and social values in light of the effects of modern technology are developed and discussed.

61 People and Their World: The Creative Process (3) CSU
Prerequisite: English 28 recommended
This course focuses on the creative processes. A survey of creativity as expressed through art, architecture, literature, music, dance and drama is undertaken. Philosophical, psychological and historical approaches are incorporated.

72 The Art of Being Human (3) UC-CSU
This course provides a modularized introduction to the humanities as an approach to living. Each unit of study represents a major theme, such as humanism itself, esthetics, myth, Eastern consciousness, morality, love and death.

73 Humanities through the Arts (3) UC-CSU
Through film, drama, music, literature, painting, sculpture and architecture this course surveys the humanities; emphasizing the history, technique, meaning and evaluation of individual works of western art.

185 Directed Study - Humanities (1) UC-CSU
Cooperative Work Experience Education
Humanities is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.

JAPANESE

21 Fundamentals of Japanese I (3) UC-CSU
Prerequisite: Completion of English 28 with a grade of C or better is recommended.
This is a course in spoken Japanese which stresses the fundamentals of pronunciation and grammar, basic vocabulary, useful phrases, and the ability to understand and speak simple Japanese. All materials are presented in Romanized Japanese (Romanji) to facilitate mastery of the spoken language.

JOURNALISM

101 Collecting and Writing News (3) CSU
(CAN JOUR 2)
(Formerly Journalism 1)
Prerequisite: Eligibility for English 28
This introductory course stresses instruction and practice in news gathering and news writing. Extensive practical writing experience is geared to the campus newspaper. It also includes a study of newspaper, radio and television news. Adherence to professional writing style and legal and ethical aspects of the profession are covered.

105 Mass Communication (3) CSU
(CAN JOUR 4)
(Formerly Journalism 5)
This course analyzes the impact of mass media on society. Special attention is devoted to newspapers, magazines, radio, television, motion pictures, public relations and advertising.

217 Publication Laboratory (2) CSU RPT 3
(Formerly Journalism 17)
Prerequisites: Journalism 101 or consent of instructor
This course stresses constructive criticism of students' writing styles and news evaluation. Publication production plans are developed. The instruction is directed by the campus newspaper adviser, editor and staff members.

218 Practical Editing (3) CSU RPT 3
(Formerly Journalism 18)
Prerequisites: Journalism 101 or consent of Instructor
This course provides practical instruction and practice in writing and editing the campus newspaper. Editions are evaluated in regularly scheduled class meetings.

Cooperative Work Experience
Journalism is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.

Continued
Course Descriptions

LAW

1 Business Law I (3) UC:CSU
(CAN BUS 8)
(Same as Business 5)
Essentials of the law of contracts, in its application to everyday problems pertaining to business and to the individual, are covered. Elementary safeguards regarding sales and sales contracts are also considered. Case discussion and lecture method are utilized. Credit is not granted for students enrolled in or with credit in Business 5.
Acceptable for credit, UCLA maximum one course from Law 1 or 2; UC campuses.

2 Business Law II (3) UC:CSU
This course covers essentials of the law of negotiable instruments, security devices, partnerships, corporations, estates and bankruptcy in their application to everyday problems of business.
Acceptable for credit, maximum one course from Law 11 or 2; UC campuses.

3 Civil Rights and the Law (3) CSU
Comparative and analytical study of the law and related problems concerning the Bill of Rights to the U.S. Constitution. Life and the death penalty, freedoms of speech and press, freedom of religion, racial and sexual equality, and privacy are some of the topics under consideration, with emphasis on recent court decisions and current events. Recommended elective for Paralegal Certificate.

10 Introduction to Legal Assistant I (3) CSU
Prerequisite: Concurrent enrollment in or completion of English 101
Lecture 3 hours.
All introductory course in formalizing the career of the legal assistant; an introduction to law; social forces and the law; comparison of the role of the legal assistant and the lawyer; and an introduction to legal terminology and bibliography, including research problems.

11 Introduction to Legal Assistant II (3) CSU
Prerequisite: Law 10
Lecture 3 hours.
A continuation of Law 10 with a study of the composition, location and jurisdiction of all courts; a study of the production and administration within the judicial structure; a detailed examination of civil and criminal cases; an introduction to legal drafting and writing.

12 Tort Law and Claims Investigation (3)
Prerequisite: Concurrent enrollment or completion of Law 10
Lecture 3 hours.
A study of the fundamental principles of law of torts, including insurance and an examination of the techniques of investigation involved in the lawyer's handling of tort and insurance claims.

13 Wills, Trusts, and Probate Administration (3)
Prerequisite: None
Lecture 3 hours.
A study of the fundamental principles of the law of wills and trusts, including simple will and trust forms; an examination of the organization and jurisdiction of a California Probate Court; and the administration of estates in California Probate Courts.

14 Law Office Management (3)
Prerequisite: None
Lecture 3 hours.
A study of the basic objectives of the management of a law office: a study of hardware and software used in a law office; an examination of indexing and filing principles; law office manually; a study of basic accounting principles; practice in and study of law office correspondence.

15 Property, Bankruptcy, and Family Law (3)
Lecture 3 hours.
A study of the law of personal property and real property, including community property, joint tenancy, leases, deeds, contracts, escrows, deeds of trust, study of the system of recording and search of public documents, a study of the bankruptcy laws and forms and a study of family law, with emphasis on the dissolution of marriage.

16 Civil and Criminal Evidence (3)
Prerequisite: Law 10
Lecture 3 hours.
A study of the rules of civil and criminal evidence and the admissibility of such evidence in court; deposition comprehension and use in court; interrogation summarizing and use in court.

20 Basic Probate Procedures (3)
Prerequisite: Law 10 or consent of instructor
Lecture 3 hours.
A comprehensive study of methods for fact gathering, office procedures, and required court work involved in the handling of probate of both intestate and intestate decedents.

Cooperative Work Experience Education
Law is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.

LEARNING SKILLS

1 Learning Skills - Reading (3) RPT3 NDA
Prerequisite: None
Corequisite: Enrollment in one or more college course.
Laboratory 6 hours.
A self-paced program intended for all students having difficulty with their college reading, assignments. Course features diagnostic testing, individual attention and instant feedback about students' progress toward prescribed goals. (This 3-unit course is modularized into three 1-unit modules.)

2 English Fundamentals (3) NDA
Individualized English grammar review at an appropriate level.

3 Vocabulary Development (5) NDA
Learning Skills 3A and 3B are group conversation classes designed to provide ESL students with class activities that will expand their comprehension and use of spoken English. Through the use of role-playing, practice dialogues, and impromptu speaking exercises, students are given the opportunity to improve their oral communication skills in a small group setting. Learning Skills 3C, 3D, and 3E are individualized, self-paced vocabulary programs for all students, and have been designed on various levels of difficulty. These courses focus on continued vocabulary growth and development, as well as provide students with helpful strategies for understanding complex vocabulary words.

4 The Mechanics of Spelling (1) NDA
There are two courses available in spelling, the first being presented at a lower level of difficulty than the second. The first course offers individualized instruction in basic word-attack skills, covering vowels, consonants, blends, digraphs, and syllables. The second course offers individualized instruction in the basic rules and complicated patterns of spelling, covering vowels, consonants, and word families.

10 Mathematics Fundamentals (3) NDA
Prerequisite: Learning Skills 40
Individualized review of math skills for students with identified learning disabilities.

40 Learning Disabled Students' Individualized Diagnostic Process (1) NDA
Prerequisite: Consent of instructor.
Individualized diagnostic assessment processes are conducted. Students with learning disabilities identify problems, become aware of individual strengths and weaknesses in achievements

Continued
Course Descriptions

and learning skills, and develop individual educational plans outlining goals, objectives and recommendations. Students identified as learning disabled qualify for services and classes in the Learning Disabilities Program.

41 Study Strategies for the Learning Disabled (3) NDA
Prerequisite: Learning Skills 40 or consent of instructor.
This course will help students with identified learning disabilities to develop strategies to cope with the demands of the academic environment. Such strategies include discovering "hidden agendas," time management, note-taking, memory, and comprehension skills.

LIBRARY/MEDIA TECHNOLOGY

15 Library Research Methods (1) CSU
Lecture 1 hour.
This course teaches the student how to make independent use of library resources for maximum educational and life-long personal benefit. Standard research techniques are emphasized and specialized information sources are examined. Students learn how to find information efficiently.

MANAGEMENT

(See Business also)

1 Principles of Management (3) CSU
Prerequisite: Business 1 or equivalent and consent of instructor.
This course provides an introduction to the principles of management. Detailed analysis of basic managerial functions including planning, organizing, staffing, directing and controlling in a business or administrative environment is made.

