On behalf of administrators, faculty and staff, I would like to welcome you to Long Beach City College, a college rich in tradition, that is recognized for academic excellence around the state, as well as across the nation.

Long Beach City College is dedicated to providing you quality, affordable educational programs and related student services. Our faculty is recognized as experts in their field and our staff is dedicated to bringing you the best in service.

While providing you with an outstanding, comprehensive academic curriculum, the college is also proud to offer you one of the largest and most active Associated Student Body (ASB) programs in the California Community College system.

Whether your educational goals are to transfer to a four-year institution, enhance personal or professional development or transition into a new career, I want to assure you that Long Beach City College is dedicated to helping you reach your educational goals.

Congratulations on making Long Beach City College Your #1 Community College Choice!

E. Jan Kehoe, Ph.D.
Superintendent-President

On behalf of the Associated Student Body of Long Beach City College, I would like to extend a warm welcome to all of you who will be experiencing college for the first time. And to those of you who are returning students, an affectionate welcome back.

As you begin or continue your journey here, I would like to personally invite you to learn about your opportunities for growth outside of the classroom. LBCC has at your disposal a nationally recognized volunteer program for you to serve your community, and such student leadership opportunities as ASB Cabinet, Student Senate, Associated Men and Women's Student boards, Pacific Coast Campus Council and PCC Club Board. There are also many different social clubs and fraternities to become involved with, and for those of you who strive to be the best, there is Thane and Kassai, the college's men's and women's honors orders representing the top 25 male and female students respectively, and Alpha Gamma Sigma, the community college honor society.

It is my hope that your experiences here at LBCC will be enriching, enlightening and producing lasting, joyful memories that you will take with you long after you have completed your tasks here. Thank you.

Michael Brignac
ASB President
Summer Sessions 2004
June 1  Day or Evening Summer Session Classes Begin
June 14  Day or Evening Summer Session Classes Begin
July 6  Day or Evening Summer Session Classes Begin
July 5  Holiday (Independence Day)

Fall Semester 2004
August 16  Begin Fall Classes
September 6  Holiday (Labor Day)
October 1  Deadline to Apply for December Graduation
November 12  Holiday (Veterans Day)
November 25-26  Holiday (Thanksgiving)
December 9-17  Final Exams - Refer to Fall Schedule of Classes
December 17  Fall Classes End
December 20-January 9  Winter Recess

Spring Semester 2005
January 10  Spring Classes Begin
January 17  Holiday (Martin Luther King Day)
February 18  Holiday (Lincoln's Birthday)
February 21  Holiday (Washington's Birthday)
February 25  Deadline to Apply for May Graduation
March 28 – April 3  Spring Recess
May 17-24  Final Exams - Refer to Spring Schedule of Classes
May 24  Spring Classes End
May 25  Graduation
May 30  Holiday (Memorial Day)

For more detailed registration information, refer to the Schedule of Classes or college website.

College Campus Locations

Liberal Arts Campus
4901 East Carson Street
Long Beach, California 90808
(562) 938-4111

Pacific Coast Campus
1305 East Pacific Coast Highway
Long Beach, California 90806
(562) 938-3903

Off-Campus Location:
Lakewood Extension Campus
4401 Briercrest Avenue
Lakewood, California 90713
Office of Economic Development
3950 Paramount Boulevard, Su 101
Lakewood, California 90712

For Other Off-Site Locations Contact:
Office of Extended Instruction (562) 938-4810

Accreditation
Long Beach City College is accredited by the Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges, (3402 Mendocino Avenue, Santa Rosa, CA 95403, (707) 569-9177), an institutional accrediting body recognized by the Commission on Recognition of Postsecondary Accreditation and the U.S. Department of Education.

Curriculum Offerings
The college reserves the right to determine which of the courses listed in the catalog are to be offered in each semester. Changes in curriculum or course content may occur after the information cut-off date of this catalog, April 2003.

Schedule Of Classes
Long Beach City College publishes a schedule of classes before the beginning of each semester indicating each course to be offered. Schedules are available for sale in the college bookstores, local 7-Eleven stores and for review in the Counseling Center, the college website (http://www.lbcc.edu) and other campus locations. Changes in curriculum offerings or in fees charged may occur after printing.

In compliance with Section 508 of the Workforce Investment Act of 1998, the Long Beach Community College District provides the catalog and other college publications in alternative formats. If you are an individual who requires special assistance and would like materials in an alternative format, contact the Disabled Students Programs & Services department at (562) 938-4558 or (562) 938-4833 TDD. The Disabled Students Programs & Services department is located on the Liberal Arts Campus (LAC), located at 4901 E. Carson St., Long Beach, CA 90808.
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College Vision and Mission

2020 Vision
Long Beach City College prepares students to be successful in the world of the 21st century. Sitting at a global crossroads, the college constantly crafts its educational programs to meet the needs of students living in: a world of increased complexity and speed; a world both global and remarkably accessible; and a world technologically advanced but intensely interdependent. A culturally diverse college, Long Beach City College welcomes all people who desire to grow and serve. The college nurtures a vibrant environment that cultivates a passion for learning which continues for life.

Mission
Long Beach City College is an institution of higher education within the California Community College System. As a comprehensive college, Long Beach City College provides quality, affordable educational programs and related student services to those who can benefit from the programs the college offers. Through a collegiate experience and with an open door admissions policy, the college fosters the development of individual potential and is responsive to the diverse educational needs of the community it serves. The primary purposes of the education program are to prepare students for transfer to baccalaureate-granting institutions, entry into work or career development and to support business and industry in economic development. Long Beach City College offers general education and vocational education at the lower division level and transitional instruction and those support services that promote student success–remedial education, English as a second language instruction, adult noncredit courses and student support services. College programs and services educate citizens to enrich the quality of life in the community.

To fulfill this mission, the college will assist students in the following ways:

To find, enter and progress in careers suited to their interests and goals.

To develop techniques and devices for problem-solving to reach decisions and goals.

To develop an understanding of and appreciation for the scientific and technological basis of our civilization.

To develop the skills of communication needed to act within the framework of a society based on information and service.

To establish acceptance, preference and commitment to values that lead to the attainment of self-esteem and self-respect.

To develop and intensify an appreciation and understanding of the aesthetic qualities of life.

To develop an understanding of the great diversity of human cultures and heritages and a respect for the intrinsic value of life in all its forms.

To develop the ability to cooperate and work with individuals and groups.

To develop the attitudes and techniques needed to use time effectively and creatively.

To encourage the development of attitudes, knowledge and skills that promote physical and mental health.

To promote respect for truth, confidence in attaining goals and enthusiasm for learning as a life-long process.

To promote and encourage the utilization of the various tools of education in developing a sense of commitment toward responsible citizenship and an appreciation of the processes which sustain our society.

To recognize that close student-faculty-staff relationships contribute to a motivated and supportive atmosphere for learning and working.

College Functions

Transfer
The first two years of courses satisfying either the general education or major requirements for a four-year college (Baccalaureate) degree in the University of California system, California State University system or other colleges and universities to which our students commonly transfer.

General Education
A community college (Associate) degree that includes a broad general education and selected fields of concentration most appropriate to the educational and occupational needs of our community.

Occupational Education
Specialized education and training in selected occupational fields leading to job skills preparation, promotion, retention and certification.

Developmental Education
Educational and learning assistance to help students succeed in a community college program once they have demonstrated minimum communication and computational levels.

Support Services
A multifaceted support program to assist students to assess their abilities and to establish and achieve realistic educational and career goals.

Beyond the Classroom
An appropriate co-curricular program including practical educational experiences, as well as opportunities for growth in leadership and citizenship.

Life-Long Learning
Selected continuing education programs and courses that are cost effective and provide life-long learning and training opportunities.

Economic and Resource Development
Economic and Resource Development provides workforce preparation programs and services to individuals to develop entry-level skills, new technical skills, career advancement, and to regional industry to ensure business attraction, retention and global competitiveness.
**General Information**

**College History**

Long Beach City College is a two-year community college located in Long Beach, California. It is one of the largest of the 108 community colleges in California, and serves the same area as the Long Beach Unified School District, encompassing the cities of Long Beach and Signal Hill, two-thirds of Lakewood and Santa Catalina Island.

The college has 30,000 students and is governed by a five-member, elected Board of Trustees. It offers two-year associate degree courses in business, health, services, trade and technical, and liberal arts fields; as well as one-year, vocational certificates in occupational trades and courses that transfer to four-year universities or offer job skills.

Long Beach City College has received state awards for its registered nursing and childcare programs and is widely known for its extensive and technologically advanced commercial music and electronics programs. It has special training partnerships with several corporations, including a diesel mechanics training program with Caterpillar.

The national newspaper, Community College Week has reported that Long Beach City College is one of the largest and most effective community colleges in the nation. In 1993, a study found that only nine other two-year colleges in the nation award more associate degrees to minority students than Long Beach City College, according to the magazine, Black Issues in Higher Education.

The college was founded in 1927, and initially housed at Woodrow Wilson High School until the 1933 earthquake, which destroyed the building. Classes were held outside and in tents at neighboring Recreation Park until the college moved to the site of its present-day Liberal Arts Campus at Carson Street and Clark Avenue in 1935.

From its earliest days, the college established traditions that are alive today, such as the mascot, Ole, and team name, Vikings. A student newspaper, yearbook, and social, service and intramural programs were launched in the first year. Academic honors included having a library that was viewed as a model nationally and the state’s top junior college debate team. Athletic honors included Southern California championships in wrestling, baseball, men’s and women’s swimming and the state championship in men’s basketball, all in the 1928-29 school year.

The college grew rapidly during and after World War II and added the Pacific Coast Campus, formerly Hamilton Junior High, in 1949. Numerous extension campuses and satellite locations were added as growth continued into the early 1970s. As a result of state law, the college separated from the Long Beach Unified School District. Retrenchment occurred during the late 1970s and early 1980s as Proposition 13 forced the end of many popular classes and services.

Changes in the workplace, and in the community’s demographics, brought about rapid changes in the mid-1980s. The influx of Southeast Asian refugees led to extensive courses in English as a Second Language and other programs to assist and acculturate this burgeoning population. A later wave of amnesty applicants ensured that ESL stayed the college’s largest program. The amnesty program garnered awards as a state model.

Computers entered nearly every instructional program necessitating acquisition of new equipment and revisions to curriculum. Apple Computer presented Long Beach City College with one of 10 grants nationally for its extensive commitment to computer technology.

In 1987, the college completed a decade of negotiations with the City of Long Beach to acquire the neighboring Veterans Stadium. Through the sale of surplus land to another neighbor, McDonnell Douglas (now Boeing), the college was able to finance the $3 million in renovations required to upgrade the facility. The college’s adapted physical education then moved to modernized facilities under the stadium. In 1992 the college celebrated completion of these and other projects, including an all-weather track and redesigned athletic fields.

Within the last five years the college has completed a multi-million-dollar upgrade of its swimming pool facilities at the Liberal Arts Campus.

Long Beach City College students also have access to more than 65 computer-based learning classrooms with full Internet connection and a state-of-the-art math and science building which opened with the beginning of the 2000 fall semester.

**Extended Instruction/Off-Campus Programs**

Off campus classes are offered at several community sites to facilitate student access to a variety of course offerings. These sites enable students to attend classes at convenient locations near their homes or work.

Students can enroll for these classes through the regular college registration process or by “walk-in” classroom registration during the first class meeting. For further information, consult the schedule of classes or call (562) 938-4810.

**Senior Studies Program**

The Senior Studies Program offers courses specifically designed for the needs and interests of mature students. Stimulating noncredit classes are available. Special theater programs, seminars, a campus senior club and mini tours are designed for the active adult (55 and older). The Senior Center, located at the Pacific Coast Campus, Room FF108, is open from 8 a.m.-3 p.m., Monday-Thursday, and 8 a.m.-1 p.m., Friday. Special assistance is given during registration and counseling is available. For further information, call (562) 938-3048.

**Distance Learning**

Online TeleWeb Instruction

Online/TeleWeb courses offer students an opportunity to take a variety of courses through a remote access by using a personal computer with Internet connection. Students can access these courses at home, off-campus...
public facilities, or make use of the college’s open access labs to log on to their course website. These course offerings are entirely web based and do not require students to be present on campus (some courses require on-campus orientations or testing; check the section notes in the schedule of classes or the e-courses directory at http://de.lbcc.edu/e-courses). TeleWeb courses, in addition to online course requirements may require access to TV/Public Broadcast Stations (PBS) and/or LBCC Cable station.

Students can enroll for these classes through the regular college registration process or by accessing the OLE On-line Experience page at http://www.lbcc.edu/ole.html. For further information access the Distance Learning program website or call (562) 938-4025.

**Televised Instruction**

Televised courses offer students an opportunity to take a variety of courses via TV, at home or at other off-campus public facilities. Students need to have access to Public Broadcast Stations and/or LBCC cable station (Charter Communications channel 15 in Long Beach and channel 32 in Lakewood). Televised courses are accompanied by a website that provides access to course information, communication and practices opportunities. Students need a computer with an Internet connection or they can make use of the computers in the college’s open access labs. On-campus meetings for these courses are limited (check the section notes in the schedule of classes).

Students can enroll for these classes through the regular college registration process or by accessing the OLE On-line Experience page at http://www.lbcc.edu/ole.html. For further information consult the schedule of classes, the TV courses link on the Distance Learning website (http://de.lbcc.edu), or call (562) 938-4025.

**Hybrid Courses**

Hybrid courses include some face-to-face meetings on campus as well as off-campus instruction used in any of the above sections. Check the schedule of classes for information about the requirements for the hybrid course of your interest.

**Weekend Classes**

An increasing number of Saturday and Sunday classes are being offered at the Pacific Coast Campus. Some meet for the entire regular session of eighteen weeks. Others fall under the ACE umbrella (see below) and meet for nine week sessions. Classes are offered in academic, general education, and in the School of Trades and Industry (vocational).

**Accelerated College Education (ACE)**

ACE (Accelerated College Education) is a two-year curriculum offered at the Pacific Coast Campus of Long Beach City College. It is designed to meet the needs of busy, working adults by offering classes in nine week sessions that meet one night during the week for two hours and four hours on Saturday. The curriculum meets the lower division, general education transfer requirements for the Liberal Studies major for all of the CSUs, in particular CSULB and CSUDH. CSUDH continues the format in their upper division Interdisciplinary Studies major.