2 Organization and Management Theory (3) CSU
Prerequisite: Business 1 or equivalent and consent of instructor.
This course provides an introduction to the theories of organization and management. Organizational structure, technology and systems; administrative behavior; communications; motivation and leadership and organizational change and manpower development including organizational development, are examined.

6 Public Relations (3) CSU RPT 1
This course covers the basic concepts and fundamentals involved in the organization of a public relations program. Community relations, customer relations, stockholder relations, press relations, public relations and special group relations are emphasized.

13 Small Business Management I (3) CSU
Prerequisite: Business and Management 1.
This course teaches the student how to organize and operate a small business.

15 Small Business Management II (3) CSU
Prerequisite: Management I and 13 and consent of instructor.
This course focuses on problems confronting the small business firm and explores potential ways to effectively resolve each problem. Course includes guest lectures and field trips. It is case-oriented.

33 Personnel Management (3) CSU
Prerequisite: Management 1 or equivalent and consent of instructor.
The growth and development of the field of personnel administration; unions and their relationship to business enterprises; employee selection, training, rating, promotion, discharge, hours of work and method of payment, the handling of personnel problems; diagnosing organizational stability and employee service and programs are dealt with. Offered only Spring of even-numbered years.

Cooperative Work Experience Education
Management is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.

MARKETING

(Formerly Merchandising)

1 Principles of Selling (3) CSU
This course emphasizes the principles used in persuasive communication. Consumer buying behavior, presentations, and closing are covered. The course is designed to help students currently involved in sales as well as those seeking to improve their communication skills. Sales presentations, video tapes and case studies are used.

21 Principles of Marketing (3) CSU
This course introduces students to various activities in the field of marketing. It provides a broad understanding of the principles involved in the distribution of commodities from the producer to the user or consumer. It covers the consumer market, consumerism, packaging and brands, pricing, wholesaling, retailing, sales promotion, personal selling and international marketing. Presentations, case studies and video tapes are used.

Cooperative Work Experience Education
Marketing is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.

MATHMATICS

To enroll in a mathematics course, one of the following must be satisfied:
1. The prerequisite must have been completed in the Los Angeles Community College District.
2. Satisfactory score on the Mathematics Placement Exam.

100 Mathematics Workshop (1) RPT 3 NDA
(Formerly Mathematics 88)
Prerequisite: Current enrollment in any mathematics course. Recommended: For students concurrently enrolled in any mathematics course.
Laboratory 3 hours
This course is designed to increase comprehension of all levels of mathematics, utilizing tutorial assistance from a mathematics instructor.
Credit/No Credit only.

105 Arithmetic for College Students (3) NDA
(Formerly Mathematics 30)
This course is designed to give the student an understanding of and a competency in the basic operations of elementary arithmetic. To attain this mastery, the student must have a genuine desire to remove arithmetic deficiencies. Topics include operations with whole numbers, common and decimal fractions, percentages, the study of the metric system and simplified calculations.

112 Pre Algebra (3) NDA
Prerequisite: Mathematics 105 or knowledge of arithmetic.
This course bridges the gap between arithmetic and algebra. It reviews arithmetic and introduces concepts of algebra including signed numbers, variables, exponents, mathematical sentences and linear equations.

115 Elementary Algebra (5)
(Formerly Mathematics 31)
Prerequisite: Math 105 with a grade of C or better, or Math 112.
This is a first course in algebra. It covers the fundamental operations on natural numbers and carries on a logical development through all the real numbers. The course includes the solution of linear and quadratic equations and their graphs, factoring and statement problems.

Continued
Course Descriptions

116 Algebra Review (3)
Prerequisite: One year of high school algebra or equivalent. Satisfactory score on Mathematics Placement Test.
A review of the first course in algebra. This course includes the solutions of linear and quadratic equations, graphing, and statement problems. It is recommended for those who require further practice in order to continue their study of mathematics.

120 Plane Geometry (5)
(Formerly Mathematics 32)
Prerequisite: Mathematics 115 with a grade of C or better.
This is a basic course in the fundamentals of Euclidean plane geometry, stressing the development of logical proof in a mathematical system.

125 Intermediate Algebra 5
(Formerly Mathematics 20/220)
Prerequisite: Mathematics 115 and 120 with a grade of C or better.
Manipulative skills in algebra are developed and strengthened in the course. The topics include rational exponents, the complete number system of algebra, algebraic and graphical solutions to linear and quadratic equations, logarithmic and exponential functions, elementary theory of equations and inequalities and conics. A wide variety of statement problems are included in the course.

215 Principles of Mathematics 1 (3) CSU
(Formerly Mathematics 35)
Prerequisite: Mathematics 125 with a grade of C or better.
This course helps students understand topics in mathematics, including sets, number bases, number systems, logic and probability. It is recommended for prospective elementary school teachers. Acceptable for Mathematics 35A credit, UCLA.

225 Introductory Statistics (3) UC:CSU
(Formerly Mathematics 14)
Prerequisite: Mathematics 125 with a grade of C or better within the last 3 years. Students must enroll concurrently in Math 225. The principles of elementary statistics which are studied include measures of central tendency, measures of dispersion, the normal distribution, probability, the histogram, chi-square test, correlation and regression, test involving variance, and non-parametric tests. Applications are made of the central limit theorem to the testing of hypotheses. Acceptable for Mathematics 50A credit, UCLA.

226 Elementary Statistics Problem Solving (1) CSU
(Formerly Mathematics 54)
Prerequisite: Concurrent enrollment in Mathematics 225. This course is intended for those students enrolled in Math 225. It supplements the statistics course work through problem analysis, problem solving, and the use of hand-held calculators.

235 Mathematical Analysis for Business and Social Sciences I (5) UC:CSU
(Formerly Mathematics 23)
Prerequisite: Mathematics 125 or equivalent with a grade of C or better.
This course covers finite mathematics consisting of sets, graphing, linear programming, vectors, matrices, linear systems, combinations, probability, statistics, game theory and Markov chains with emphasis on applications to business and social sciences. Acceptable for Mathematics 2 credit, UCLA. Maximum of 5 units allowed at UC.

236 Mathematical Analysis for Business and Social Sciences II (5) UC:CSU
(Formerly Mathematics 24)
Prerequisite: Mathematics 120 and 125 with a grade of C or better. Lecture 5 hours.
This course consists of elementary differential and integral calculus; exponential and logarithmic functions, and their applications to business and social sciences. Offered spring semester only. Acceptable for Mathematics 4A credit, UCLA.

240 Trigonometry (3) CSU
(Formerly Mathematics 3)
Prerequisite: Mathematics 120 and 125 with a grade of C or better or consent of instructor.
This course of analytical trigonometry includes solutions of triangle problems, radian measure, graphs of trigonometric functions, trigonometric equations, identities, polar coordinates and inverse trigonometric function and complex numbers.

260 Introduction to Analysis (5) UC:CSU
(Formerly Mathematics 40)
Prerequisite: Mathematics 240 with a grade of C or better.
This course in pre-calculus combines the traditional courses of college algebra and analytic geometry and covers such topics as inequalities, functions, matrices and determinants, properties of the straight line, conics, algebraic and transcendental functions and parametric equations.

261 Calculus I (5) UC:CSU
(Formerly Mathematics 41)
Prerequisite: Mathematics 240 with a grade of C or better.
A study is made of the differentiation and integration of algebraic functions; applications of the derivative to maximum-minimum problems; related rates, motion of a particle and curve sketching; applications of the integral to the area between two curves; volumes of solids of revolution and work; the Fundamental Theorem of Integral Calculus. Acceptable for Mathematics 31A credit, UCLA. Mathematics 261 and 262 together are acceptable for Mathematics 31AB credit, UCLA.

262 Calculus II (5) UC:CSU
(Formerly Mathematics 42)
Prerequisite: Mathematics 261 with a grade of C or better or consent of instructor.
The second course of calculus deals with the differentiation and integration of transcendental functions, standard techniques of integration, curves in polar coordinates and sequences and series. Acceptable for Mathematics 31B credit, UCLA. Mathematics 261 and 262 together are acceptable for Mathematics 31AB credit, UCLA.

263 Calculus III (5) UC:CSU
(Formerly Mathematics 43)
Prerequisite: Mathematics 262 with a grade of C or better or consent of instructor.
The third course of calculus deals with such topics as multivariable calculus, partial differentiation, two and three-dimensional vectors, Stokes and divergence theorems, and differential equations. Acceptable for Mathematics 32A credit, UCLA. Mathematics 270, 275, 263 together are acceptable for Mathematics 32A and 33AB credit, UCLA.