For further information about ACE and Saturday and Sunday classes, call (562) 938-3904, Monday – Friday 8:00 a.m. – 5:00 p.m.

**Honors Program and Courses**

For over 75 years, Long Beach City College has established innovative educational programs to serve the public. In 1980, the college established the Honors Program to better serve high-ability, high-achieving students. Today, the program is an important element of the college’s curriculum, and its graduates have proven records of success in professional and graduate schools, as well as at the baccalaureate level.

Major benefits of the program include Scholarships, Transfer Programs agreements and President’s Scholar and Academic Senate Scholar Awards.

**Rotary Club Honors**

Each year Rotary Club Honors Scholarships are available to entering Long Beach City College students who graduate from area high schools. Awarded on the basis of a student’s academic record and potential, these scholarships require students to have met the “a through f” subject requirements for entry into the University of California with a GPA of 3.5 or better (correspondingly high scores on the SAT or ACT are also necessary).

In addition, the Long Beach City College Foundation awards $150 scholarships to all graduates of Long Beach high schools who have a 3.5 or higher cumulative grade point average during the previous six semesters and who enroll at Long Beach City College.

**Transfer Programs**

The LBCC Honors Program is a member of the UCLA, UCI, UCR, UCSC, CSUDH, CSUF (Honors) CSULB (Honors), SDSU (Honors), Chapman University, Occidental College, LaSierra University (Honors), Pitzer College, Pomona College and Whitman College Transfer Programs and can offer its graduates priority transfer consideration for admission to these universities for the Baccalaureate Degree. For further details about these and developing alliances, contact the Honors Program Office at (562) 938-4354.

**President’s Scholar Honors**

The President’s Scholar designation with the associate degree is awarded in recognition of outstanding achievement in the college’s Honors Program.

I. To qualify, a student must complete a minimum of six Honors courses with a 3.5 or higher GPA. (Minimum units required: 15).*

In addition, a student must maintain a Long Beach City College cumulative GPA of 3.5 or higher with at least 80 percent of all units attempted in courses numbered 1-99. * A student must also satisfy the college’s “units in residency” requirement.

*NOTE: Exceptions to the total number of units required and to the 80 percent rule may be made at the discretion of the Honors Program Committee.
II. The President’s Scholar designation is entered on the transcript, next to the associate degree notation. In addition, qualifying students receive a gold seal on their diplomas and are given special recognition at commencement. President’s Scholars are the first to receive their diplomas and are awarded medallions, which they wear at graduation.

III. As part of the President’s Scholar award, students customarily receive a cash scholarship at graduation.

Academic Senate Scholar Honors
The Academic Senate Scholar designation upon transfer is awarded in recognition of outstanding achievement in the college’s Honors Program.

I. To qualify, a student must complete a minimum of six Honors courses with a 3.5 or better GPA.

In addition, a student must maintain a Long Beach City College cumulative GPA of 3.5 or higher with at least 80 percent of all units attempted in courses numbered 1-99.* A student must also satisfy the college’s “units in residency” requirement.

The Academic Senate Scholar designation is entered on the transcript after a student has completed the 60 units required for transfer.

*NOTE: Exceptions to the total number of units required and to the 80 percent rule may be made at the discretion of the Honors Program Committee.

II. As part of the Academic Senate Scholar award, qualifying students will receive a certificate of recognition for this achievement.

Honors Student
The Honors Student designation is awarded to all transfer students that complete the Honors Program successfully.

1. To qualify, a student must have completed a minimum of six Honors classes, a minimum of 15 units, with a 3.0 GPA or higher.

2. In addition, a student must maintain a Long Beach City College cumulative GPA of 3.0 or higher with at least 80 percent of all units attempted in courses numbered 1-99. A student must also satisfy the college’s “units in residency” requirement.

3. The Honors Student designation is entered on the transcripts after the student has completed the 60 units required for transfer.

Honors Courses
General education Honors courses have as few as ten students and offer more intensive study than is normally possible. Over the years, Anatomy 1, Anthropology 2, Art 1, Art 2, Art 3, Art 4, Art 11, Biology 20, Biology 41, Economics 1A, English 1, English 3, English 44, English 45, English 48, Geology 1, Geology 3, German 3, German 4, History 1A, History 1B, History 2C, History 8A, History 8B, Humanities 1, Math 37, Music 40, Philosophy 6, Philosophy 7, Political Science 1, Psychology 1, Social Science 1, Spanish 3 and Statistics 1 have been offered as Honors courses.

In addition, Honors courses sometimes offer an extensive approach to knowledge by considering the interconnections between disciplines and fields of knowledge. Guest speakers and field trips enhance this approach. Other extensive possibilities are available because many Honors classes are scheduled with instructors from different disciplines working together to encourage students to explore multi-disciplinary concerns as they fulfill the general education requirement.

If you have any questions, please call (562) 938-4354.

Admission Requirements for Newly Enrolling Students
Students enrolling at Long Beach City College for the first time should have the following grades (overall GPA) and test scores (SAT, ACT or the equivalent) and are qualified for English 1 to qualify for the Honors Program:

<table>
<thead>
<tr>
<th>GPA</th>
<th>SAT COMPOSITE</th>
<th>SAT TOTAL</th>
<th>ACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0</td>
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<td>20</td>
<td></td>
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<tr>
<td>3.9</td>
<td>850</td>
<td>21</td>
<td></td>
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<td>1150</td>
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</tr>
<tr>
<td>3.25</td>
<td>1175</td>
<td>27</td>
<td></td>
</tr>
</tbody>
</table>

If you believe you are eligible for the Program based on other criteria, please make an appointment to see the Honors Coordinator after you have filled out the application. However, you must be close to the minimum requirements based on the SAT/ACT and GPA, have excellent letters of recommendation, and offer academic evidence showing why you believe you should be allowed to enroll in the Honors Program.

Admission Requirements for Currently Enrolled Students
Students currently enrolled at Long Beach City College qualify for the Honors Program if they have a 3.0 overall GPA in twelve or more college units (in courses numbered 1-99) and are qualified for English 1.

Continued superior academic achievement is required to remain in the Honors Program. A minimum 3.0 GPA is required in addition to completion of program requirements.

Some Benefits of the Long Beach City College Honors Program
- Honors Scholarships for entering students from local high schools
- Access to special research sources
- Free UCLA, UCI, CSULB library card
- Faculty mentors
- Honors academic counseling
- Informal degree checks
- Invitation to special honors forums, seminars and social events
- Participation in National Collegiate Honors Council (NCHC)
Matriculation

Matriculation is a process that brings together the college and a student who enrolls for credit into an agreement for the purpose of realizing the student’s educational goal through the college’s established programs, policies and requirements. Matriculation services include registration, orientation, assessment, counseling, post-enrollment evaluation and referral of students to services. The student is expected to participate in these services unless he/she requests a waiver from a particular service.

I. College’s Responsibility

In accordance with the matriculation agreement, the college agrees to provide guidance to students by evaluating basic skills, helping to place students in courses where they will encounter the greatest possible success, aiding them in developing realistic educational plans and providing the services to assist the student in achieving his/her goals.

II. Student’s Responsibility

a. All new non-exempt students must complete assessment and orientation before they enroll in their second term. If the student has not completed the assessment and orientation processes at that time, he/she will not be able to register until assessment and orientation are completed. All students affected by this policy will be notified by letter during their first term, if they have not completed these processes.

b. The agreement calls for the student’s expression of at least a broad educational intent at admission and the willingness to declare a specific educational objective by the semester after he/she has completed fifteen units of degree applicable credit coursework. Diligence in class attendance, completion of assigned coursework and maintenance of progress toward an educational goal is expected.

III. Components of Matriculation

Matriculation is composed of the following components to ensure student success:

- Admission to the college
- Assessment of English, math, reading (SOAR) and English as a Second Language skills
- Orientation to the college’s programs and services
- Counseling to receive assistance with course selection and planning of an educational goal

Other Student Services are available to assist students in attaining an educational goal (See Page 12 of catalog for description of student services):

- EOP&S - Financial Aid - Health Center
- Job Placement - Transfer Center - DSPS
- Learning Center - Career Planning - Tutoring

*These components are required of all students to be Fully Matriculated. (See V. for exemptions)
IV. Matriculation Requirement
Admission, Orientation and Assessment. All new non-exempt students must complete assessment and orientation before they enroll in their second term. If the student has not completed the assessment and orientation process at that time, he/she will not be able to register until assessment and orientation are completed. All students affected by this policy will be notified by letter during their first term if they have not completed these processes. (See V. below) The assessment test (SOAR) is required of any student who falls under one of the following categories:

a. All new, non-exempt (see below) students.
b. Students who want to enroll in any English composition, reading or math course.
c. Students who want to use this option to fulfill their associate degree math or reading proficiency.
d. Students who are financial aid recipients, including Extended Opportunities Programs and Services.
e. Candidates for any of the Nursing and Health Technologies programs.
f. Students wishing to fulfill English and/or math prerequisites as specified by a department program.

V. Matriculation Component Exemptions
a. Orientation - Students who are exempt from the matriculation service of orientation are those students who hold associate degrees or higher, or those students who demonstrate that they are taking courses only for personal enrichment or those students who are co-enrolled at a four-year college or university or those students who are enrolled only in:
   1. Performance or activity classes.
   2. Classes for advancement in current job/career (update job skills).
   3. Distance education classes.
   5. Non-Credit classes.
b. Assessment - The exemptions for orientation apply to the assessment component, unless a student plans to take a math, reading, English or English as a Second Language class and has not met the prerequisite. The assessment component for math, reading and writing can be partially met with documentation of coursework from another accredited college or high school.

VI. Matriculation Component Appeal/Waiver Process and District Policies of Handling
a. Admission - All students must participate in this component; there is no waiver process.
b. Orientation, Counseling and Assessment - Any student who feels that he/she is exempt from any of these components may appeal by filing a Matriculation Component Waiver form, which is available in the Assessment Office. These exemptions do not provide clearance for enrollment into specified English, math, reading or ESL courses. The waiver will be reviewed by the Matriculation Specialist and the student is then notified of the decision by mail. A student may request to participate in a previously waived component by contacting the Matriculation Specialist.
c. College Assessment Test -
   1. Retest Policy: A student may retake any part of the College Assessment Test (SOAR) after a five-month period has passed. You can retake a different math level (Algebra Readiness, Elementary Algebra, orIntermediate Algebra) test without waiting five months.
   2. Appeals of Initial Placement Recommendation: A student may appeal an initial placement recommendation in English, math, reading or ESL by completing the Placement Appeal form available at the Assessment Center, Counseling Office or the respective department. The student will be notified of the appeal decision by mail.

VII. Student Rights and Matriculation
A student may file a complaint against Long Beach City College matriculation practices by filing a complaint form, which is available at the Assessment Office. Complaints will be filed with the Dean of Counseling and Student Support Services, who is responsible for investigation and resolution of such complaints. The Dean will maintain a file on all formal complaints.

Student Grievance Policy
Long Beach City College is committed to resolving problems students may be encountering while working within the guidelines and policies established by the state of California and the Board of Trustees. For specific information on both the policy and process for student grievances, contact the office of the Dean of Student Affairs.

Procedures For Application To School of Health and Science Programs 2005-2006
Applications for 2005-2006 School of Health and Science Programs are accepted on a continuous basis. Qualified applicants will be accepted on the basis of date of application and number of required general education courses taken. Applications are carried over if there are more applicants than can be admitted. All applicants must attend information sessions.

Students in their senior year may apply as specified above.
International Student Program/Admissions

Long Beach City College encourages students from other countries to enroll. International student tuition is $146 per unit and the enrollment fee is $18 per unit. Both fees are subject to change without notice. In addition, students will pay a College Services fee and a Health Services fee. International students must also purchase the College Health Insurance Plan. There is an optional parking fee.

Students may live in an apartment, with relatives or friends or with an American family in a homestay. The prices range widely. Contact the International Student Office for assistance. There is bus transportation directly to campus from throughout the community.

Through the college’s International Students Club, members plan local trips, parties and other events that help international students make friends, learn about other cultures and explore Southern California activities and attractions.

How to Apply:
Request an application packet containing the forms you need from:

Long Beach City College
Attention: International Student Admissions
4901 East Carson Street
Long Beach, CA 90808 USA

Complete and return your application, along with a $25 application fee. Application materials must be completed by June 1 for the fall semester and October 1 for the spring semester. The form I-20 will not be issued until all requirements are met. Those applicants who have properly submitted all necessary forms will be accepted in order of completion until the semester begins.

Your completed application file should contain:

1. A TOEFL test score. English proficiency, indicated by a score of 500 or better on the Test of English as a Foreign Language (TOEFL), is required to be considered for admission. Request a test application form from:
   TOEFL - Educational Testing Services
   Box 899
   Princeton, New Jersey 08540 USA

2. A financial statement, to comply with U.S. immigration requirements, showing access to sufficient funds to pay college and living expenses for the duration of your studies. Submit the College Financial Statement form with your application. The approximate cost per school year is $15,000 in U.S. dollars. The financial statement must be filled out using U.S. dollars. A sponsor’s Affidavit of Support must also be submitted. The form may be requested from the International Student Office.

3. Transcripts showing academic preparation equivalent to receipt of a U.S. high school diploma, which is twelve years of elementary and secondary school. Please request that official copies of your transcripts be sent to the college. They should show all courses taken in the last three years of secondary school, the grade received in each course, grading method, the minimum passing grade allowed and the date of your completion of secondary school. Transcripts for any college classes completed must also be supplied. All must be translated into English and notarized before being submitted.

4. Proof of medical insurance must be on file within one month of the start of classes. Such insurance must be maintained throughout enrollment at the college. Applicants must provide proof of not having tuberculosis.

5. An F-1 application form for Form I-20 must also be signed and returned directly to the college.

American Language and Culture Institute

Long Beach City College’s American Language and Culture Institute combines instruction for men and women at all levels of English proficiency with exposure to Southern California’s dynamic blend of arts, sports, entertainment and business.

Whether you want to master English to take a TOEFL exam, attend a U.S. university, travel in English-speaking countries or for your business or career, the Long Beach City College American Language and Culture Institute is for you.

Students, business people, professionals and others will benefit from this strong program of language acquisition enhanced by the opportunity to learn about U.S. culture and customs.

The American Language and Culture Institute offers the opportunity to acquire or improve English language skills rapidly through intensive study, augmented by individualized computer instruction. Adults of all ages and levels of proficiency will be able to benefit.

Nine-week sessions are held throughout the year. Classes are conveniently scheduled early in the day to permit free time to explore Southern California’s many attractions.

Registration Procedures

Students are responsible for officially registering in classes. A registration receipt is proof of enrollment. Students may not attend a class unless they are properly registered in that class. Registration may be done online, over the phone, or on a walk-in basis. See the Schedule of Classes for the semester enrolled to learn about registration dates, times and instructions.

Students are also responsible for officially dropping classes and must do this at the Admissions and Records Office.

Fees, Tuition and Other Expenses

Students must pay all fees and tuition at the time of registration unless otherwise indicated. All students are
required to purchase their own books and regular supplies. All fees are subject to change after the printing of the schedule of classes.

A $15 fee will be charged for all returned checks. Under Assembly Bill 1226, any person who writes a check dishonored for lack of funds is civilly liable, and under the law is liable for three times the amount of the check, plus the face value of the check.

Nonresident Tuition: Students who have been classified as non-residents (see residence section) shall be required to pay nonresident tuition at the rate of $167 per unit (rate subject to change without notice). The international student rate is $174 per unit, which includes a capital outlay surcharge of $7 per unit.

Books, Supplies and Course Materials Fees: You must purchase all books and many of the supplies required by instructors of the classes in which you enroll. If your class has a materials fee, it will be printed in the schedule of classes and that fee must be paid during registration. When possible, the bookstore sells used books at reduced prices. The bookstore generally stocks the supplies you may be required to purchase.

College Services Card Fee: This optional fee, administered by the Associated Student Body, underwrites many of the services, programs and extracurricular classroom experiences that otherwise cannot be provided. Some of these services include: telephone registration, scholarships, five percent discount on textbooks and supplies, on-campus check cashing, bus pass purchases, legal advice, accident insurance, theatre, music and athletic events. The College Services Card fee is $15 for fall and spring and $10 for summer sessions.

Student Health Fee: A health fee of $12 for the fall/spring semesters and $9 for the summer session will be charged upon registration, unless students meet one of the exemptions listed below:

1. Students who qualify for the Board of Governors Fee Waiver (BOGW) or are identified by the Financial Aid Office as qualifying for exemption under Education Code Section 72252.1.
2. Any student who depends exclusively on prayer for healing in accordance with the teachings of a bona fide religious sect, denomination or organization. Documentary evidence of such an affiliation is required.
3. Students attending college under approved apprenticeship training programs under Section 76355(c)(2).

The Student Health Services Offices are located on both campuses and are staffed by a registered nurse. Services include:

- Health assessment
- Health referrals
- First aid treatment
- Health counseling
- Blood pressure check
- Pregnancy tests
- Vision screening
- Hearing screening
- Over-the-counter medications for colds, flu, and headache
- Health-related programs such as the annual LBCC health fair
- Insurance coverage for accidents occurring on campus or at off-campus, college-sponsored events ($50 deductible).

Parking Fee: Students must purchase a parking pass if using on-campus parking. The parking fee for automobiles or motorcycles is $25 for students during the fall or spring semester. For students receiving financial aid, the fee is $20. The fee for all students during summer sessions is $15. Citations are issued starting the third week of each semester for vehicles not displaying a valid parking permit.

Printing Fee: A printing fee of $.10/page will be charged for each page duplicated in the open access labs and library on campus. Students are welcome to save the information to a disk to print at home or take to another source for duplicating.

Indebtedness: The college cannot extend credit for fees or expenses. In the event that the student becomes indebted to the college due to library fines, books or athletic equipment damage or loss, student loan defaults, breakage of equipment, bad checks, failure to meet attendance regulations involving veteran support or financial aid or for any other reason, the college may deny further enrollment, refuse to release transcripts and refuse to release information to potential employers or other agencies until all indebtedness has been cleared.

Refunds

For purposes of this section, the “first week of instruction” is the first week scheduled in that class in that semester, not necessarily the first week of student enrollment or attendance.

Service Charge: $10 shall be charged for processing each enrollment fee refund transaction except for those resulting from the cancellation of a class by the college or overpayment of fees.

Long Beach City College will determine the amount of federal financial aid that a student has earned in accordance with federal law. Students who receive federal financial aid and do not attend any classes will be required to repay all of the funds they received. Students who withdraw from all classes prior to completing more than 60% of the semester will have their financial aid eligibility recalculated based on the percentage of the semester completed and will be required to repay any unearned financial aid they received.

At LBCC a student’s withdrawal date is:

1. The date the student officially notified the Admissions Office of his or her intent to withdraw, or
2. The midpoint of the semester for a student who leaves without notifying the college or
3. The student’s last date of attendance at a documented academically related activity.

Long Beach City College does not have leaves of absence.

**Transfer Rules and Refunds**

Students may transfer from one class to another within the same academic discipline upon the approval of the instructors involved. Transfers shall not be considered withdrawals.

**Definition of a Course Transfer**: After the refund/transfer period, transfers may only be made between classes in the same academic discipline. Furthermore, transfers will only be allowed under the following conditions:

1. Both classes are of equal length and start in the same week.
2. The class from which the transfer is being made is shorter than the new class and both start in the same week.
3. The class from which the transfer is being made is longer than the new class and both end in the same week.

**Fee Refund/Transfer Period**: In order to receive a refund or transfer enrollment fees or nonresident tuition from one class to another, students must officially withdraw or transfer within the period defined below. Transfer of fees and tuition will be made at the 100 percent rate; refunds will be 100 percent less the service charge of $10. The period depends on the length of the class, regardless of when the student enrolls.

1. For classes that are scheduled for the entire semester, the refund/transfer period is the first two weeks of the semester. After the second week, no refund can be made and transfers may only be made within the same academic discipline provided that permission is granted by the instructors.
2. For all other classes that are scheduled for shorter or longer periods of time than the regular semester, the refund/transfer period is the first ten percent of the total scheduled class meetings, excluding holidays. After ten percent of the scheduled class meetings have passed, no refunds can be made and transfers may only be made within the same academic discipline provided that permission is granted by the instructors.

**Nonresident tuition, health fees, materials fees and enrollment fees** will be automatically refunded to students who officially withdraw or transfer during the refund period. After this period, they will not be refunded. All enrollment fee refunds except those caused by cancellation of classes are subject to a service charge of $10.

**In the case of a verified military withdrawal**, enrollment fees will be refunded with no service charge, provided no academic credit is earned.

**College Services Card and Parking Fees** will be refunded within the refund/transfer period defined above. After this time there are no refunds. All requests must be accompanied by the College Services Card and/or parking permit. No refunds will be granted without the appropriate documentation. College Services Cards will be refunded at the ASB Bank. Parking fees will be refunded at the Cashier’s Office.

**Appeal for Refund Due to Special Circumstances**

1. The Dean, Admissions and Records, and Registrar shall consider all appeals for refund of tuition and enrollment fees.
2. The Dean, Student Affairs, shall consider all appeals for refund of College Services Card and parking fees.

**Change of Address**

Change of address or name must be reported immediately to the Admissions and Records Office to ensure that the student’s grades and transcripts are correct. Change of address for payroll purposes is made in the Fiscal Affairs Office to ensure correct delivery of paychecks and W-2 Forms.

**Student Conduct**

Student conduct must conform to the Standards of Student Conduct, which has been established by students and college staff and has been approved by the Board of Trustees. The Standards of Student Conduct are listed in the Academic Policies section of this catalog and are strictly upheld.

**Knowing Your Responsibilities**

Long Beach City College provides you with a wide variety of academic assistance and personal support, but it is up to you to know when you need help and to seek it out.

It is your responsibility to keep informed and to obey the rules, regulations and policies which control your academic standing and your life as a Long Beach City College student.

Meeting deadlines, completing prerequisites and satisfying the degree and certificate requirements, as found in the curriculum guides and in this catalog, are all part of your duties as a student.

Consult this catalog, the college and school announcements and the schedule of classes for the information you need. Watch for official announcements in the **Viking** and on-campus bulletin boards.

**Family Educational Right to Privacy Act (FERPA)**

All student records of Long Beach City College are maintained in accordance with the provisions of the Family Rights and Privacy Act of 1974. Copies of the complete text of this act are available in the college library (see “Family Educational and Privacy Rights” in Shepherd’s Acts and Cases by Popular Names). The two basic elements of the act are the student’s right to review and challenge his/her record and the conditions under which information in the record can be released to outside parties.
1. Students may request access to challenge the correctness or appropriateness of any part of the record. However, students are advised that grades, though a part of the record, are considered final as assigned by the instructor and can only be challenged on the basis of clerical error, fraud, bad faith or incompetency.

2. Student information, except for directory information as defined below, cannot be released by the college to any outside agency, except for those entitled to access under the act, without signed permission of the student. The student may further restrict the release of name and attendance verification by completing the appropriate form in the Admissions Office. In the absence of having this form on file, the college may release directory information to any person or agency. Directory information is defined as dates of attendance, degrees, certificates or awards received, verification of student participation in school activities and sports and weight and height of members of athletic teams.

3. Parents may have access to records of their children but only if the children are still their dependents as evidenced by a claim of same on federal income tax returns. Parents desiring access to the records of a dependent child must present the full name, social security number and birth date of the child, their own personal identification and a copy, that the college district may keep, of the current year’s federal income tax return indicating the child has been claimed as a dependent. Parents seeking to review records of a dependent child during the early months of the year must be able to demonstrate that they have already filed for the year even though the filing deadline isn’t until April 15th.

4. By law, notwithstanding any of the above, all student records must be released under court order. The student will be notified by mail to the last address on file of any such access, and the student shall have the right to request a copy of any information released in this manner.

5. Any questions regarding the student’s rights under this act should be directed to the Dean, Admissions and Records.

**Drug-Free College Statement**

The Long Beach Community College District is committed to providing an appropriate environment free from illicit drugs and alcohol. As a preventive measure, appropriate information regarding the health risks associated with the use of illicit drugs and abuse of alcohol will be provided for students. This information may be obtained from the College Health Services Offices—(LAC) (562) 938-4210 or (PCC) (562) 938-3992. In addition, information may be obtained regarding counseling, treatment, rehabilitation and recovery programs. Long Beach City College offers forums and other educational programs regarding the harmful effects of drugs and alcohol. Information regarding programming may be obtained from the Office of Student Affairs, (562) 938-4154. All inquiries will be held in the strictest confidence.

In compliance with federal legislation, it is the policy of the Long Beach Community College District to maintain a drug-free environment and support a drug prevention program for students use. The unlawful manufacture, distribution, dispensation, possession, use or sale of illicit drugs or alcohol is prohibited by all students in all buildings, property, facilities, service areas and satellite centers of the district or as part of any district activities. Any student violating this policy will be subject to appropriate disciplinary action.

**Student Right-To-Know and Campus Security Act**

The Long Beach Community College District is committed to making the campuses of Long Beach City College as safe as possible for students, employees and visitors. The Long Beach Police Department-College Unit exists to inform, educate and make individuals aware of personal safety, as well as the safety of others. Students are encouraged to promptly and accurately report all criminal and emergency actions to the Long Beach Police Department College Unit on either campus. Those actions requiring further reporting should also be reported to the appropriate law enforcement agency. Assistance will be provided, as needed, to accomplish this task.

Policies exist identifying Long Beach City College as a secure facility. Access to all facilities outside of class hours requires prior approval from the Office of Administrative Services.

Under the auspices of the Long Beach Police Department-College Unit, monthly crime reports are compiled and distributed for both student and employee consumption. These reports are intended to inform individuals about current criminal experience, as well as educate individuals regarding crime prevention. The Police Department also recommends and conducts programs designed to inform students and employees about campus security procedures and practices which encourage individuals to be responsible for their own security, as well as the security of others. In addition, pamphlets are prepared and distributed by the Long Beach Police Department-College Unit on a regular basis to new students and employees regarding campus safety and crime prevention.

Public information regarding sex offenders in California may be obtained by viewing the Megan’s Law Web site at the Long Beach Police Department and/or the Los Angeles County Sheriff’s Department.

Long Beach Police Officers assigned to the College Unit have the authority and responsibility to enforce all policies, rules and regulations of the District, as well as local, state and federal laws.

In compliance with the Student-Right-to-Know and Campus Security Act of 1990, it is the practice of the Long Beach Community College District to make available its completion and transfer rates to all current and prospective students.
In accordance with this legislation, beginning in Fall, 2000, all certificate, degree and transfer-seeking first-time, full-time students were tracked over a three-year period; their completion and transfer rates are listed below. These rates do not represent the success rates of the entire student population at Long Beach City College, nor do they account for student outcomes occurring after this three-year tracking period. The Fall 2000 group represents only 2% of the students enrolled at the college that term.

Based upon the group defined above, 31% attained a certificate, degree or became "transfer-prepared" during the three-year period (Fall 2000 to Spring 2003). Students who are "transfer prepared" have completed 56 transferable units with a GPA of 2.0 or better.

Based upon the group defined above, 16% transferred to another California postsecondary institution (CSU, UC or another California Community College) prior to attaining a degree, certificate, or becoming "transfer prepared" during a five-semester period (Spring 2001 to Spring 2003).

Of the original cohort group, 37% were still enrolled at Long Beach City College the academic year following the three-year tracking period. Based on another study, the average time to degree for Long Beach City College students is 4 1/2 years (9 semesters).

More information about Student-Right-to-Know rates and how they should be interpreted can be found at the California Community Colleges "Student-Right-to-Know Information Clearinghouse Website" located at http://www.cccco.edu/divisions/tris/mis/srtk.htm.
Counseling & Student Development

The Counseling Center assists students in the selection of career and educational goals consistent with their interests and aptitudes. The counseling program is designed to complement the instructional program by providing specialized services, including testing and counseling on personal problems which may affect a student’s progress in college. Counselors are available to help each student utilize to the best possible advantage the educational opportunities offered by Long Beach City College. Counseling services are available Monday-Tuesday, 8 a.m.-8 p.m., Wednesday-Thursday, 8 a.m.-5 p.m. and Friday, 8 a.m.-4:30 p.m. Call LAC (562) 938-4560 or 938-4561 or PCC (562) 938-3920.