270 Linear Algebra (3) UC:CSU
(Formerly Mathematics 13)
Prerequisite: Mathematics 263 which may be taken concurrently. A study of vector spaces, linear transformations and matrices, matrix algebra, determinants and solutions of systems of equations is made. Mathematics 270 and 275 together are acceptable for Mathematics 33A credit at UCLA. Mathematics 270, 275 and 263 together are acceptable for Mathematics 32A and 33AB credit at UCLA. Offered fall semester only.

275 Ordinary Differential Equations (3) UC:CSU
(Formerly Mathematics 15)
Prerequisite: Mathematics 263 which may be taken concurrently with Mathematics 275.
This study covers first order differential equations and linear differential equations. Special methods for solution of these equations are developed and applied. Laplace Transforms are developed and used for the solution of differential equations and

Continued
Course Descriptions

systems of equations. Existence theorems are stated and proofs are outlined. Series solutions and operator methods are included. Mathematics 270 and 275 together are acceptable for Mathematics 33A credit at UCLA. Mathematics 270, 275, and 283 together are acceptable for Mathematics 32A and 33AB credit at UCLA. Offered Spring semester only as an evening class.

Cooperative Work Experience Education
Mathematics is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.

METEOROLOGY
See also: Earth Science, Environmental Science, and Geography.

3 Introduction to Weather and Climate (3) UC:CSU
(Same as Geography 3.)
Atmospheric elements and controls, storms, human modification and the regional distribution of climates are studied.
Acceptable for Atmospheric Science 3 credit, UCLA.

Cooperative Work Experience Education
Meteorology is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.

MICROBIOLOGY

20 General Microbiology (4) UC:CSU
Prerequisite: College Biology with a grade of C or better, concurrent enrollment in or successful completion of English 28.
Recommended: Chemistry 3 or 10.
An introduction to the fundamental principles of microbiology. Included are general aspects of the structure, metabolism, multiplication, genetics and classification of bacteria, fungi, protozoa, and viruses; the methods used to control these microorganisms, the human body's natural defense mechanisms, and some selected microbial pathogens. The laboratory portion of the course covers microscopic and cultural techniques for studying and identifying microorganisms.

Cooperative Work Experience Education
Microbiology is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.

MUSIC

101 Fundamentals of Music (3) UC:CSU
Basic rudiments of musical notation, scales, keys, intervals, common musical terms and elementary keyboard are studied. This is a preparatory course for Music 201 and Music 211.
Acceptable for Music 1 credit, UCLA.

111 Music Appreciation I (3) UC:CSU
Designed for non-music majors, this course meets humanities/fine arts requirements by surveying a wide variety of musical styles and periods, past and present. The emphasis is on perceptive listening, along with expository readings.
Acceptable for Music 2A credit, UCLA.

112 Music Appreciation II (3) UC:CSU
NOTE: Music Appreciation I is not a prerequisite to Music Appreciation II.
Designed for non-music majors, this course meets humanities/fine arts requirements by surveying a variety of twentieth century musical styles. The emphasis is on perceptive listening, along with expository readings. Music 112 differs from Music 111 in that the focus is on twentieth century composers and styles. Acceptable for Music 2B credit, UCLA.

122 Music History and Literature II (3) UC:CSU
Prerequisite: Music 101 or equivalent.
Styles, techniques and forms of music from 1750 to the present are traced. Special emphasis is placed on the development of the orchestra and its forms. The artistic philosophy of each style period is examined.
NOTE: Music History and Literature I is not a prerequisite to Music History and Literature II.

141 Jazz Appreciation (3) UC:CSU
Designed for non-music majors, this course meets humanities/fine arts requirements by surveying jazz styles of music from their beginnings to the present. The emphasis is on perceptive listening, along with expository readings.

181 Applied Music I (1) UC:CSU

182 Applied Music II (1) UC:CSU

183 Applied Music III (1) UC:CSU

184 Applied Music IV (1) UC:CSU
Prerequisite: Open to music majors by audition.
This course is designed for both vocal and instrumental students and provides credit for Independent study. Fifteen one-hour lessons and a minimum of five hours of weekly independent music practice is required for the semester. The development of vocal/instrumental technique is emphasized. Workshop and recital participation are required.
Acceptable for credit, UC campuses; 12 units maximum from Music 181, 182, 183, 184, 321, 322, 323, 324, 341, 411, 412, 413, 414, and 561.

201 Harmony I (3) UC:CSU
Required of all music majors.
Prerequisite: Music 101, 200 or equivalent and concurrent enrollment in Music 211. Also some pianistic ability and/or concurrent enrollment in an elementary piano course.
This course deals with the fundamental harmonic principles of music including chord structure, diatonic harmony, inversions, harmonic progression, harmonic structure of the phrase, harmonization of a given part and nonharmonic tones. Harmonic skill is developed through written exercises, analysis of classic examples and keyboard exercises.

202 Harmony II (3) UC:CSU
Prerequisite: Music 201 and concurrently enrollment in Music 212.
This course extends principles initiated in Music 201, including the structure of seventh chords, secondary dominants, altered nonharmonic tones and modulation to closely related keys.

203 Harmony III (3) UC:CSU
Prerequisite: Music 202 and concurrently enrollment in Music 213.
This course extends principles developed in Music 202, including augmented sixth chords, the Neapolitan sixth, altered dominants, diminished seventh chords, chromatic third-related harmony, modulation to foreign keys and extended chords such as ninths, elevenths and thirteenth.

211 Musicanship I (2) UC:CSU
Required of all music majors.
Prerequisite: Music 101, or equivalent and concurrent enrollment in Music 201.
Correlated with Harmony 1, this course consists of a study of sight reading, one-part melodic dictation, simple harmonic dictation, elementary theory, including scale structure, keys, intervals, musical terminology and notation, and the basic principles of
Course Descriptions

212 Musicianship II (2) UC:CSU
Prerequisite: Music 211 and concurrent enrollment in Music 202.
This course consists of sight reading, ear training and keyboard
application of the subject matter covered in Music 202.

213 Musicianship III (2) UC:CSU
Prerequisite: 212 and concurrent enrollment in Music 203.
This course consists of sight reading, ear training and keyboard
application of the subject matter covered in Music 203.

299 Music Honors (1) UC:CSU RPT 3
Prerequisite: Designed for the advanced Music major with consent
of department chairperson.
This course provides the gifted student in music with an
opportunity for concentrated independent study in selected
areas under the direction of an instructor.

321 Elementary Piano I (2) UC:CSU
Student must have access to a piano as daily practice is required.
This course presents an introduction to music reading, scale
playing, and the use of the pedals. The artistic performance of
appropriate repertoire is emphasized.
See acceptability Music 184

322 Elementary Piano II (2) UC:CSU
Prerequisite: Music 321 or equivalent.
Student must have access to a piano as daily practice is required.
This course is a continuation of skills and concepts started in
Elementary Piano I.
See acceptability Music 184

323 Elementary Piano III (2) UC:CSU
Prerequisite: Music 322 or equivalent.
Student must have access to a piano as daily practice is required.
This course is a continuation of skills and concepts developed in
Elementary Piano II.
See acceptability Music 184

324 Elementary Piano IV (2) UC:CSU
Prerequisite: Music 323 or equivalent
Student must have access to a piano as daily practice is required.
This course is a continuation of skills and concepts developed in
Elementary Piano III.
See acceptability Music 184

341 Intermediate Piano (2) UC:CSU RPT 3
Prerequisite: Music 324 or equivalent.
The performance of appropriate repertoire is developed with
emphasis on memorization and artistic interpretation.
See acceptability Music 184

411 Elementary Voice I (2) UC:CSU
This course is an introduction to the proper use of the voice
including attention to posture, breath control, tone quality,
power, diction, range, and stage presence. Repertoire includes
simple art songs and arrangements of folk songs and spirituals.
Acceptable for Music 65 credit, UCLA.
See acceptability Music 184

412 Elementary Voice II (2) UC:CSU
Prerequisite: Music 411 or equivalent
An extension of principles introduced in Music 411 with a greater
emphasis on interpretation.
Acceptable for Music 65 credit, UCLA.
See acceptability Music 184

413 Elementary Voice III (2) UC:CSU
Prerequisite: Music 411 and 412 or equivalent.
All aspects of solo singing are stressed, especially English,
Italian, French and German diction. Repertoire includes art
songs in the original language and less vocally demanding arias
from opera and oratorio.
Acceptable for Music 65 credit, UCLA.
See acceptability Music 184.

414 Elementary Voice IV (2) UC:CSU
Prerequisite: Music 411 and 412 or 413 or equivalent.
This course is a continuation of principles and concepts presented
in Music 413. The development of the student's ability to analyze
and interpret the song repertoire is stressed.
Acceptable for Music 65 credit, UCLA.
See acceptability Music 184.