The Counseling Center also provides Online Counseling as a flexible alternative to meeting with a counselor. Visit the Online Counseling website at https://onlinecounseling.lbcc.edu or access it directly from the LBCC website at http://www.lbcc.edu and click Online Counseling. Not all counseling services are available online.

Campus Child Development Center

Child-care services make attending classes more convenient for many students. Quality care is available for children between 2-5 years of age (before kindergarten entrance). Both campuses have child-care facilities. The facility used is NOT dependent on the location of classes. Both Centers have scheduled four-hour sessions and extended times to accommodate students. The Centers are open Monday-Thursday, 7:00 a.m. – 5:30 p.m, Friday 7:00 a.m – 12:00 p.m. CalWORKs students may take advantage of this service while working toward their combined school and work requirement. For information about fees, space availability and parent responsibilities, contact the PCC Center at (562) 938-3079 or 938-3080 and/or the LAC Center at (562) 938-4253 or 938-4728.

Transfer Center and Student Success

The College Transfer Center, located in Room A151 in the Administration building at LAC, offers services to students in the process of transferring. Some of these services include individualized counseling/advising, a written academic plan, transcript evaluation, academic assessment and information about financial aid, housing, parking and getting around a larger campus. Students may make an appointment with a Transfer Center counselor and/or with representatives from a variety of four-year colleges and universities. The Transfer Center is open Monday - Thursday from 8:00 a.m.–7:00 p.m. and Friday from 8:00 a.m.– 4:30 p.m. Appointments may be made in the Transfer Center at the Liberal Arts Campus by calling (562) 938-4030. Visit our website at http://transfer.lbcc.edu.

Student Affairs

The mission of Student Affairs is to create, encourage, and support a positive collegial learning environment whereby the educational goals of students and the College are enhanced. Various events and programs are scheduled on a regular basis, which give students the opportunity to become involved in campus life. These activities foster personal growth, social interaction, and cultural exchange. Other student programs also present opportunities for leadership development, shared governance, competition, and volunteerism. The programs and services that make up the area of Student Affairs include Alumni Development, the Associated Student Body Bank, Athletics, Health and Psychological Services, Intramurals, Student Conduct and Discipline, Student Life, Summer Recreation, and more. For more information on how the area of Student Affairs can assist you, contact the Office of Student Affairs, which is located upstairs in the College Center (Building E) on the Liberal Arts Campus.

Career Planning Center

The average person spends 14 years getting an education, 20 years parenting, but 45 years in a career. People spend more time working at their career than virtually anything else. Career decisions have an enormous impact on people’s lives.

The Career Planning Centers are here to assist individuals in their career decisions. This dynamic process is life long and can entail individual counseling or group counseling in a classroom setting.

The programs to help this personal exploration include: assessments, discussion and exploration, use of an expansive career library, computer assisted career guidance systems and “hot files” on job exploration and future career trends.

The opportunity to explore choices is what the centers are all about. The centers are staffed with counselors, a resource technician and student assistants. Centers are located on the Liberal Arts Campus and the Pacific Coast Campus. For more information and hours, call: LAC (562) 938-4283 or PCC (562) 938-3915. Visit our website at http://careers.lbcc.edu.

Job Placement Services

The Job Placement Service posts new jobs daily on a bulletin board at each campus. Students seeking more information about a job listing may visit the Job Placement Services Office for an interview and an appointment with prospective employers. Office hours at LAC and PCC are 8:00 a.m.-5:00 p.m., Monday-Friday.

Job Placement Offices

(562) 938-4500                  (562) 938-3900

Economic and Resource Development

Economic and Resource Development develops and implements economic development and workforce development (WFD) programs and services directly and indirectly related to instructional programs at the College, regional and community workforce preparation needs, and mandated vocational education and workforce preparation initiatives from the federal government, state legislature and the California
Community College Chancellor’s Office. Economic development refers to the activities that support the attraction, expansion and retention of jobs. Workforce preparation refers to programs and services which prepare people for entry-level work and career advancement including technical preparation, basic skills and employability skill sets.

All programs and services are designed to improve local and regional workforce preparation and regional economic development. This includes professional development courses for the community at large, customized training for business and industry, technical assistance and employee assessment and skills development programs. These programs and services are performance based and can be customized to meet specific business/industry needs. All activities of the Office of Economic Development are linked to the strategic goals and initiatives of the College. For more information please call (562) 938-5005.

Women and Men’s Resource Center
The center provides services and activities designed to help individuals pursue career and educational goals through the development of skill, capability and confidence. These services include: referrals to college and community resources, weekly educational workshops and seminars, parenting education workshops, support groups, crisis counseling, a student lounge and study area with a student dedicated computer and staff to provide individual assistance.

The Women and Men’s Resource Center is located on the Pacific Coast Campus in room DD142. For additional information, please call (562) 938-3987. Hours: Monday-Thursday 8:00 a.m. – 5:00 p.m., Friday 8:00 a.m. – 3:30 p.m.

Student Health Services
A Student Health Center on each campus provides health education and promotion, health assessment, selected health screenings and limited illness care. Scheduled health education and promotion events include the health fair, smoking cessation activities and breast cancer awareness programs. In cooperation with Student Health Services, the Long Beach Public Health Department provides counseling and testing for human immunodeficiency virus (HIV) and other sexually transmitted diseases (STDs).

In the event of accidental injury while on campus or engaged in college sponsored activities, students must contact the Student Health Centers to initiate the coverage for student accident insurance. The college student accident insurance, after a $50.00 deductible, will pay for most of the necessary medical care provided by approved physicians in approved health care facilities.

The LAC Student Health Center is located in Q120-124, near the pool area. The PCC Student Health Center is located in the administration area in AA101-106. For information concerning current hours of operation or to make an appointment, telephone (562) 938-4210 for the LAC Center or (562) 938-3992 for the PCC Center.

Voluntary Health Insurance
Optional medical and dental insurance plans are available for students and their dependents. These are supplemental plans which have costs attached to them. Brochures and application forms are available in the office of the Dean of Student Affairs and in the Student Health Centers.

Psychological Counseling Services
Student Health Services and the Counseling Departments on both campuses have cooperated to provide brief psychological counseling for students with personal problems. Appointments are made and the counseling sessions are held in the offices of the Counseling Departments at LAC and PCC. The personal counseling is provided by professional counselors of Family Service of Long Beach and is both strictly confidential and entirely separate from college records. Visit our website at http://couns.lbcc.cc.ca.us/personal_counseling/index.htm.

Student Parking Regulations
Parking permits are required for all Long Beach City College lots; that is, a current semester student parking permit or a daily permit. Student permits and daily permits do not authorize parking in staff or other reserved areas except where posted otherwise. Parking is available on a first-come, first-served basis. Having a permit does not guarantee that a student will find a parking space near his or her class. At the LAC, there is additional parking in the Veterans Stadium Parking Lot. Parking permits are purchased each semester during registration at the time the College Services Card is purchased or may be obtained later at the Cashier’s Office.

EMERGENCY SERVICES – 911 or 9911 from campus phones:
Contact the Long Beach Police Department with any emergencies such as crimes in progress, medical aid, or any incident requiring immediate police/security response.

GENERAL POLICE SERVICES – 562-938-4910 or 562-435-6711:
Contact the Police Department for security escorts, lost and found items, thefts, or other crimes not requiring an emergency response. The LAC office is located north of the Library in parking lot ‘C’. The PCC office is located in the ‘EE’ building Room 162. Business hours are Monday through Friday, 8 am to 5 pm. Please call the business line for general information or questions at (562) 938-4798. Call the General Service numbers above or 911 (9911 from on-campus phones) for an emergency or police response. For after hours request for police services, Call boxes are located outside the entrances of each Police Office. Call boxes will directly connect you to the Long Beach Police Department or Long Beach City College Switchboard Operator.

Escorts are available to students, staff, or faculty by request. This service is not a transportation service. Call the City College Unit through the General Service numbers above to arrange an escort.


Parking and Traffic Regulations
These rules are enforced to ensure the rights of permit holders, as well as to provide for the safety of people and property:

1. Parking permits are required at all times in LAC and PCC parking lots, except for Friday evening and Saturday classes. Parking permits are purchased each semester during registration. After registration, permits may be purchased from the ASB Bank at either campus. For students who do not wish to purchase a semester parking permit, a one-day parking permit machine is available at both campuses. The parking permit machine at LAC is located on the west side of parking lot “J” and at PCC on the south side of parking lot 3. There are meters in Lot “G” at LAC.

2. Semester parking permits must be attached to the rear view mirror so that it is visible from the front of the vehicle. One-day parking permits must be placed in plain view on the vehicle dashboard with the permit facing upward. Students who are having difficulty displaying a permit should go to the College Police Trailer for assistance. Students driving a convertible-type vehicle can obtain a special convertible permit from the LAC College Police Trailer in lot ‘C.’ This special convertible permit can only be obtained after the purchase of a semester parking permit.

3. Citations are issued in student lots starting the third week of each semester for vehicles without a properly displayed, valid parking permit. Parking is free only in student stalls for the first two weeks of each semester.

4. Student permits and daily permits do not authorize parking in staff or other reserved parking spaces, except where posted otherwise.

5. Parking is available on a first-come, first-served basis.

6. All vehicles must be parked between the lines of a designated parking space only. Backing into parking stalls is not permitted.

7. A permit does not guarantee a parking space in the parking lot of choice. You are advised to allow ample time to find parking. At LAC, there is additional parking in the Veterans Stadium parking lot.

8. Citations are issued by the Long Beach Police Department and Long Beach City College Parking Enforcement to automobiles, motorcycle, and mopeds that do not display a properly placed, current parking permit. Students parked in staff or other specially designated areas will also be cited.

9. Students may not double park nor circle the parking lots to wait for a parking space.

10. No adjustments will be made for parking citations at the Long Beach Police Department–City College Unit. Individuals wishing to contest a citation must call (888) 255-9711 for District citations or (562) 570-6822 for City of Long Beach citations. Refer to your citation for more information on contesting.

11. Motorcycles and mopeds are to be parked only in areas specifically posted for their use. Operators must purchase a current semester parking permit and keep it in their possession. Motorcycle permits may be obtained from the Support Services Office, located in the Police Trailer at LAC. Motorcycles and mopeds may not be driven on campus or parked on sidewalks. Violators will be cited.

12. Students, staff, or faculty with state-issued disabled placards are to park in the marked handicapped spaces. If a handicap space is not available, parking is allowed in any other student or staff space. Disabled permits are not valid in carpool or other reserved spaces.

13. Regulations pertaining to parking can vary from lot to lot. It is the responsibility of the driver to read the parking regulations that are posted at the entrance of each parking lot.

Questions about these and other parking and traffic regulations should be directed to the Long Beach Police Department – City College Unit at (562) 938-4534.

Student Financial Aid
Long Beach City College administers a comprehensive student financial aid program to assist students in meeting college costs. The amount of financial aid awarded varies from student to student, depending on the individual’s need and resources. Financial aid awards are based on calculated financial need as determined by the Free Application for Federal Student Aid. The FAFSA may be completed via the paper application, which is available at the LAC Financial Aid office or the PCC office, or may be completed on the Web at www.fafsa.ed.gov. Student budgets include educational expenses, such as tuition, fees, books, supplies, housing, food, transportation, child-care and personal expenses.

Financial aid recipients must adhere to the standards of progress of the financial aid programs.

Federal Programs
To be eligible for the five federal programs, the student must be a U.S. citizen or an eligible non-citizen as defined by federal regulations.

Federal regulations also require financial aid recipients to either have graduated from high school or have completed a recognized equivalent (such as the California High School Equivalency examination or the GED). Those who do not meet the above requirements must pass a federally approved Ability to Benefit test through the Long Beach City College Assessment Center.

Federal Pell Grants provide federal grants that range from $400 to $4000. In order to be eligible for a Pell...
grant, the student must have financial need as determined by a formula that is applied uniformly to all applicants throughout the nation.

**Federal Supplemental Educational Opportunity Grants (FSEOG)** are federal grants that range from $100 to $1000 per year at Long Beach City College.

The **Federal Work Study Program (FWS)** provides part-time employment. Students are employed a maximum of fifteen hours per week while school is in session. The pay rate for most Federal Work Study positions is currently $6.75 per hour for the first year (540 hours) and $7.25 per hour during subsequent years.

The **Federal Perkins Loan Program (formerly the National Direct Student Loan Program)** provides low-interest, long-term loans. No interest is charged, nor is repayment required while the borrower is enrolled in school at least half-time. Payments and interest of five percent per year begins nine months after the borrower ceases to be enrolled or is enrolled less than half-time.

The **William D. Ford Direct Loan Program** provides loans to students to be used for educational expenses. Community college students may borrow up to $2625 for the first year of study and up to $3500 per year after successful completion of the first year.

The amounts awarded to the student from the FSEOG, FWS, Perkins Loans and the William D. Ford Direct Loan programs will vary depending upon the financial need of the student. Financial need for these programs is determined by the use of the Free Application for Federal Student Aid (FAFSA), which is available at the Financial Aid Offices at LAC and PCC. FSEOG, FWS and Perkins Loans funds are limited and early application is strongly advised. Be sure to check the financial aid calendar published in the current schedule of classes for financial aid deadlines.

**State Programs**

**Cal Grant A** helps low- and middle-income students with tuition/fee costs at four-year colleges and universities. Grant recipients are selected on the basis of financial need and grade point average.

If you qualify for a Cal Grant A and want to attend a public community college first, the Student Aid Commission will hold the tuition/fee award on reserve until you transfer to a four-year school, provided you continue to qualify.

**Cal Grant B** provides a living allowance and tuition/fee help for low-income students. Cal Grant B’s may be used at community colleges, as well as at four-year schools.

**Cal Grant C** helps vocational school students with tuition and training costs. Recipients must be enrolled in a vocational program at a community college, independent college or vocational school, in a program of study from four months to two years in length.