501 College Choir (1) UC:CSU RPT 3
Open to all students by audition.
This course consists of study and performance of selected choral
literature for mixed voices, both accompanied and a cappella.
The emphasis is placed on the development of reading skills,
basic voice techniques and interpreting the score.
Acceptable for Music 70B credit, UCLA.
See acceptability Music 184.

561 Chamber Chorale (1) UC:CSU RPT 3
Open to all students by audition.
Rehearsal and performance of choral music for small ensembles.
The music is chosen from all stylistic periods. Emphasis is
placed upon reading skills, interpreting the score and the
development of a professional attitude toward public performance.
Acceptable for Music 70C credit, UCLA.
See acceptability Music 184.

725 Community Orchestra (1) UC:CSU RPT 3
Open to all musicians who play orchestral instruments by audition.
Standard orchestral literature is rehearsed and performed.
Acceptable for Music 70D credit, UCLA.
See acceptability Music 184

775 Jazz Ensemble (1) UC:CSU RPT 3
Open to all instrumentalists by audition.
This course provides the instrumentalist with the opportunity to
rehearse and perform music of the past in the "big band"
tradition as well as contemporary compositions written for this
ensemble.
See acceptability Music 184

Cooperative Work Experience Education
Music is approved for Cooperative Work Experience Education
credit. See Cooperative Education courses for prerequisites,
course descriptions and credit limits.

OCEANOGRAPHY
See also: Earth Science, Environmental Science, and Geography

1 Introduction to Oceanography (3) UC:CSU
The student is introduced to the general field of oceanography,
including a study of the features of the sea floor, the chemical
and physical properties of sea water, currents, tides, waves and
their effects on marine organisms. Special reference is made to
the Southern California environment and the problem of man
and the sea.

Cooperative Work Experience Education
Oceanography is approved for Cooperative Work Experience
Education credit. See Cooperative Education courses for
prerequisites, course descriptions and credit limits.

OFFICE ADMINISTRATION

1 Typewriting 1 (3)
Students with one year of high school typewriting or ability to type
35 w.p.m. should enroll in Office Administration 2. (Students who
have completed a beginning typewriting course with a grade of "D"
should enroll in Office Administration 3.)
Five hours weekly.
Mastery of the keyboard and the basic operations of electric
Continued
Course Descriptions

typewriters are developed. Emphasis is placed on fundamentals of letter writing, manuscript typing, rules for centering and tabulation and rough draft typing. The student should achieve a minimum typing speed of 55 w.p.m.

2 Typewriting II (3) CSU
Prerequisite: Office Administration 1, one year of high school typing or ability to type 35 w.p.m.
Five hours weekly.
Skills developed include correct techniques in the operation of electric typewriters and speed and accuracy in typing letters, business forms, tabulation problems and manuscripts. The student should achieve a minimum 5-minute typing speed of 45 w.p.m. with a maximum of 5 errors.

3 Typewriting III (3) CSU
Prerequisite: Office Administration 2 or the ability to type 45 w.p.m.
Five hours weekly.
Skills developed include correct techniques and speed and accuracy in typing business letters and memorandums, special business forms, rough drafts, statistical and business reports. The student should achieve a minimum typing speed of 50 w.p.m. Students who have had word processing may do the production work using the computer.

6 Adding and Calculating Machines (1)
(Same as ACCTG 37)

7 Machine Transcription (3)
Prerequisite: Office Administration 2 (with a grade of C or better) or ability to type 45 w.p.m.; Business 31.
Three hours weekly.
Skills developed include proficiency in operating transcribing machines; production typing of multiple letters and memorandums from machine dictation; and review of business letter styles, word division, spelling, punctuation, and capitalization.

9 Typing Improvement (1) RPT 1 NDA
Prerequisite: Completion of beginning typing course with grade of D or better.
Three hours weekly.
Speed and accuracy are improved through timed writings and corrective drills. Students may enroll for two semesters, but the semesters may not be taken consecutively. This course may be taken in addition to Office Administration 2 or Office Administration 3 if the student needs additional speed and/or accuracy building.

15 Script Shorthand I (3) NDA
Prerequisite: Ability to type 45 w.p.m.
This system of shorthand uses the letters in our alphabet rather than traditional shorthand symbols. Therefore, it takes less time to learn the theory and achieve employable speeds. Alphabetic shorthand is now increasing in popularity.

20 Medical Assistant Office Procedures 5
Prerequisite: Office Administration 1 or ability to type 40 w.p.m.
Comprehensive training is given in all types of medical office procedures. Speed and accuracy are developed in the typing of medical copy such as case histories, reports, correspondence and insurance forms. Medical terminology and abbreviations are taught. Telephone techniques, medical record keeping, filing and other office skills are reviewed. Grooming, professional ethics, and personal relationships are stressed. No shorthand is required.

23 Legal Secretarial Procedures I (3)
Students are introduced to the legal terminology of the law office. Students are also introduced to the forms used in the law offices and in the courts and to the procedures used in performing the duties of a legal secretary.

24 Legal Secretarial Procedures II (5)
Prerequisite: Office Administration 23
Students' knowledge of legal terminology is further strengthened. Students develop the ability to quickly and accurately prepare legal papers which are used in the law office and which must be prepared for the courts. Emphasis is given to responsibility in the performance of duties by the legal secretary.

31 Business English (3)
Prerequisite: English Placement Test
Recommended: Concurrent enrollment in Office Administration 34
Lecture 3 hours,
This course is required for Office Administration majors.
Note: Same as Business 31.

32 Business Communications (3) CSU
Prerequisite: English Placement Test. Office Administration 31 or equivalent. Ability to type 30 w.p.m.
Lecture 3 hours.
This course is required for Office Administration majors.
Note: Same as Business 32.

34 Business Vocabulary and Spelling (2)
Two hours weekly.
Vocabulary building and spelling skills are stressed. Emphasis is placed on phonics, spelling rules, confusing words, commonly misspelled words and the formation of plurals. The course allows application of skills through written expression.

35 Word Processing: Concepts in Information Systems (3) CSU
Prerequisite: Ability to type 35 w.p.m.
Three hours weekly.
Word processing vocabulary and features found on word processing and computer software packages are studied.

39 Word Processing, Keyboarding and Operations (3) RPT 2
Prerequisite: Ability to type 40 w.p.m.; completion of, or concurrent enrollment in, Office Administration 35 or other computer class.
Five hours weekly.
This course teaches word processing skills such as inputting, editing, formatting, and printing using popular business word processing packages on the IBM-PC.

44 Medical Terminology (3)
Three hours weekly.
The student develops a comprehensive medical vocabulary applicable to all specialties of medicine through the learning of Greek and Latin prefixes, suffixes, word roots, etc. A basic understanding of anatomy and physiology is provided. Training in the spelling, pronunciation and definition of medical terms is given as well as training in the use of a medical dictionary.

64 Office Administration Laboratory (1) NDA
Prerequisite: Concurrent enrollment in Office Administration 35, Office Administration 75A, or Office Administration 79.
This course is designed to reinforce the lectures presented in Office Administration 35, 75A, and 79. It gives the practice needed to apply fundamental word processing principles to projects.

75A Word Processing: Equipment and Operations (1) CSU
Prerequisite: Ability to type 25 w.p.m. This is a short-term class in word processing for personal use. Word processing software on the IBM-PC is used to develop computer application skills for all students, including non-business majors.
Three hours weekly.
This class presents word processing skills on the microcomputer, including keyboarding, editing, and printing various types of documents. Spreadsheets and databases are also covered. It is designed for all students, including non-business majors.

79 Word Processing Applications (3)
Prerequisite: Ability to type 40 w.p.m. Completion of Office Administration 35 and Office Administration 39.
Five hours weekly.
Basic word processing skills, such as inputting, editing, formatting,
Course Descriptions

and outputting are taught utilizing the WordStar word processing program on the IBM-PC.

88 Microcomputer Office Applications: Desktop Publishing(3)
This course provides information and hands-on training in using IBM or compatible microcomputers, laser printers, and an up-to-date desktop publishing software package. Students will learn to produce camera-ready, near typeset quality reports, newsletters, and business forms.

185 Directed Studies - Office Administration (1)
285 Directed Study - Office Administration (2)
385 Directed Study - Office Administration (3)
Prerequisite: Ability to type 50 w.p.m., Office Administration 39, 79, or 69 and permission of instructor.
Students will work on independent projects as discussed and approved by instructor.
Credit limit: A maximum of 3 units in Directed Study may be taken for credit.

Cooperative Work Experience Education
Office Administration is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.