The application period for all Cal Grants is from January 1 until March 2 for the following academic year. Application materials and help with filling them out are available in the Financial Aid Offices at LAC and PCC during the application period.

**Applications, Program Guidelines and Deadlines**

Students who plan to apply for financial assistance to meet their educational costs at Long Beach City College are encouraged to obtain the following information from the Financial Aid Office.

**USDE Student Guide**

Financial Aid Workbook, 2003-2004

Long Beach City College Financial Aid

**Satisfactory Progress Policy**

Students are invited to visit the Financial Aid Office to talk to any of the staff members for further clarification and financial counseling.

**Financial Aid Office**

Liberal Arts Campus  Financial Aid Office

4901 E. Carson Street  Pacific Coast Campus

Long Beach, CA  90808  Long Beach, CA  90806

(562) 938-4257  (562) 938-3955

**Extended Opportunity Program and Services (EOP&S)**

The Extended Opportunity Program provides services and activities that are “over and above” what is traditionally provided to community college students. EOP&S is designed to help low-income and educationally disadvantaged students complete their college careers.

The following services are provided by the program at Long Beach City College: priority registration, academic and personal counseling, peer advisement, study skills workshops, developmental courses, individual tutoring and financial assistance.

Students who would like to apply for the program must first complete an application for financial aid at the Financial Aid Office.

**EOP&S Eligibility:** Students must be enrolled full-time, be eligible for the California Board of Governors’ Grant (BOGG) and meet the educationally disadvantaged criteria.

**Cooperative Agencies Resources for Education (CARE):** The CARE program provides support services to assist students in EOP&S who are single parents with children under the age of fourteen and recipients of CalWorks or GAIN. The objective of the program is to help eligible students complete college-level training and educational programs.

**G. I. Bill**

Generally, veterans’ eligibility for benefits expires 10 years after release from active duty. (Extensions are sometimes granted in cases of disability.)

At the beginning of each semester, all veterans and dependents must pick up an Attendance Verification Card and return it to the Veterans’ Affairs Office at PCC with all of their instructors’ signatures within the first two weeks of class. Other information is available at the
Veterans’ Affairs Office (in the administration wing at the Pacific Coast Campus).

G. I. Bill benefits will be paid according to the following schedule:

**Regular Semester**

<table>
<thead>
<tr>
<th>Payment Level</th>
<th>Units Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full payment</td>
<td>at least 12 units</td>
</tr>
<tr>
<td>3/4 payment</td>
<td>at least 9 units</td>
</tr>
<tr>
<td>1/2 payment</td>
<td>at least 6 units</td>
</tr>
<tr>
<td>1/4 payment</td>
<td>at least 3 units</td>
</tr>
</tbody>
</table>

*1/4 payment is not available in all programs and may not be advisable under certain conditions. Check with the Veterans Affairs office for more information, (562) 938-3929.*

**College Programs**

Long Beach City College administers more than 1000 scholarships each year. These scholarships are funded by campus and community organizations, local businesses and private donors. Applications for scholarships will be available October 1, 2004 and due December 17, 2004.

The Scholarship Office/Foundation Office is located in Building “I,” Martha Knoebel Center, near Parking Lot C at the Liberal Arts Campus. The Scholarship Office is located in AA128 at the Pacific Coast Campus.

**Support Services for Disabled Student Programs and Services (DSPS)**

The Department of DSPS provides assistance to disabled students requiring special services at the college. They include:

1. Specially designated parking spaces.
2. Ramps and elevators for accessibility to main campus facilities.
3. Registration assistance for students unable to negotiate regular registration procedures.
4. Specialized academic, personal and vocational counseling.
5. Special equipment for campus use and home loan, such as tape recorders, visual enlarging machines, a talking calculator and adaptive computer equipment.
6. Services of the State Department of Rehabilitation, such as vocational counseling and guidance, training (with payment of costs, such as books, fees, tuition, etc.) and job placement.
7. Specialized instruction for the physically limited, as well as for individuals working with the disabled.
8. An innovative Special Learning Center for disabled students to provide self-pacing programs and vocational exploration packages, located at the Pacific Coast Campus.
9. Specialized services for the deaf and hard of hearing, including speechreading (lipreading) instruction, courses in total communication, as well as the coordination of classroom interpreters for deaf students. Students who may need these services should inform the DSPS office before they enroll.
10. Adapted physical education for physically limited students requiring specialized physical education.

In addition to these services, the program has as its goal the integration of the student with a disability into the mainstream of college activities. For information or appointments, please call: LAC (562) 938-4558; PCC (562) 938-3921; (562) 938-4833 TDD. You may ask questions of a DSPS counselor online at https://onlinecounseling.lbcc.edu or from the LBCC website, http://www.lbcc.edu then click Online Counseling.

**Civil Rights Compliance Statement**

The Long Beach Community College District does not discriminate in its admissions, educational programs, activities or employment policies on the basis of race, religious creed, color, national origin, ancestry, gender, sexual orientation, age (over 40), disability, marital status, medical condition, or disability (mental and physical, including HIV and AIDS), other protected classes, or status as a Vietnam-era veteran, or obligations to the National Guard or Reserve forces of the United States.

The District is subject to Title VI and VII of the Civil Rights Act of 1964; Title IX of the Educational Amendments Act of 1972; the Rehabilitation Act of 1973, sections 503 and 504; the Age Discrimination Act of 1975; and the Americans with Disabilities Act of 1990.

The lack of English language skills will not be a barrier to admission and participation in the District’s programs. Anyone with a question or a discrimination complaint should contact Irma Ramos, Director of Human Resources and Staff Diversity at (562) 938-4095.

**Title IX. Prohibiting Sex Discrimination in Education**

The Long Beach Community College District is committed to support all regulations under Title IX. “No person in the U.S. shall, on the basis of sex, be excluded from participation in, be denied the benefits of or be subjected to discrimination under any operation of an educational institution that receives federal funds.”

Anyone with a question or a discrimination complaint should contact Irma Ramos, Director of Human Resources and Staff Diversity at (562) 938-4095.

**Americans with Disabilities Act of 1990**

The Americans with Disabilities Act (ADA) of 1990 prohibits discrimination against people with disabilities
in employment, public services including public and private transportation, public accommodations and telecommunications services.

Support services for students with a disability are provided through the Disabled Student Services Program. Anyone needing information about our services for students with a disability should contact this office at (562) 938-4558 voice or (562) 938-4833 TDD.

Anyone with a question or a discrimination complaint should contact Irma Ramos, Director of Human Resources and Staff Diversity, 4901 E. Carson St., Long Beach, CA 90808 at (562) 938-4095.

**Sexual Harassment Policy Statement**

The Long Beach Community College District provides an educational, employment and business environment free of unwelcome sexual advances, requests for sexual favors, and other verbal, visual, or physical conduct or communications constituting sexual harassment, as defined and otherwise prohibited by state and federal statutes. Sexual harassment includes a prohibition against sexual harassment, gender harassment, and harassment based on pregnancy, childbirth, or related medical conditions. Sexual harassment is a violation of an individual’s civil rights and will not be tolerated.

Individuals with questions and/or a sexual harassment complaint should contact Irma Ramos, Director of Human Resources and Staff Diversity, 4901 E. Carson St., Long Beach, CA 90808 at (562) 938-4095.

**Section 504, Rehabilitation Act**

In compliance with Section 504 of the Rehabilitation Act, the District has developed a Disabled Student Services Program headed by Mark Matsui. He is located at 4901 E. Carson St., Long Beach, CA 90808. Anyone needing information about our program for students with a disability should contact this office at (562) 938-4558 voice or (562) 938-4833 TDD.

The Long Beach Community College District encourages the full participation of students with a disability in regular classes. The college offers support services to provide students with an equal educational experience. Disabled Student Services provides sign language interpreters, note-takers, readers, disability related counseling, test-taking accommodations, speech services, adapted equipment and a variety of other services.

Anyone with a question or a discrimination complaint should contact Irma Ramos, Director of Human Resources and Staff Diversity, 4901 E. Carson St., Long Beach, CA 90808, (562) 938-4095.

**Declaracion Del Cumplimiento De Los Derechos Civiles**

El distrito del colegio de la comunidad de Long Beach no discrimina en sus normas de admisión, programas educacionales, actividades o regulaciones de empleo en lo referente a raza, edad (más de 40 años), sexo, religión, descendencia, color, nacionalidad, incapacidad, condición médica, estado civil, orientación sexual o el ser veterano en la guerra de Vietnam o ser obligado a la Guardia Nacional o Las Fuerzas Reservas de los Estado Unidos. El distrito está sujeto a los artículos VI y VII del Acta de 1964 de los derechos civiles, el artículo IX de la enmienda educacional de 1972, el Acta de Rehabilitación de 1973 secciones 503, 504 y el Acta de Americanos incapacitados de 1990.

La falta de habilidad en la lengua inglesa no será una barrera para la admisión y participación en los programas del distrito.

Para preguntas o quejas de discriminación comunícese con Irma Ramos, Director of Human Resources and Staff Diversity, 4901 E. Carson St., Long Beach, CA 90808, (562) 938-4095.

**Artículo IX Prohibi La Discriminacion Sexual En La Educacion**

El distrito del colegio de la comunidad de Long Beach está comprometido a apoyar todas las reglamentación bajo el artículo IX que especifica que: Ninguna persona en los Estados Unidos, por condición de su sexo, tendrá que ser excluida de participar o serle negado los beneficios o ser sujeta a discriminación bajo ninguna operación que se lleve a cabo en una institución educacional que reciba fondos federales.”

Para preguntas o quejas de discriminación comunícese con Irma Ramos, Director of Human Resources and Staff Diversity, 4901 E. Carson St., Long Beach, CA 90808, (562) 938-4095.

**Americanos Con Incapacidad–Acta De 1990**

El Acta (ADA) de 1990 de Americanos con incapacidades prohíbe la discriminación contra personas con incapacidad en el trabajo, servicios públicos incluyendo transportes público y privados, alojamientos públicos y servicios de telecomunicación.

Se proveen servicios de ayuda para estudiantes con incapacidades mediante el Programa de Servicios Para Estudiantes Incapacitados. Para informarse de estos servicios, llame al (562) 938-4558 (Voz) o (562) 938-4833 TDD.

Para preguntas o quejas de discriminación comunícese con Irma Ramos, Director of Human Resources and Staff Diversity, 4901 E. Carson St., Long Beach, CA 90808, (562) 938-4095.

**Declaracion De Las Normas De Acosos Sexuales**

El distrito del colegio de la comunidad de Long Beach provee un ambiente para la educacion, el empleo, y el negocio que es libre de los avances sexuales indeseables, los pedidos por favores sexuales, y otro conducto verbal o físico o comunicación que constituyen el acoso sexual, conaco se define y se prohíbe en los estatutos estatales y federales estos prohíbe. El acosoimiento sexual y el acoszomiento basado en genero o en las candidious medicals relacionadas con la prenez o el parto.

Para preguntas o quejas de discriminación comunícese con Irma Ramos, Director of Human Resources and
Sección 504, Acta de Rehabilitación

De acuerdo con la Sección 504 del Acta de Rehabilitación, el distrito ha desarrollado un programa de servicios para los estudiantes incapacitados, dirigido por Mark Matsui. El está localizado en 4901 E. Carson St., Long Beach CA 90808. Cualquier persona que necesite información acerca de nuestro programa para estudiantes con incapacidades puede ponerse en contacto con esta oficina al (562) 938-4558 voz o (562)938-4833 TDD.

El distrito del colegio de la comunidad de Long Beach invita a los estudiantes con incapacidades a participar de lleno en clases regulares. El colegio ofrece servicios de apoyo para proporcionar a los estudiantes una experiencia educacional equitativa. Los servicios para los estudiantes incapacitados proporciona intérpretes de lenguaje por señas, tomadores de notas, lectores, consejos relacionados con incapacidad, adaptaciones para tomar exámenes de acuerdo a las necesidades de cada individuo, servicios de lenguaje, equipo adaptado, y una extensa variedad de otros servicios.

Para preguntas o quejas de discriminación comunicarse con Irma Ramos, Director of Human Resources and Staff Diversity, 4901 E. Carson St., Long Beach, CA 90808, (562) 938-4095.
**Learning Resources & Services**

**Libraries**
Libraries at each of the two main campuses have a combined collection of more than 150,000 volumes and are fully automated with an online catalog and computer-based literature searching available at each site. In addition to books, the collections include periodicals, pamphlets and various types of non-print materials, such as compact discs and audiocassettes. Librarians are available for assistance all hours the libraries are open and instruction in the use of library resources is offered at both campuses.

**Liberal Arts Campus**
Hours (fall and spring):
- Monday-Thursday: 7 a.m.-10 p.m.
- Friday: 7 a.m.-4 p.m.
- Saturday and Sunday: 10 a.m.-4 p.m.
For additional information or summer hours, call (562) 938-4232/4853.

**Pacific Coast Campus**
Hours (fall and spring):
- Monday-Thursday: 8:30 a.m.-9 p.m.
- Friday: 8:30 a.m.-2:30 p.m.
- Saturday: 10 a.m.-2 p.m.
- Sunday: CLOSED
For additional information or summer hours, call (562) 938-3028.

**PCC Learning Center**

**Pacific Coast Campus**
The PCC Learning Center provides personal learning assistance in reading, arithmetic, spelling, vocabulary and English at all levels. Using computers and a variety of teaching methods and materials, students can progress at their own speed.

The center is designed to aid students who:
- Plan to enroll or are enrolled in regular classes and need to improve or refresh their basic educational skills.
- Plan to take the college assessment tests or examinations for employment, special educational programs or equivalency diplomas (GED),
- Wish to review their basic education skills.

The center is open year round, and students may begin or complete their program at any time. Scheduling is arranged to meet the personal timetable of students. At the time of their first attendance, students will plan with the instructor their specific goals and hours.

The PCC Learning Center at the Pacific Coast Campus, Room GG129, is open: Monday – Thursday, 8:00 a.m. – 9:00 p.m. and Friday, 8:00 a.m.-2:00 p.m. For information, call (562) 938-3978.

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**Learning and Academic Resources Department**

**Center for Learning Assistance Services**
Liberal Arts Campus Pacific Coast Campus
North Wing of the L Building GG Building
(562) 938-4474 (562) 938-3991

The Center for Learning Assistance Services (CLAS) in the Learning and Academic Resources department offers a variety of programs to help students achieve their academic and occupational goals. For more information about CLAS services, check the LAR web page at http://lar.lbcc.cc.ca.us.

**Learning and Study Skills**
Skills to enhance learning, such as test taking and note taking, are taught in a variety of ways. Study skills assistance is offered through a series of free workshops. Learning skills are taught through individualized instruction or learning skills courses, such as LEARN11.

**Media Materials**
At the Liberal Arts Campus, CLAS houses the videotape collection for televised instruction courses which may be viewed in the Center. Music CDs are available for students who have listening exercises required by their music class. CLAS also maintains a large teacher reserve section for instructors who would like to have media materials available for their students.

**Tutoring**
Tutoring is offered in a variety of college subjects, including accounting, biology, chemistry, physics, foreign languages and math. Students work individually and in small groups. Interested students should inquire in person in Room L119 at LAC or GG116 at PCC.

**Open Access Computer Lab**
Both Macintosh and Gateway PC computers, software, laser printers and Internet access are available to students in a large open-access computer lab on the second floor of the L Building at LAC. Interested students may obtain information about the lab policies and services by visiting the facility.

An open access computer lab with a mix of Macintosh and Gateway PC computers with laser printers and Internet access is available in GG113 on the Pacific Coast Campus. For information on the lab hours and policies, students may visit the lab.

**Instructional Technology Student Support Center**
A technology support center for students using multimedia technology as a component of their courses is available in room L135 at the Liberal Arts Campus. Students can receive assistance with their computer-based projects. Both Macintosh and Gateway PC computers with a wide variety of software are available. Web-based supplemental instruction is also available in the Center.

**Computer Proficiencies for Academic Success**
The Learning and Academic Resources department offers courses designed to teach students the computer skills they will need to succeed in their academic classes. Both introductory (CPAS 1 and LEARN 617) and
advanced (CPAS 10) computer skills courses are offered.

Supplemental Instruction
Supplemental Instruction (SI) services in selected courses offers organized discussion sessions designed to help students master course concepts and improve relevant learning skills. Regularly scheduled discussion sessions are conducted by trained SI Leaders in selected course sections. Students should check the schedule of classes to determine which courses offer supplemental instruction.

Computer & Office Technologies Self-Paced Classrooms
Pacific Coast Campus
Register at any time during the semester. Please see Schedule of Classes for specific deadlines for each course.

AA202
Courses are offered are Beginning Keyboarding/Typewriting using Microsoft Word, Microsoft Excel (Beginning, Intermediate and Advanced), Microsoft Office Exam Prep-Excel, Internet for Office and Personal Use, Business Calculating Machines, Filing A and B, Business English, Business Telephone Procedures, Customer Service, Call Centers, Customer Conflict Management, Job Search Skills, Professional Development, Keyboarding, and Desktop Publishing—Small Business using Microsoft Publisher (Beginning and Advanced).

Hours of Operation
Phone No. (562) 938-3033
Monday-Thursday, 8:00 a.m.-8:00 p.m.
Friday, 8:00 a.m.-4:00 p.m.
Saturday, 8:00 a.m.-noon

AA205

Hours of Operation
Phone No. (562) 938-3035
Monday-Thursday, 8:00 a.m.-2:00 p.m.
Tuesday and Thursday, 5:00-9:00 p.m.

AA206
The comprehensive Microsoft Office course (Word, Excel, PowerPoint, and Access) provides an opportunity for students to explore the most widely-used features of the suite. Microsoft Word (Beginning, Intermediate, and Expert) and Corel WordPerfect (Beginning, Intermediate, Advanced, and Expert) courses provide students with the broad background necessary for success in a variety of office environments. Other courses include Microsoft Windows Operating Systems (Beginning and Advanced), PowerPoint (Beginning and Advanced), Proofreading, Microsoft Office Exam Prep for Word (Core and Expert) and PowerPoint (Core and Expert).

Hours of Operation
Phone No. (562) 938-3032
Monday-Friday (closed Wednesday) 9:00 a.m.-2:00 p.m.
Monday and Wednesday 5:30-9:30 p.m.
Tuesday 5:15-9:15 p.m.

Liberal Arts Campus
M107/M109
Beginning and advanced courses help the student develop computer skills through a combination of short scheduled lectures and computer practice at the student’s own pace. Courses provide training in Microsoft Windows Operating System (Beginning and Advanced), Microsoft Word (Beginning, Intermediate, Advanced and Expert), Microsoft Excel (Beginning, Intermediate and Advanced), Microsoft Access (Beginning and Intermediate), Microsoft PowerPoint (Beginning and Advanced), Speed and Accuracy Building for Typists, Computer Keyboarding, and Microsoft Office Exam Prep for Access, Excel, PowerPoint and Word.

Hours of Operation
Monday, Wednesday, and Friday 8:00 a.m.-3:00 p.m.
Tuesday and Thursday 5:00-9:00 p.m.
Saturday 9:00 a.m.-1:00 p.m.
Phone Numbers: (562) 938-4064, 938-4061, 938-4461

Writing and Reading Center
Liberal Arts Campus and Pacific Coast Campus
The Writing and Reading Center offers a wide range of materials and instruction to help students improve their language skills: writing, grammar, punctuation, usage, spelling, vocabulary and reading. Help is also available in techniques for writing research papers and the analysis of literature. Qualified certified instructors and peer tutors are on duty to help students on an individual basis.

The Writing and Reading Center at the Liberal Arts Campus is located in the north wing of the Library in L149. At the Pacific Coast Campus, the Writing and Reading Center is located in Room GG129. For additional information, call (562) 938-4520.

Aviation Learning Center
Liberal Arts Campus
The Center provides videotapes and computer-based instruction to students enrolled in aeronautics courses. Subjects available include private pilot, instrument rating, commercial pilot, multi-engine rating, flight and ground instructor and airline transport pilot. Flight training devices (single and multi-engine airplane simulators) are also located in the center for the use of students enrolled in simulator flight training classes.

The Aviation Learning Center is located in Room Z111. For additional information, call the Center at (562) 938-4387.

Life Science Learning Center
The Life Science Learning Center offers a wide range of audiovisual materials and books to assist students in learning the concepts taught in Biology, Anatomy, Physiology and Health Education courses. The Life Science Learning Center also provides a “hands-on” experience for the student through the use of scientific models, microscopes and plant and animal specimen
collections. In addition, Macintosh computers with CD-ROM drives and a printer are available. A collection of software and courseware are provided for student use in the Learning Center. Internet access is also available.

The Life Science Learning Center is located in D214. The Center is open during posted hours.

**Foreign Language Multimedia Learning Center**

*Liberal Arts Campus*

The Foreign Language Learning Center offers technological and linguistic support in a multimedia environment for students enrolled in foreign language classes. The Center also operates as an open access lab to support computer-assisted learning.

The Center is open Monday-Thursday from 8:00 a.m.-8:00 p.m., Fridays, 8:00 a.m.-2:00 p.m. and Saturdays, 9:00 a.m.-2:00 p.m. For additional information, please call (562) 938-4331.

**Mathematics Learning Center**

*Liberal Arts Campus*

The Math Learning Center houses state-of-the-art computers to provide students with a broad range of educational tools. With PC workstations, students can access a variety of software that includes word processing, graphics, spreadsheets, statistics, Geometers’ Sketchpad and Mathematica. Software is available that corresponds with many of the math textbooks to allow additional practice opportunities for students. Students can also use the computer labs for engineering courses, such as C++ and Engineering Graphics.

The Math Learning Center provides free peer tutoring to students registered in any math course offered at LBCC. In addition, students can arrange to meet others enrolled in the same course for informal group study or a study room can be reserved. Chemistry and physics tutors are also available. Math faculty are on hand for supplemental instruction.

The Math Learning Center is located in D103. Hours of operation are from 9:00 a.m.-8:00 p.m. Monday through Thursday, from 9:00 a.m.-4:00 p.m. Friday, and from 12:00 p.m.-4:00 p.m. Saturday. Students are invited to use the Math Learning Center facilities on a drop-in basis throughout the semester.

**Nursing and Allied Health Learning Center and Skills Lab**

*Liberal Arts Campus*

The Nursing and Allied Health Learning Center provides supplementary material and skills practice for students enrolled in a nursing and/or allied health course. A variety of self-paced, print media, multimedia programs and skills equipment are available

The center is located in Room C201 and is open during posted hours. For additional information, call (562) 938-4299.
Faculty Office Hours

All full-time faculty hold five regularly scheduled office hours per week. Ask your instructors for their hours and office location.

Class Syllabus

All instructors are required to publish a course information sheet and distribute it no later than the end of the second week of classes. A copy must be kept on file in the office of the school to which the department belongs. The information sheet must contain a brief course description, including goals or purpose, grading standards for the class, a description of the means by which the course is to be taught, attendance requirements, and office location and hours for full-time faculty. Other recommended items are: exam dates, text, assignments and outline of topics.

Student Attendance

Attendance is the responsibility of the student. Students not attending the first class session may be dropped from the class at the discretion of the instructor. In the event of excessive absences, the instructor may drop a student from a course or may lower a student’s grade. Students who are absent in excess of 20 percent of the total class hours or for two consecutive weeks shall be dropped from class. The grade assigned by the instructor upon dropping a student for non-attendance shall be in accordance with Regulation 4020.3. Such students may be reinstated only at the discretion of the instructor for extenuating circumstances.

Extenuating circumstances shall be defined as reasons for absence beyond the control of the student. Typical examples of such circumstances would be extended illness, hospitalization, court appearances or death in the immediate family.

Auditing of Classes

An “auditor” shall mean a person who attends a course but is not regularly enrolled, and does not receive credit or a grade for the course. To be eligible to audit, a person must be currently enrolled in at least one other course.

Students may enroll as an auditor by permission of the instructor only. The level of auditor participation in a class shall be subject to the ongoing discretion of the instructor. Students may audit a specific course only once and shall be limited to auditing two courses per term. Audited units shall be included in determining student unit load maximums. However, audited units shall be excluded in determining student status for credit unit load for purposes such as financial aid, scholarships and athletic eligibility.

All official restrictions to enrollment shall apply to auditors, including placement and prerequisite requirements. Priority in class enrollment shall be given to students taking the course for credit. Auditors may enroll only after the conclusion of the open and “by petition” enrollment period and before the end of the fourth week of class for an 18-week course or equal percentage of the course length.

The fee for auditing a class shall be $15 per unit and any materials fees that are ordinarily required for the course. Students enrolled in classes to receive credit for ten or more units shall not be charged a fee to audit three or fewer units per semester. Fees are to be paid before auditing the course, and fees are non-refundable.

Auditors shall not be permitted to change their enrollment status in order to receive credit for the course. Regularly enrolled students may not change to audit status. Auditors shall not be permitted to earn credit by examination for an audited course.

Grading Regulations

Grading System - Final grades are issued after the end of the semester or summer session in which the class ends. Grades will be mailed to the last known address after the grades are posted. The significance of grades is as follows: “A,” excellent; “B,” good; “C,” satisfactory; “D,” passing but less than satisfactory; “F,” failing; “W,” withdrawal; “MW,” military withdrawal; “CR,” credit (at least satisfactory-units awarded not counted in G.P.A.); “NC,” no credit (less than satisfactory-units not counted in G.P.A.); “RD,” report delayed. Courses numbered in the 600-band do not award a grade.

Make-Up Grades for Incomplete Work

Permission for making up incomplete work may be granted when unforeseeable emergencies and justifiable reasons cause the student to be unable to complete the academic work by the end of the course. It is the responsibility of the student to initiate the request for the incomplete, but the “I” grade is assigned at the instructor’s discretion.

The instructor gives the grade of “I” and indicates the grade to be assigned in the event the student does not complete the required work within one year from the end of the term in which the “I” was assigned. The grade must be “A,” “B,” “C,” “D” or “F” except that “CR” and “NC” grades may be assigned where the course provides for grading on this basis and the student has elected to be graded on the CR/NC basis by the appropriate deadline. This grade shall be based on the total requirements for the course and a grade of “W” may not be assigned.

The necessary make-up work and any other conditions required for the student to complete the course shall be filed in the Records Office by the instructor in writing. The Records Office shall make a reasonable attempt to provide the student with a copy. The student must complete the course within one year from the time the original grade is assigned. If upon completion of the course the grade is to be different than originally recorded, the instructor shall file the appropriate grade change with the Records Office. If the course is not completed within the one-year limitation, the originally recorded grade becomes final. Petitions to change these grades or to exceed the one-year make-up period must first be approved by the instructor and then submitted to the Grade Review Committee for final disposition.

Withdrawal - The grade of “W” shall be assigned for withdrawal from a class or classes in accordance with the schedule below for both a student-initiated withdrawal and instructor-initiated drop. One exception is when a
student is required to leave a class for reasons of academic dishonesty; then a grade of “F” may be given. Another exception is for military withdrawal, in which an “MW” is assigned.

1. **Students withdrawing or being dropped** after the final limit for “W” must be assigned a grade of “A,” “B,” “C,” “D,” “F,” “MW,” “CR” or “NC.” The grade assigned shall be based on the total semester requirements for the course.

2. **Classes of nine weeks to full semester in length** - If the date of last attendance is within the first two weeks of the class, the grade recorded must be “NA.” If the date of last attendance is between the beginning of the third week and the end of the deadline week, then the recorded grade must be a “W.” After the deadline week a letter grade other than “W” must be assigned and must be based on the total course requirements.

<table>
<thead>
<tr>
<th>Class Length (Weeks)</th>
<th>Deadline Week</th>
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<tbody>
<tr>
<td>Semester (17.5-19)</td>
<td>14</td>
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<td>17</td>
<td>14</td>
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<td>16</td>
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3. **Classes of less than three weeks in length** - If the date of last attendance is the first class meeting, the grade recorded must be a “W” which will automatically be converted to an “NA” and will not be recorded on the transcript. If the date of last attendance is between the first and last class meeting, the grade recorded must be a “W.” A letter grade other than “W” must be recorded if the student attends the last class meeting.