PERSONAL DEVELOPMENT

1 Introduction to College (1) RPT 1 NDA
This course covers educational and vocational planning, including preparation of a detailed term-by-term plan, fixing of goals and objectives, career guidance, library skills, institutional roles and governance, student government, and deficiencies in preparation with relation to objectives and study skills.

8 Career Planning and Development (2) CSU
Personal development 8 is an introduction to career planning and is designed for students who are contemplating vocational choice. The focus is on a comprehensive career and personal evaluation, the development of an appropriate educational plan, and the ability to utilize a personal career strategy.

15A Business and Interpersonal Communications Skills (1) NDA
This workshop develops verbal communication skills to help students manage their feelings of insecurity and/or inadequacy in both business and social settings.

15B Test Anxiety Management (1) NDA
This workshop teaches students techniques and attitudes helpful in overcoming fears and anxieties which interfere with successful test taking and with other anxiety-provoking situations in life.

15C Strategies for Success in College and Life (1) NDA
This course is designed to teach students methods that enhance their success in college and life. Utilizing a product approach, students will develop workable, realistic goals for their education and life pursuits.

PHILOSOPHY

There are no prerequisites to any philosophy course although eligibility for English 101 is recommended for some courses.

1 Introduction to Philosophy I (3) UC:CSU
Recommended: Eligibility for English 101.
A critical analysis of traditional problems of knowledge, metaphysics, philosophy of science and philosophy of religion is made.

3 History of Greek Thought (3) UC:CSU
Recommended: Eligibility for English 101.
A critical presentation of western thought from the Greek Classical philosophers to the medieval philosophers is made. Acceptable for Philosophy I credit, UCLA.

8 Logic in Practice (3) UC:CSU
Application of the logical principles of sound thinking to morals, politics and everyday life is made with emphasis upon the analysis of language as an aid to sound thinking.

9 Deductive Logic (3) UC:CSU
This introductory course is designed to promote clear deductive thinking. It begins with a general discussion of the nature of logic and language and informal fallacies. Traditional Aristotelian logic is then studied and modern symbolic logic is introduced. Techniques of proof, translation, and logical analysis of arguments are covered.

9 Symbolic Logic I (3) UC:CSU
This course provides an introduction to formal logic, including truth, validity, truth tables, tautologies, contradictions, contingencies, quantification and methods of deduction.

18 Business Ethics (3) CSU
Recommended: Eligibility for English 101
This course introduces the study of values and their importance in the practical conduct of business.

20 Ethics (3) UC:CSU
Recommended: Eligibility for English 101
An introduction to the study of human values, the grounds of reasonable choice and the standards of right and wrong is provided.

23 The World's Great Religions (3) UC:CSU
An historical and philosophical study of major faiths and their ethical and theological principles is conducted.

24 An Introduction to the Philosophy of Literature (3) UC:CSU
A philosophical inquiry is made into such themes as freedom, guilt, love, self-knowledge, God, evil, reality, death, and the meaning of life by examination of the great literary works.

185 Directed Study - Philosophy (1) UC:CSU
285 Directed Study - Philosophy (2) UC:CSU
385 Directed Study - Philosophy (3) UC:CSU
Prerequisites: Completion of two courses in the subject field with a minimum grade point average of 3.5 for those courses and recommendation of instructor with whom student will work. Conference 1 hour per week.
Allows students to pursue Directed Study in Philosophy on a contract basis under the direction of a supervising instructor. Credit Limit: A maximum of 3 units in Directed Study may be taken for credit.

Cooperative Work Experience Education
Philosophy is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.

PHYSICAL EDUCATION

Water Activities (1) UC:CSU RPT 3 except as noted
Activity 2 hours.
Beginning, intermediate and advanced levels offered for all courses listed below, but all levels may not be taught each semester:
102 Swimming - Skills

Individual and Dual Activities (1) UC:CSU RPT 3
Activity 2 hours.
Beginning, intermediate and advanced levels offered for all courses listed below, but all levels may not be taught each semester:
212 Tennis - Skills
222 Racquetball - Skills

Continued

95
Course Descriptions

228 Body Conditioning
229 Body Dynamics
259 Golf - Skills
262 Track and Field - Skills
289 Bowling - Skills
690 Weight Training and Conditioning - Skills

Team Sports (1) UC:CSU RPT3
Activity 2 hours.
Beginning, intermediate, and advanced levels offered for all courses listed below, but all levels may not be taught each semester:
304 Basketball - Skills
310 Flag-Touch Football - Skills
322 Volleyball - Skills

Dance Activities (1) UC:CSU RPT3
Activity 2 hours.
Beginning, intermediate, and advanced levels offered for all courses listed below, but all levels may not be taught each semester:
401 International Folk Dance - Skills
431 Modern Dance - Skills
434 Ballet Techniques - Skills
437 Modern Jazz Dance - Skills

Intercollegiate Sports (2) UC:CSU RPT 1
Activity 10 hours in the sports season.
504 Basketball
506 Cross Country
508 Football
509 Golf
514 Tennis
515 Track and Field
516 Volleyball

Physical Education Major’s Classes UC:CSU
These classes may or may not meet the required credit for Physical Education activity. Required for Physical Education and Recreation majors and minors.

712 Introduction to Physical Education (3)
This class does not meet the required credit for Physical Education activity.
Lecture 3 hours.
This introductory course is designed to offer the major examples of the requirements of a physical education teacher.
Acceptable for credit: CSUN, P.E. 241

Dance Major’s Classes UC:CSU
These classes may or may not meet the required credit for Physical Education activity. Required for the Dance major.

814 Dance Production (2) RPT3
Lecture 1 hour; activity 2 hours.
This course provides laboratory experience in developing the skills involved in dance production: choreography, set design, lighting, directing and costume design.

Cooperative Work Experience Education
Physical Education is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.

PHYSICAL SCIENCE

1 Physical Science 1 (3) UC:CSU
This integrated course for non-science majors develops fundamental concepts and principles of physics, chemistry, geology, astronomy, and related fields. The course emphasizes the ideas that will give an overall understanding of our physical universe.

PHYSICS

6 General Physics I (4) UC:CSU
Prerequisite: Mathematics 240, equivalent trigonometry or concurrent enrollment with consent of instructor.
Lecture 3 hours; recitation 1 hour; laboratory 2 hours.
Physics 6 and 7 constitute a two-course sequence in general physics designed primarily for medicine, dentistry, pharmacy, optometry and geology majors. The areas of physics involved in this course are mechanics, energy, fluids, waves, thermal behavior, kinetic theory and the laws of thermodynamics.
Acceptable for Physics 3ABC and 3AL-BL, and CL credit, UCLA, when both Physics 6 and 7 are completed. See Note: Physics 12.

7 General Physics II (4) UC:CSU
Prerequisite: Physics 6
Lecture 3 hours; recitation 1 hour; laboratory 2 hours.
Physics 6 and 7 constitute a two-course sequence in general physics designed primarily for medicine, dentistry, pharmacy, optometry and geology majors. This course is a continuation of Physics 6, covering electricity, magnetism, electromagnetism, alternating currents, electromagnetic waves, optics, the atom, quantum physics and relativity.
Acceptable for Physics 3ABC and 3AL-BL and CL credit, UCLA, when both Physics 6 and 7 are completed. See Note: Physics 12.

12 Physics Fundamentals (3) UC:CSU
Prerequisite: One year high school algebra or Mathematics 115.
Lecture and demonstration 3 hours.
This introductory course in physics which is designed primarily for liberal arts students provides qualitative knowledge of fundamental physical principles.
Acceptable for Physics 10 credit, UCLA, when both Physics 12 and 14 are completed. NOTE: No credit will be given for Physics 12 if it follows the Physics 6, 7, or 37 series. Credit will be limited if similar material is covered in other physics courses.

14 Physics Fundamentals Laboratory (1) UC:CSU
Prerequisite: Completion of Physics 12 or concurrent enrollment in Physics 12.
Lecture 3 hours.
This course is designed for those liberal arts students who are taking or have taken Physics 12 and who wish or need to have a laboratory experience as part of their physical science education.
The course consists of a large number of physical science experiments.
Acceptable for Physics 10L credit, UCLA, when both Physics 12 and 14 are completed.

37 Physics for Engineers and Scientists I (5) UC:CSU
Prerequisite: Mathematics 261 or equivalent.
Corequisite: Mathematics 262.
Lecture 4 hours; laboratory 3 hours.
The first semester of a three-semester calculus-level sequence in introductory physics. Topics studied include kinematics, particle dynamics, momentum and impulse, work, energy, rotational dynamics, statics, oscillations, gravitation, mechanics of solids and fluids, and special relativity.
Acceptable for credit, UCLA, Physics 37, 38 and 39 sequence satisfies the UCLA Physics 8ABCDE sequence. Students should plan to complete the sequence at WLC. Transfer when part of the sequence is completed will be difficult and loss of credit is likely.

38 Physics for Engineers and Scientists II (5) UC:CSU
Prerequisite: Physics 37 and Mathematics 262.
Corequisite: Mathematics 263
Lecture 4 hours; laboratory 3 hours.
The second semester of a three-semester calculus-level sequence in introductory physics. Topics studied include electric fields, magnetism, electrical and magnetic properties of material, direct and alternating current circuits, Maxwell's equations, electromagnetic waves and wave theory.
Acceptable for credit, UCLA, Physics 37, 38 and 39 sequence satisfies the UCLA Physics 8ABCDEFG sequence. Students should plan to complete the sequence at WLC. Transfer when part of the sequence is completed will be difficult and loss of credit is likely.

Continued
Course Descriptions

39 Physics for Engineers and Scientists III (5) UC:CSU
Prerequisite: Physics 37 and Mathematics 262.
Corequisite: Mathematics 263
Lecture 4 hours; laboratory 3 hours.
The third semester of a three-semester calculus-level sequence in introductory physics. Topics studied include thermodynamics, waves and sound, geometrical and physical optics, quantum mechanics, some statistical mechanics, and nuclear physics.
Acceptable for credit, UCLA Physics 37, 38 and 39 sequence satisfies the UCLA Physics 8ABCDE sequence. Students should plan to complete the sequence at WIAC. Transfer when part of the sequence is completed will be difficult and loss of credit is likely.

185 Directed Study - Physics (1) UC:CSU
Cooperative Work Experience Education
Physics is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.

PHYSIOLOGY
See also: Anatomy

1 Introduction to Human Physiology (4) UC:CSU
Prerequisite: College Biology with a grade of C or better: concurrent enrollment in or successful completion of English 28.
Recommended: Anatomy
This course presents the biochemical and biophysical principles underlying the physiological processes of the human. Lecture topics include the neural and hormonal regulation of bodily processes, and the integration of the organ systems to maintain a constant fluid environment within the body. Special emphasis will be placed on the evaluation of body temperature, blood pressure, breathing, and urine output, as well as the interpretation of clinical laboratory tests. Laboratory exercises will introduce the student to the spectrophotometer, EKG machine, blood pressure cuff, and urinalysis tests. This course is intended to meet the requirements of students majoring in nursing, dental hygiene, occupational therapy, psychology, physical education, and life sciences, or for those who wish to extend their knowledge of the human body beyond the scope of introductory biology.
NOTE: Anatomy 1 and Physiology 1 together equal Physiology 6.

Cooperative Work Experience Education
Physiology is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.

POLITICAL SCIENCE

1 The Government of the United States (3) UC:CSU
(CAN GOVT 2)
This course deals with the problems, principles, structures, and functions of United States and California Governments.
Acceptable for Political Science 1 credit, UCLA.

2 Modern World Governments (3) UC:CSU
A comparative study is made of the major governments of the modern world in terms of their institutions, ideologies, political habits and foreign policies. Emphasis is placed upon the governments of Great Britain, France, Germany, China, Nigeria and the Soviet Union.
Acceptable for Political Science 50 credit, UCLA.

4 Introduction to State and Local Governments (3) CSU
This general survey course introduces the student to the various functions, structures and services of state governments, their relation to local governments and their interrelationships with the federal government as appropriate. Emphasis is placed upon lectures by the instructor, guest speakers' presentations and field trips.

7 Contemporary World Affairs (3) UC:CSU RPT I
This course surveys the factors involved in international relations today. Emphasis is placed on providing the student with a framework for the analysis of world affairs. Major areas of analysis include the positions of the United States and the Soviet Union.
Acceptable Political Science 20 credit, UCLA.

14 Government and Politics in the Middle East (3) UC:CSU
Introduces political and governmental patterns prevalent in the Middle East, including the Arab states, Iran, and Israel. Emphasis is given to the Arab-Israeli conflict.

185 Directed Study - Political Science (1) UC:CSU
285 Directed Study - Political Science (2) UC:CSU
385 Directed Study - Political Science (3) UC:CSU
Prerequisite: Consent of instructor.
Conference 1 hour per unit
Allows students to pursue Directed Study in Political Science on a contract basis under the direction of a supervising instructor.
Credit Limit: A maximum of 3 units in Directed Study may be taken for credit.

Cooperative Work Experience Education
Political Science is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.

PSYCHOLOGY

1 General Psychology I (3) UC:CSU
This course offers a scientific approach to principles of human behavior. It covers such topics as growth and development, heredity and environment, perception and attention, feeling and emotion, motivation, learning, thinking and intelligence, individual differences, introduction to statistical concepts, personality and social relations.
Acceptable for Psychology 10 credit, UCLA.

2 General Psychology II (3) UC:CSU
Prerequisite: Psychology 1
This course considers the functional and anatomical aspects of the nervous system, the structure and function of the sense organs, as well as emotions, speech, intelligence, consciousness and sleep, motivation and psychosomatic relationships.
Acceptable for Psychology 15 credit, UCLA.

14 Abnormal Psychology (3) UC:CSU
The principles of general psychology are applied to the field of psychopathology. Behavior disorders are described, and their major causes and treatment are reviewed.

16 Love and Marriage (3) CSU
This course deals with the psychological aspects of dating, love and marriage. It is designed to provide students with a basic positive attitude towards the potentials of marriage and to prescribe the circumstances that make the marital union an opportunity for a growing, greater, "other-centered" self-realization.

52 Psychological Aspects of Human Sexuality (3) UC:CSU
This course addresses the psycho-sexual development of the individual, the scripts that are learned in our culture and comparative information from other cultures. The history of attitudes toward sexuality in America is studied. The study of the anatomy and physiology of the human sexual system, the physical and emotional orgasmic response, myths and misconceptions about the sexual response, sexual variance and dysfunction all are studied to help the student achieve an understanding of his or her own unique sexuality.

Continued
Course Descriptions

185 Directed Study - Psychology (1) UC-CSU
285 Directed Study - Psychology (2) UC-CSU
385 Directed Study - Psychology (3) UC-CSU

Prerequisite: Consent of instructor.
Conference 1 hour per unit.
Allows students to pursue Directed Study in Psychology on a contract basis under the direction of a supervising instructor.
Credit Limit: A maximum of 3 units in Directed Study may be taken for credit.

Cooperative Work Experience Education
Psychology is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.

REAL ESTATE

1 Real Estate Principles (3) CSU
Required for real estate salesperson's license, and highly recommended as a foundation course in real estate.
This beginning course in real estate fundamentals and principles covers real estate economics, terminology and definitions, real estate law, ownership rights, real estate investment and career opportunities, as well as other subjects vital to a basic understanding of real estate.

3 Real Estate Practice (3) CSU
Prerequisite: Real Estate 1 or possession of a real estate salesperson's license or consent of instructor.
This course covers the day-to-day activities of the real estate brokerage business, from the viewpoint of both the owner and the sales staff. It gives practical training in such topics as: time management, human relations, client psychology, financing, leasing, appraising and property management. The course is required for those seeking the California broker's license.

4 Real Estate Office Administration (3) CSU
Prerequisite: Real Estate 3 or consent of instructor.
This course presents a practical framework for current and future managers of real estate brokerage offices. It presents and develops topics of vital interest to office administrators: establishing goals and plans, personnel recruitment and selection, listing and selling techniques, management controls and systems.

5 Legal Aspects of Real Estate I (3) CSU
Prerequisite: Real Estate 1, possession of a salesperson's license or consent of instructor.
Principles of property ownership and management, with special emphasis on the law as it applies to community property, conveyances, deeds, trust deeds, leases, brokerage activities, liens, homesteads, wills, estates and taxes are covered in detail.

7 Real Estate Finance I (3) CSU
Prerequisite: Real Estate 1, possession of a salesperson's real estate license or consent of instructor.
Forms and sources of financing property, construction and permanent financing are studied. The procedures for FHA, Cal Vet and VA financing, mortgage capital from savings and loan associations, commercial banks, insurance companies and other sources, junior mortgages, appraising for mortgages, loan ratios and leaseholds are covered.

9 Real Estate Appraisal I (3) CSU
Prerequisite: Real Estate 1, possession of a salesperson's real estate license or consent of instructor.
This course emphasizes the theory, principles and methods used in the valuation of various types of properties. Cost, market and income approaches are examined in great detail. Land and building residual techniques are also presented. An appraisal report on a single-family residence is usually required.