4. **Classes meeting longer than a full semester (18 weeks)** - If the date of last attendance is within the first two weeks, the grade recorded is a “W” which will automatically be converted to an “NA” and will not be recorded on the transcript. If the date of last attendance is between the beginning of the third week and the end of the week that represents 75 percent of the term length rounded off to the nearest whole week, the recorded grade must be a “W.” After this time, a letter grade other than “W” must be assigned based on the total course requirements.

5. **For classes involving fractional weeks**, like the 5.5 week summer session, use the next lower whole number (five in this example) and apply the above rule.

6. **Students may petition for a “W” grade after the final limit for “Ws” only for extenuating circumstances beyond the control of the student**, such as verified accident or illness. Petitions must be reviewed and approved by the Grade Review Committee.

**Military Withdrawal** - The grade of “MW” may be assigned to students who are members of an active or reserve military service and who receive orders compelling a withdrawal from classes. Upon verification of such orders, the grade of “MW” may be assigned at any time from the beginning of the period that “Ws” may normally be assigned, through the end of the course. The “MW” grade shall in no way adversely affect a student's academic record. The “MW” grade shall not be counted in completion ratio or GPA calculations. The grade of “MW” may be applied as appropriate retroactively to January of 1990.

**Grade Points**

A system of grade points is used to determine a student’s standing for graduation or transfer. Grade points are assigned to the respective scholarship grades as follows:

- For each unit of credit, the scholarship grade of “A” is assigned 4 points; “B,” 3 points; “C,” 2 points; “D,” 1 point; “F,” 0 points. CR (credit) and NC (no-credit) units are not counted in one’s GPA.

**Change of Grades**

A student who believes a final grade to be incorrect may file a “Request for Change of Grade” form obtained from the office of Admissions and Records. All requests for grade change should be made by the student, in writing, within two years after the end of the semester in which the grade in question was earned. In the absence of the instructor, the request shall be referred to the Grade Review Committee.

**Open Entry/Open Exit Courses**

Students completing 0-29 percent of the work or time required in an open entry/open exit course will be given an “NA” grade. Students completing 30-74 percent of the work or time required will be assigned a “W” grade. The “W” will be included in completion ratio calculations. Students completing 75 percent or more of the work or time required will be assigned the grade earned, i.e., “A,” “B,” “C,” “D,” “F,” “CR” or “NC.” The exception to this is the grade of “MW.”

**When Grades are Awarded**

If the last day of a scheduled class falls within a term (fall, spring or summer), credit shall be awarded in the term in which the class ends. If the last day of a scheduled class falls between terms, credit shall be awarded in the subsequently scheduled term unless prior arrangements are made through the department offering the class.
Repetition of Courses

Credit courses that may be repeated fall into two categories, those that may be repeated only once under certain conditions and those that may be repeated up to three times (meaning a course may be taken a total of four times).

A. All courses except those indicated in section B may be repeated only once and only under one of the following conditions:

1. A course may be repeated provided that a grade of D, F or NC has been recorded. For all course repeats in which a grade of D, F or NC has been recorded, the grade of the repeated course (the second enrollment), whether higher or lower, will be used in lieu of the earlier course grade for determining the grade point average. Unit credit is allowed only once. Neither credit nor grades shall be allowed for unauthorized repeats. The grade for the earlier course and the repeated course shall both be recorded on the student’s permanent record, insuring a true and complete academic history.

2. A course may be repeated when a grade of B, C or CR has been recorded provided the district finds that the previous grade was the result of verified cases of accidents, illness or other circumstances beyond the student’s control. Students desiring to repeat a course under this section must have prior approval from the Grade Review Committee before reenrolling in the course. Application for such approval must be made in writing to the Dean, Admissions and Records, and must be supported by documentation that will verify the extenuating circumstances and must include a statement from the instructor of record (or department head if the instructor is unavailable) indicating that the recorded grade was lower than it might otherwise have been, had the extenuating circumstances not arisen.

3. A course may be repeated when a grade of A, B, C or CR has been recorded provided that a minimum of two semesters has elapsed since the student previously took the course for any course numbered 1-99, except for Directed Study. For all courses numbered 100 or higher, excluding 600 band courses, one semester must have elapsed. In either case, the District has determined the student would benefit by repeating the course in order to ensure that the student’s knowledge is current. For course repeats in which a grade of A, B, C or CR has been recorded, the grade of the repeated course (the second enrollment) shall not be counted when calculating a student’s grade point average. The grade of the earlier course and the repeated course shall both be recorded on the student’s permanent record, insuring a true and complete academic history. Unit credit is allowed only once. Neither credit nor grades shall be allowed for unauthorized repeats.

B. Certain courses may be repeated up to a maximum of three times for a total of four enrollments regardless of the grades earned. These courses are identified in the college catalog and in the schedule of classes. They include courses in which skills or proficiencies are enhanced by supervised repetition and practice within class periods or those in which active participatory experience in individual study or group assignments is the basic means by which learning objectives are met. All grades earned for the authorized repeats shall be counted toward the grade point average and these courses are not subject to the repeat rules of Section A. These courses are designated with a fixed course number followed by letters indicating the number of semesters the course may be taken for credit. The letters following the course number are not separated by a hyphen. (Example: “AB” = 2 semesters, “AC” = 3 semesters, “AD” = 4 semesters) For example, Journalism 85AD may be taken a maximum of four times. All grades and units earned in these types of courses are counted.

C. It shall be the student’s responsibility to ensure that the repetition of a course is authorized by these regulations. Any student who is determined to be repeating a course when not authorized to do so shall be administratively removed from the class and any fees or tuition paid may be forfeited. Any grades or credit submitted for unauthorized repeats shall be disallowed.

D. Credit by examination is not subject to the course repetition rules.

E. Courses in the 600-number band (non-credit courses) are not subject to the course repetition rules.

Academic Renewal

The purpose of academic renewal is to alleviate a portion of a student’s prior substandard academic work when such performance does not reflect current demonstrated ability. Students wishing to alleviate prior work must petition the Dean, Admissions and Records, in writing, for the alleviation of substandard grades under the following conditions:

A. The student must have completed 45 units of work at Long Beach City College with at least a 2.0 cumulative GPA subsequent to the work to be alleviated.

B. Work to be alleviated shall be on a semester (or term) basis with all work for the designated semester to be ignored in determination of the requirements for graduation, including GPA, field of concentration, honors, general education and units. Any work thus ignored, which would otherwise meet a particular requirement, will have to be fulfilled by retaking a course or by other legitimate means.

C. A maximum of two semesters (or terms) may be thus alleviated.

D. Academic renewal may be applied only at the time of application for graduation.
E. Work to be alleviated must have been recorded at least five years prior to the intended date of graduation.

F. All course work alleviated shall remain on the official record. The transcript shall be appropriately annotated to indicate that academic renewal has been applied, including the specific semester(s) (or terms) that were ignored.

**Academic and Progress Probation**

A. A student shall be placed on probation whenever the student’s academic record indicates any of the following conditions:

1. The student’s grade point average falls below 2.0 (C) in all units graded over the 4.0 grading scale after the student has attempted more than 12 units at Long Beach City College.

2. After enrolling in a minimum of 12 units at Long Beach City College, the student has completed fewer than one-half of all units in which the student has enrolled as reflected in the academic record.

B. For the purposes of section A.2, the entries of W, NC and I are counted as incomplete work while entries of A, B, C, D, F and CR are counted as complete.

C. Students on academic and/or progress probation shall be subject to Counseling Intervention. Counseling Intervention shall include the following provisions:

1. Meeting with a counselor in the Counseling Department, DSPS or EOP&S;

2. Completing a student “Strategy for Success” contract and/or an Education Plan;

3. Being limited to a maximum of 12 units each semester until the student is off probation; and

4. Completing the sequence of basic skills courses in the Education plan.

D. Any student on probation shall be reclassified as “satisfactory” whenever the cumulative grade point average reaches or exceeds 2.0 (C) and the ratio of units-completed to units-enrolled is one-half or better based on the number of units indicated in section A above.

**Academic and Progress Dismissal**

A student on probation for at least two semesters and who has not completed the Counseling Intervention and made up the deficiencies in the student’s academic record as outlined in the probation section shall be dismissed from Long Beach City College unless satisfactory progress is indicated during the semester in which the dismissal should normally occur. Satisfactory progress is defined as follows:

A. In the case of academic dismissal, the student must complete at least three units during the semester with a semester grade point average of at least 2.0.

B. In the case of progress dismissal, the student must enroll in at least three units during the semester. If enrolled in 3 to 5.5 units, the student must have a 1.00 completion ratio (complete all units). If enrolled in six or more units, the student must have a completion ratio of at least .80 (four-fifths).

Academic dismissal shall occur only at the end of the Spring semester.

**Readmission After Dismissal**

A. If a student is dismissed from the college and at the time of dismissal has not completed the Counseling Intervention, the student will not be readmitted to the college for at least one full year, consisting of Fall, Spring and Summer, in that order.

B. Only students who have completed Counseling Intervention may petition for readmission immediately after dismissal.

C. Students desiring to return after one year of dismissal must complete a readmission petition, which is reviewed by the Readmission Committee.

D. A dismissed student who is readmitted shall be readmitted as a student on probation and shall be subject to further readmission restrictions and dismissal in accordance with this policy.

**Scholarship**

Long Beach City College acknowledges outstanding student scholarship in three ways: on the Dean’s Honors List, in the graduation ceremonies and through a scholarship honor society. “Outstanding Scholarship” is classified in the following ways:

1) Scholarship with Honors 3.500-3.749 GPA

2) Scholarship with Distinction 3.750-3.999 GPA

3) Scholarship with Great Distinction 4.000 GPA

**Dean’s List**

Students on the Dean’s List are recognized at the close of each semester on a posted list and with a personal letter. To be eligible for the Dean’s List, a student must meet the following requirements:

Either: All students with 12 or more units attempted* that semester with 75 percent or better overall completion ratio who maintain the necessary semester GPA to qualify for “outstanding scholarship” described above.

Or: All students with 6 to 11.9 units attempted that semester with both a 75 percent or better overall completion ratio and an overall cumulative GPA of at least 3.50 in 12 or more previously earned units (including the current semester at Long Beach City College) and who maintain the necessary semester GPA to qualify for “outstanding scholarship” described above.

*Note: Units attempted are shown on the grade slip and are classes with grades of “A,” “B,” “C,” “D” or “F.” A
class taken for a grade of “CR” or “NC” does not count in computing the number of units attempted.

Scholarship Society (A.G.S.)
Long Beach City College has two chapters of Alpha Gamma Sigma, the California Community College honor scholarship society. Students eligible for the Dean’s List are encouraged to apply for membership. Students with a 3.0 overall cumulative GPA in 12 or more units are also eligible for membership.

Kappa Chapter is located at the Liberal Arts Campus. Information and applications are available in Room M226. Delta Chi Chapter is located at the Pacific Coast Campus. Information and applications are available in the Student Affairs Office.

Honors at Entrance
High school graduates are accorded “Honors at Entrance” as a form of recognition for outstanding scholarship. To be eligible, the graduate must have earned a 3.5 GPA or better and must have matriculated to LBCC.

Honors at Graduation
Students graduating with outstanding scholarship are recognized during the graduation ceremony and in the commencement program. To be eligible for honors at graduation, a student must have a cumulative overall GPA based on all college work applied to the degree, no matter where completed, that qualifies for “outstanding scholarship” as described above.

Course Credit & Class Preparation
To earn one unit of credit in a lecture class, you must spend one hour each week, for 18 weeks, in a lecture class session. In addition, you are expected to devote a weekly average of two hours in outside-of-class preparation for each one hour of lecture class time.

To earn one unit of credit in a laboratory, demonstration or practice situation class, you must spend three hours each week, for 18 weeks, in a class session. Some additional outside-of-class preparation will be expected.

For work experience classes, one unit of credit represents 75 hours of paid employment or 60 hours of volunteer work per semester.

Credit/No Credit Courses and Grading
Students may petition to take course(s) on such a basis, rather than for a letter grade. Students choosing this option must complete and submit a Credit/No Credit Option Request Form (available in the Admissions Office), following the instructions on the form, before the term is 30 percent complete (sixth week for semester-long courses).

Students are required to do all work assigned and take examinations as though they were getting a grade. To receive credit, a student must do the work equivalent to a “C” grade or better. Students seeking an associate degree are limited to 20 units on a credit/no credit basis. All courses not applicable to the degree (courses in the 800-band) shall be graded credit/no-credit.

Method of Evaluation
Although courses taken on a credit/no-credit basis do not affect the grade point average at Long Beach City College, the student should consult the catalog of the school to which she/he intends to transfer to determine its policy. Some universities apply the same criteria as Long Beach City College; others count the no-credit (NC) grade as an “F” grade (as do some with an unresolved incomplete) and still others count the credit grades as “C” grades in establishing the total grade point average. The method of evaluation is subject to change. At the time this catalog was published, the method for evaluation (grading) for each course is listed in the catalog description.

Maximum Student Unit Load
The full-time unit load definitions for a regular academic semester are as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Full-time Unit Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Minimum full-time unit load: 12 units</td>
<td></td>
</tr>
<tr>
<td>B. Normal full-time unit load: 15 units</td>
<td></td>
</tr>
<tr>
<td>C. Maximum full-time unit load with waiver: 21 units</td>
<td></td>
</tr>
</tbody>
</table>

For students with good academic standing, i.e., students who are not on any form of probation, the maximum full-time unit load definitions for any one or combination of summer terms are as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Full-time Unit Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Minimum unit load for full-time summer status: 6 units</td>
<td></td>
</tr>
<tr>
<td>B. Maximum full-time unit load: 10 units</td>
<td></td>
</tr>
<tr>
<td>C. Minimum unit load for half-time summer status: 3 units</td>
<td></td>
</tr>
</tbody>
</table>

The requirements by residency category are as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Full-time Unit Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Residents of California may enroll for up to the maximum full-time unit loads, as stated, during the academic year and summer school.</td>
<td></td>
</tr>
<tr>
<td>B. Non-residents (unless restricted by visa) may enroll for up to the maximum full-time unit loads, as stated, during the academic year and summer school and must pay non-resident tuition.</td>
<td></td>
</tr>
<tr>
<td>C. High School Students</td>
<td></td>
</tr>
</tbody>
</table>

During the academic year eligible high school students may enroll in a maximum of 11 units. During the summer school session eligible high school students may enroll for up to the maximum summer school full-time unit load. High school students who have completed at least the tenth grade may attend with permission of the high school principal and their parent or legal guardian. Students must have a certified grade point average of 3.0 for academic courses and a 2.0 for vocational courses.
Waiver of Maximum Unit Load Limitation

A. A student may request a waiver of maximum unit load limitation, except for the summer session. Under no circumstances will a student be permitted to exceed the defined maximum unit load limitation with waiver. The determination to waive the maximum unit load limitation is the responsibility of the Counseling Department and will be made only for extraordinarily capable students of proven academic ability and excellent past academic performance.