10 Real Estate Appraisal II (3) CSU
Prerequisite: Real Estate 9.
This advanced appraisal course features a brief review of the theory, principles and methods used in the valuation of residential, commercial and industrial properties. It also features case study problems illustrating the use of the three approaches to value and a thorough analysis of the components utilized by the income approach. This course emphasizes the valuation of all income-producing properties. An appraisal report is required on an income-producing property.

11 Escrow Principles (3) CSU
Prerequisite: Real Estate 1 or Real Estate 3.
This course gives an introduction to the principles and methods of handling escrows involving transfer of real estate ownership or real estate loans. The various forms used in escrows and escrow instructions are studied, along with the applicable laws pertaining to the escrow function.

12 Escrow Practices (3) CSU
Prerequisite: Real Estate 11 or consent of instructor.
The principles and methods of handling escrows involving title to land, sales of personal property and real estate loans are taught. Included is a study of the various forms used in the drawing of escrow instructions and closing statements, as well as the practical operation of escrow offices. Case situations and realworld problems are an integral part of the course.

14 Property Management (3) CSU
Prerequisite: Real Estate 1 or Real estate 3.
This course is designed for real estate brokers, salespersons and owners of income-producing properties. Topics covered include the nature and types of property management, organization for management, leases and contracts, rent scheduling, selling of space and techniques of renting, tenant selection and supervision, relations with owners, budgets, purchasing accounts, reports, ethics and legal and professional relationships.

16 Income Tax Aspects of Real Estate (3) CSU
Prerequisite: Real Estate 1 or consent of instructor.
The impact of Federal and California State income tax laws upon the purchase, sale, exchange and use of real property is covered. This includes depreciation, capital gains, installment sales, prepaid interest and tax saving opportunities. Upon successful completion of this course, students may receive 45 hours of Continuing Education credit with the California Department of Real Estate.

18 Real Estate Investments I (3) CSU
Prerequisite: Real Estate 1 or consent of instructor.
This is an advanced course in which a thorough analysis is made of the investment factors that determine the evaluation of commercial, industrial and residential projects. The six basic steps in the investment process are covered in detail: Search, Analysis, Negotiation, Documentation, Contingency Removal and Property Management after Purchase. Upon completion of this course, students may receive 45 hours of Continuing Education credit with the Department of Real Estate.

21 Real Estate Economics (3) CSU
Prerequisite: Real Estate 1 or consent of instructor.
This course covers the fundamentals of economic trends and factors which affect the real estate market. Topics covered include: urban structural relationships, real estate market analysis, problems of sub-dividing and governmental relationship to real estate development.

Cooperative Work Experience Education
Real Estate is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.

SECRETARIAL SCIENCE
(See Office Administration)

Continued
Course Descriptions

SOCIOLoGY

1 Introduction to Sociology (3) UC:CSU
(CAN SOC 2)
This course is an overview of the field of sociology and the impact of society and social institutions on human behavior and social change. It examines how social forces shape the development of society. 
Acceptable for Sociology 1 credit, UCLA.

2 American Social Problems (3) UC:CSU
This course deals with the analysis of societal problems in the United States today. It emphasizes problems related to poverty, crime, education, juvenile delinquency, and cultural change.

3 Juvenile Delinquency (3) CSU
The extent and distribution of delinquency are considered. Emphasis is placed upon the area of local policy, meaning, implications, and treatment of delinquent behavior, personal and environmental conditioning factors, and the rights of children.
Same as Administration of Justice 23.

11 Ethnic & Racial Minorities in the United States (3) UC:CSU
Examines minority and majority relations in the U.S.; how these relations developed historically; and the social, political, and economic forces that maintain or act to change these relationships. Analysis of similarities and differences in ethnic and racial groups' experience will promote understanding of the forces underlying majority-minority relations.

185 Directed Study - Sociology (1) UC:CSU
285 Directed Study - Sociology (2) UC:CSU
385 Directed Study - Sociology (3) UC:CSU
Prerequisite: Consent of instructor.
Conference 1 hour per unit.
Allows students to pursue Directed Study in Sociology on a contract basis under the direction of a supervising instructor.
Credit/Unit: A maximum of 3 units in Directed Study may be taken for credit.

Cooperative Work Experience Education
Sociology is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.

SPANISH

Note: Completion of at least English 12 with a C or better is recommended.

1 Elementary Spanish I (5) UC:CSU
This course stresses practice in understanding, speaking, reading and writing simple Spanish. Students are introduced to the Spanish language and the culture of Spain through simple readings. Emphasis is placed upon the spoken language.
NOTE: Same as Spanish 21 with Spanish 22; or Spanish 51 with Spanish 52; Spanish 1 and 2 acceptable for Spanish 1, 2, 3, credit UCLA. Acceptable for Spanish 1 credit, UCLA.

2 Elementary Spanish II (5) UC:CSU
Prerequisite: Spanish 1 with a grade of C or better or two years of high school Spanish or equivalent.
This course includes review and further study of the fundamentals of the Spanish language, with emphasis upon correct pronunciation and mastery of vocabulary, including useful phrases and idioms, practice in oral and written expression and continued study of Spanish and Spanish-American civilization through selected readings. Emphasis is placed upon the spoken language.
NOTE: Same as Spanish 52 with Spanish 53. Spanish 1 and 2 acceptable for Spanish 1, 2, 3, credit, UCLA
Acceptable for Spanish 3 credit, UCLA

3 Intermediate Spanish I (5) UC:CSU
Prerequisite: Spanish 2 with a grade of C or better, two years of high school Spanish, native knowledge of the spoken language, or consent of instructor.
The course includes review and further study of the fundamentals of the Spanish language, with emphasis upon correct pronunciation and oral and written mastery of linguistic structure. Selected cultural readings are included.
Acceptable for Spanish 4 credit, UCLA.

4 Intermediate Spanish II (5) UC:CSU
Prerequisite: Spanish 3, three years of high school Spanish, or consent of instructor.
This course provides a review of the more difficult aspects of grammar and seeks to perfect comprehension, fluency and cultural knowledge. Spanish and Spanish-American life and problems are considered through readings and discussion of literature. The readings are the basis for regular composition assignments.
Acceptable for Spanish 5 credit, UCLA.

5 Advanced Spanish IV (5) UC:CSU
Prerequisite: Spanish 5, completion of four years of high school Spanish, or consent of instructor.
This course continues the study of advanced grammar and composition and seeks to perfect comprehension and fluency in the language and skill in analyzing literature. It includes reading in selected poetry and prose from Spanish and Spanish-American literature.

6 Advanced Spanish IV (5) UC:CSU
Prerequisite: Spanish 5, completion of five years of high school Spanish, or consent of instructor.
This course continues the study of advanced grammar and composition and seeks to perfect comprehension and fluency in the language and skill in analyzing literature. It includes reading in selected poetry and prose from Spanish and Spanish-American literature.

8 Conversational Spanish (2) UC:CSU
RPT3
Prerequisite: Spanish 2 or equivalent with a grade of C or better or consent of instructor.
This course develops the ability of the students to express themselves fluently, idiomatically and correctly in Spanish. Conversational material is selected from magazines, newspapers and selected books.

14 Spanish for Public Service Personnel (3) CSU RPT 1
This course develops the ability of the students to express themselves fluently, correctly and effectively in Spanish in the areas of public service, business and community activities.

21 Fundamentals of Spanish I (3) UC:CSU
Lecture 3 hours
This course provides the first half of the fundamentals of first semester pronunciation and grammar. It also stresses practice in understanding, speaking, reading, and writing simple Spanish. Students are introduced to Spanish and Spanish-American civilization through simple readings. Emphasis is placed upon the spoken language.
NOTE: Spanish 21 and 22 together are equivalent to Spanish 1. Credit UCLA.

22 Fundamentals of Spanish II (3) UC:CSU
Note: Concurrent enrollment in Spanish 101 required for main campus students.
This course provides the second half of the fundamentals of first semester Spanish. It stresses pronunciation, grammar, practice in understanding, speaking, reading and writing simple Spanish. Students are introduced to Spanish and Spanish-American culture and civilization through simple readings. Emphasis is placed upon the spoken language through practical material for simple conversation based on everyday experiences.
Note: Spanish 21 and Spanish 22 together are equivalent to Spanish 1. Credit UCLA.

Continued

99
Course Descriptions

101 Spanish Language Lab (1) CSU RPT 2
A mediated, independent study course which allows students to enhance their Spanish language skills through audio, video, and computer work in the language lab.

Cooperative Work Experience Education
Spanish is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.

SPEECH COMMUNICATIONS

101 Oral Communication I (3) UC:CSU
(Formerly Speech 1)
This beginning course provides a study of the principles of communication and audience analysis. These principles are applied to everyday social and business relationships. Students are trained in the principles and practice of effective speech composition and delivery.

102 Oral Communication II (3) UC:CSU
(Formerly Speech 2)
Prerequisite: Speech 101
Oral Communication II encourages classroom discussion and analysis of subjects chosen by the class for special study. Discussion focuses on the search for topics and the inquiry into the nature of each topic. Analysis of selected topics is undertaken to help students "invent" solutions for the "best means of persuasion." Arrangement, structure and delivery of class and public speeches are considered also. Students evaluate the manner in which different audiences perceive and judge issues and solutions presented in various speech situations. Acceptable for Speech 2 credit. UCLA.

103 Business and Professional Speaking (3) CSU RPT 2
(Formerly Speech 6)
This beginning course for business and professional persons stresses the preparation and delivery of speeches, reports and briefings. Emphasis is placed upon technical aids to facilitate delivery. The course is recommended for career education majors.

104 Argumentation (3) UC:CSU
(Formerly Speech 11)
This course is an introduction to critical thinking which seeks to explore the various steps in the critical thinking process. Emphasis is placed on both how and why we make decisions. Topics explored include: claims, definitions, evidence, reasoning, fallacies, and persuasion.

111 Voice and Articulation (3) UC:CSU
(Formerly Speech 3)
This introductory course gives students the opportunity to practice proper methods of voice production, accurate articulation and enunciation of Standard Spoken American English. The IPA (International Phonetics Alphabet) is taught as a means of identifying sounds and enhancing listening skills.

113 English Speech as a Second Language (3) CSU RPT 1
(Formerly Speech 9)
This course is designed for those whose first language is not spoken American English and also for those who are interested in teaching Spoken American English as a second language. The speech and intonation patterns of each student are analyzed so that they can work on individual problems. The IPA (International Phonetic Alphabet) is taught as a method of identifying sounds and enhancing listening skills. Improved voice production is taught when necessary.

121 The Process of Interpersonal Communication (3)
UC:CSU
(Formerly Speech 5)
This is an advanced course in the analysis of principles and the significance of interpersonal social interaction in all areas of life. Reasoning is applied to problem-solving tasks in a discussion situation.

135 Storytelling (3) CSU
(Formerly Speech 15)
Lecture 3 hours. Emphasizes history, sources, selection, analysis, preparation and presentation of narrative prose and verse for all age levels. Develops adult storyteller's knowledge, critical ability, appreciation and taste in the field of children's literature. Especially useful for teachers, nurses, librarians, recreation leaders and parents.

151 Small Group Communication (3) UC:CSU
(Formerly Speech 16)
This course provides an analysis of the purposes, principles and types of discussion. Development of individual skills is achieved by responsible discussions, participation and leadership.

185 Directed Study - Speech (1) UC:CSU
285 Directed Study - Speech (2) UC:CSU
385 Directed Study - Speech (3) UC:CSU
Prerequisite: Consent of Instructor
Conference 1 hour per unit. Allows students to pursue Directed Study in Speech on a contract basis under the direction of a supervising instructor. Credit Limit: A maximum of 3 units in Directed Study may me taken for credit.

Cooperative Work Experience Education
Speech is approved for Cooperative Work Experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.

STATISTICS
(See Mathematics 225)

THEATER

100 Introduction to the Theater (3) UC:CSU
Required of all theater arts majors.
This survey course introduces students to theater and to numerous related crafts such as costuming, lighting, etc. Emphasis is placed upon the student's becoming aware of the components constituting an artistic entity and being able to intelligently and objectively evaluate a professional or non-professional performance.

200 Introduction to Acting (3) CSU
Lecture 3 hours.
This course is an introduction for non-theater majors to the art and craft of acting. The student will be exposed to a brief history of acting. Various areas of actor training, including breathing and movement exercises through lecture-demonstration, ensemble exercises, scene work, play readings and viewing of live performances will be covered.

185 Directed Study - Theater (1) UC:CSU RPT 2
285 Directed Study - Theater (2) UC:CSU
385 Directed Study - Theater (3) UC:CSU
Conference 1 hour per unit.
Allows students to pursue Directed Study in Theater on a contract basis under the direction of a supervising instructor. Credit Limit: A maximum of 3 units in Directed Study may be taken for credit.

Cooperative Work Experience Education
Theatre is approved for Cooperative Work experience Education credit. See Cooperative Education courses for prerequisites, course descriptions and credit limits.

100
Course Descriptions

TRAVEL

100 Introduction to the Travel Industry (3)
(Formerly Travel 1)
Students are introduced to the world of the travel industry from the perspective of the travel agent, including air, cruise, rail, and motorcoach travel, hotels, resorts, and car rental.

105 Basic Airline Ticketing - Domestic (3)
(Formerly Travel 3)
Students learn how to plan schedules, compute air-fares, and write tickets for domestic air travel in the United States.

110 Airline Computer Reservations - Apollo (3)
(Formerly Travel 23)
Introduction to United Airlines’ APOLLO computer system, one of the two systems most widely used by travel agents. Learn how to build and modify passenger name records, quote fares, price tickets, and do car reservation and perform other basic functions on the computer.

115 Airline Computer Reservations - Sabre I (3)
(Formerly Travel 21)
Introduction to American Airlines’ SABRE computer system, one of the two systems most widely used by travel agents. Learn how to build and modify passenger name records, quote fares, price itineraries, make car reservations and perform other basic functions on the computer.

120 Airline Computer Reservation - Advanced Sabre (1)
(Formerly Travel 22)
Prerequisite: Travel 115 or consent of instructor.
Covers advanced concepts of American Airlines’ SABRE computer system, including special formats for hotels and other auxiliary services.

130 Travel Destination Geography I (3)
(Formerly Travel 8)
Tourist attractions and history of North America, Europe, and the Middle East are the focus of this course.

135 Travel Destination Geography II (3)
(Formerly Travel 9 and 15)
Tourist attractions and history of Central and South America, the Pacific, the Orient, and Africa are covered in this course.

140 Travel Industry Marketing and Sales (3)
(Formerly Travel 9 and 15)
Marketing objectives, strategy planning, travel motivation and research, promotional ideas, press release, advertising and sales techniques and application.

145 Basic Airline Ticketing - International (3)
(Formerly Travel 5)
Prerequisite: Travel 105 or consent of instructor.
Students learn how to plan schedules, compute air-fares, and write tickets for international air travel.

150 Advanced Airline Ticketing - Domestic and International (3)
(Formerly Travel 10 and 11)
Prerequisite: 145 or consent of instructor.
This advanced course in domestic and international airline tariffs and ticketing continues the work of Travel 105 and 145 in areas of issuing refunds, MCO’s PTA’s, tour orders, ticket exchange notices. Travel to Mexico, Canada, the Orient, Pacific and around the world are covered, as are computing fares for travel originating in another country.

155 Tour Escorting, Planning and Operations (3)
(Formerly Travel 10)
Students learn how to be expert tour guides including preplanning and day-to-day responsibilities.

160 Opening, Operating and Managing a Travel Agency (3)
(Formerly Travel 2 and 10)
Prerequisite: Travel 100 or consent of instructor.
How to open and operate a travel agency including staff, documentation, sales reports, client-agent relationships, agent-supplier relationships, problem solving and trends in the industry.

165 Bookkeeping for Travel Agency and Outside Staff (3)
(Formerly Travel 3)
The bookkeeping procedures required by ARC and IATA, including bonding, sales reports, receipts and disbursements, payroll, profit and loss, and personal record keeping for Commissioned sales are covered.

170 Travel Agency Ethics and Law
(Formerly Travel 17)
Legal issues involving travel agencies, including personnel, clients, suppliers, ARC and IATA, are covered.

175 Meeting, Convention and Incentive Travel Program
Prerequisite: Travel 100 or consent of instructor.
Students will learn how to plan, promote and operate travel programs for meeting convention and sales groups. Considerations include site selection and management, pricing entertainment, supplier negotiations and motivational techniques.

180 Cruise Sales Specialization (3)
Prerequisite: Travel 100 or consent of instructor.
Students are offered an overview of the cruise industry, including history and expansion of business, the cruise sales and booking process for individuals and groups, office procedures and documentation. Domestic and international cruise destinations are surveyed and an in-depth look at various cruise lines is provided.

200 Introduction to the Airline Industry (3)
Provides students with an introduction to the organization and operation of airlines; provides an understanding and overview of aviation policies, procedures, government and voluntary regulations and the differences between various operating departments within airlines.

400, 405, 410 ON-TOUR (1) (2) (3) NDA
Familiarization course which enhance student’s knowledge of destination, provide a foundation for the development, promotion and operation of escorted tours.