B. To apply for a waiver, a student must meet the following regulations:

1. The student must be matriculated so that his or her college placement examination scores, transcripts of previous academic performance and other pertinent data are available to the counselor.

2. The student must apply to the Counseling Office for a waiver no later than two weeks prior to the first day of walk-in registration for the semester concerned. A waiver request after the two-week deadline requires the approval of the Dean, Counseling and Student Support Services.

C. The Vice President, Student Planning & Research Support, reserves the right to grant special waivers in unusual circumstances.

Students enrolled in more units than permitted for his or her classification by these regulations will have his or her program of studies reduced to the applicable allowable maximum by the Dean of Admissions and Records or designated representative.

Credit by Advanced Placement

Long Beach City College recognizes the Advanced Placement Program of the College Entrance Examination Board. Course credit is granted for Advanced Placement examinations with a score of three, four or five in those instances in which the department concerned has determined that the material covered is comparable to a specific course offering within that department.

Advanced Placement credit is granted for fulfillment of Long Beach City College degree requirements. However, when a student transfers to any other college or university, that institution routinely re-evaluates advanced placement units in accordance with its own internal policies. Thus, advanced placement units remain intact and do not transfer as Long Beach City College courses. Unless otherwise stated, credit is awarded for an AP test score of three, four or five. The number in parentheses after each course is the number of units awarded. Courses numbered 99 in the following table are elective credit.

<table>
<thead>
<tr>
<th>AP Courses and AA/AS Degree General Education Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AP Examination</strong></td>
</tr>
<tr>
<td>Art History</td>
</tr>
<tr>
<td>Biology</td>
</tr>
<tr>
<td>Calculus AB</td>
</tr>
<tr>
<td>Calculus BC</td>
</tr>
<tr>
<td>Comparative Government/Politics</td>
</tr>
<tr>
<td>Computer Science A</td>
</tr>
<tr>
<td>Computer Science AB</td>
</tr>
<tr>
<td>English (Language and Composition and/or Literature and Composition†)</td>
</tr>
<tr>
<td>European History</td>
</tr>
<tr>
<td>French Language</td>
</tr>
<tr>
<td>French Literature</td>
</tr>
<tr>
<td>German Language</td>
</tr>
<tr>
<td>Latin/Vergil</td>
</tr>
<tr>
<td>Latin/Catullus, Horace</td>
</tr>
</tbody>
</table>

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Macro-economics  ECON 1AP (3)
Micro-economics  ECON 1BP (3)
Music Listening and Literature Music 40P (3) and MUSIC 99P (3)
Music Theory  Music 1P (5) and MUSIC 99P (1)
Physics B  PHYS 99P (4) with an AP score of 3
Physics 2AP (4) with an AP score of 4
Physics 2AP (4) and PHYS 2BP (4) with an AP score of 5
Physics C Mechanics  PHYS 2AP (4) with an AP score of 3
Physics 3AP (5) with an AP score of 4 or 5
Physics C Electricity/ Magnetism  PHYS 99P (4) with an AP score of 3
Physics 3BP (4) with an AP score of 4 or 5
Psychology  PSYCH 1P (3)
Spanish Language  SPAN 4P (5) and SPAN 99P (1) with an AP score of 5
SPAN 3P (5) and SPAN 99P (1) with an AP score of 4
SPAN 99P (6) with an AP score of 3
Spanish Literature  HUMAN 99P (3), to fulfill GE Humanities requirement and SPAN 99P (3)
Statistics  STAT 1P (3)
Studio Art - General  ART 9P (3)
Studio Art - Drawing  ART 15P (3)
United States Government/ Politics  POLSC 1P (3) - To receive credit for POLSC 1P, student must take POLSC 48 (1), which covers California government and which may be taken Credit by Exam.
United States History  HIST 10P (3)

**High School Articulation Project**

Long Beach City College (LBCC) is involved in the High School Articulation Project, which is a joint program with local high schools primarily in the Long Beach Unified School District (LBUSD) and the Long Beach Regional Occupational Program (ROP). The aim of the High School Articulation Project is to assist students to move seamlessly from high school to LBCC. Students interested in completing articulated courses must adhere to the criteria set forth by both the LBUSD/ROP and LBCC faculty.

**Note to students with Advanced Placement (AP) credit.** Students who obtain an AP-Articulation Certificate and who also complete an AP exam for the same course/s and receive passing scores as stated in the LBCC catalogue may only qualify to receive AP credit as specified in the LBCC catalogue.

Students who have received a high school/ROP Articulation Certificate and/or have questions regarding current agreements must contact the Office of School and College Articulation at (562) 938-4469.

**Credit by Examination**

Credit by Examination is a provision whereby a student who is enrolled in the college and is in good standing may, with departmental approval, take an examination for credit in a specific course. The student must have completed at least 12 semester units at Long Beach City College and have the prior approval of the department head and school dean before being allowed to take the examination for credit. Exceptions to the 12-unit limitation must be approved by the office of the School Dean. For courses identified in the High School Articulation Project as eligible for Credit by Examination, the 12-unit limitation does not apply. In all cases, courses eligible for Credit by Examination will be determined by the department.

A. In addition, the department concerned also determines specific standards of student eligibility.

B. The method of evaluation, including a copy of any written exam or a description of its contents, must be approved by the department and kept on file in the department and the office of the School Dean.

C. Students who take an exam for credit will be given the grade earned. For high school articulated courses, they will be given the grade earned or receive a “Credit” depending on the method of grading for the course; if they do not pass the examination, there will be no notation made on the transcript and no credit awarded. Units earned through Credit by Examination may not be counted toward the 20-unit residence requirement for the associate degree.

D. A fee will be charged to take Credit by Examination. The fee will be waived for participants in the High School Articulation Project.

**Credit by Directed Study Program**

The Directed Study Program provides challenge for the talented student. It allows the student in-depth study on any approved topic within a subject area. The following are the basic elements of the program:

1. Students must have earned at least a cumulative 3.0 (B) grade point average.

2. Students must have completed 24 units, at least 12 of which must be earned at Long Beach City College. Credit applied from other colleges must be supported by official transcripts on file with the Records Office.
3. Prior approval of the faculty mentor (the faculty member who directs the study), Department Head and School Dean must be obtained before commencing work on the project under the mentor’s direction. Failure to do so may result in denial of credit for the project.

4. Directed Study may not parallel or equate with work in an approved course within the department. It is expected that Directed Study is of an advanced nature and goes beyond the treatment in an approved course or series of courses. Work involving simply the production of a book report or term paper is not deemed an appropriate project.

5. While the student’s work is of an autonomous nature, it is expected the student will meet at regular intervals with his/her faculty mentor to discuss progress and seek guidance and direction.

6. The product of the directed study will be a written report or an equivalent project that demonstrates an amount of work equal to an approved course of the same number of units—54 hours of work for each unit of credit earned.

7. The project will be evaluated on a standard comparable to that used in the courses within the department granting the credit. The project will be evaluated by the faculty mentor and kept on file in the department office. The completed form will be forwarded through the approval process.

8. One to three units of credit will be granted upon satisfactory completion of a project. Each unit of credit shall be equal to 54 hours of work.

9. Units will be placed on the student’s transcript as Directed Study 99 in the subject matter area.

10. The student shall earn no more than six units in directed study courses.

**Statement of Policies for Transfer Credit, Advanced Placement and Credit by Examination for the Associate Degree Nursing Program**

**General Policy:**
Candidates for transfer credit, Credit by Examination and Advanced Placement must meet the same general entrance requirements as all regular students at Long Beach City College. Acceptance into the Associate Degree or Vocational Nursing program is a prerequisite (see the curriculum guides in this catalog or in the Counseling Office for more specific information) for transfer, Credit by Examination and Advanced Placement.

**Transfer Credit:**
Credit for nursing courses taken at an accredited school of nursing (RN and VN) will be granted upon the following conditions:

1. Candidates must qualify for admission as listed in the general policy statement.

2. Candidates must be recommended by previous school of nursing.

3. Course work must have been completed within the last three years.

4. Credit will be given for nursing courses comparable to those offered at Long Beach City College. Credit will be given for science courses comparable to those offered at Long Beach City College or applicant must complete the following science courses at Long Beach City College:
   - Biology 60 - Human Biology I
   - Biology 60L - RN only
   - Biology 61 - Human Biology II (RN only)
   - Biology 62 - Human Biology III (RN only)

5. Credit for General Education courses will be granted according to the college policy.

**Advanced Placement:**
Qualifying students will be granted Advanced Placement upon completing the following conditions:

1. All students must qualify for admission as listed in the general policy statement.

2. Request advanced placement in a specific course, in writing, within the first week of that course.

3. Achieve 75 percent on a written objective examination covering the material in that course.

4. Satisfactorily pass a clinical performance examination for that course.

5. Advanced placement for the clinical portion of a course is determined by the individual teaching team.

**Advanced Placement: LVN to RN (Career Ladder)**
Licensed Vocational Nurses seeking advanced placement into the Registered Nursing program are urged to review the curriculum guide in this catalog and available in the Counseling Office.

**Credit by Examination (Challenge Option):**
Both Nursing Departments follow the college policy for granting Credit by Examination. Applicants with previous nursing experience must qualify for admission as listed in the General Policy statement.

Applicants with 12 semester units at Long Beach City College are granted credit upon successful completion of theory and practical examinations in the area they are challenging.

Applicants without 12 semester units at Long Beach City College will be allowed to proceed in the program after successful completion of theory and practical examination. To comply with college policy, the credit is withheld until 12 semester units are successfully completed.

Syllabi for nursing courses are available in the Learning Center for the School of Health and Science.
Credit for Vocational Cooperative Work Experience Education

Long Beach City College recognizes job experience as a valuable learning resource. The Vocational Cooperative Work Experience Education Program affords students the opportunity to earn college credit for the learning, which occurs while working on their jobs.

The creation of measurable learning objectives, to be accomplished by semester’s end, involves the employer directly in the learning process of the student/employee. The work experience instructor visits each job site to validate learning and maintain good communication between the employer and the college.

The student must enroll in Work Experience (1-3 units), which represents on-the-job learning and does not involve class time, and the seminar experience, which meets once a week.

Work hours required for the following amount of units:

<table>
<thead>
<tr>
<th>Paid Employment</th>
<th>Volunteer</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 unit Work Experience Class</td>
<td>75 hours</td>
</tr>
<tr>
<td>3 units Work Experience Class</td>
<td>150 hours</td>
</tr>
<tr>
<td>4 units Work Experience Class</td>
<td>225 hours</td>
</tr>
</tbody>
</table>

Further, the student must satisfactorily complete a minimum of seven units (which must include Work Experience) for each semester of enrollment in the Vocational Cooperative Work Experience Education Program. A student may earn up to four units of work experience credit per semester, not to exceed 16 units at Long Beach City College. Vocational Cooperative Work Experience Education units meet eligibility requirements for veteran benefits, Social Security and financial aid.

The credit for educational experience in Military Service, as Vietnam era veteran.

Additional information on the program and enrollment is available at the Cooperative Work Experience Education Office, located on the Liberal Arts Campus, (Room N103), or by calling (562) 938-4938.

Credit for Educational Experience In Military Service

Long Beach City College presently requires three units in a combination of physical education and health education classes for the associate degree. Veterans may be granted these three units of credit toward graduation if they served on active duty for at least 12 continuous months. The student who needs these credits for a degree must have a copy of his/her DD-214 and file number from the Veterans’ Administration to request such credit. Please contact the Veterans Affairs Office at PCC for additional assistance.

If a veteran feels his/her military schooling provided sufficient knowledge in a particular subject area and this credit is needed for graduation or advanced placement, he/she should refer to the section, “Credit by Examination.” Each Department Head handles the particular subjects under his/her administration. Not all departments allow Credit by Examination so check the eligibility requirements carefully, then contact the Department Head involved to make the necessary arrangements for an exam, if permissible.

Policy on Academic Honesty

It is the policy of the Long Beach Community College District to establish an academic environment in which inquiry is nurtured, individual responsibility is rewarded and academic dishonesty, cheating and plagiarism are not tolerated.

Policy on Open Courses

It is the policy of the Long Beach Community College District that, unless specifically exempted by statute, every course, course section or class, the full time equivalent student (FTES) units of which are to be reported for state aid, shall be fully open to enrollment and participation by any person who has been admitted to the college and who meets course prerequisites.

Creating a Collegiate Environment

In the Classroom

Creating a proper teaching environment is the cornerstone of getting a good education. Everyone at Long Beach City College is responsible for helping to create this environment, including students. Simple rules of courtesy apply.

1. **Respect for the Instructor** - This means arriving on time, not leaving early, bringing appropriate materials, not speaking with other students while a lecture is in progress, not bringing food or drink to the classroom, not being loud, boisterous or argumentative.

2. **Respect for Other Students** - This means not interfering with the rights of others to listen and participate, not being disrespectful, not using inappropriate language or harassing others in any way.

3. **Academic Honesty** - Lack of honesty in the classroom is considered a very serious offense. Any form of cheating on tests, turning in work which is not one’s own (plagiarism), talking during tests, furnishing false information to instructors or knowingly misrepresenting oneself to the college is grounds for disciplinary action. The consequences of cheating are severe and may include the possibility of expulsion.

4. **Instructor’s Rights** - An instructor has the right to remove a student from class at any time he/she considers a student’s actions to be interfering with a proper collegiate environment. The instructor may also refer the incident to the Dean of Student Affairs for disciplinary action as warranted.

5. **Student’s Rights** - All students have a right to due process. If classroom conflicts occur, discuss them with your instructor during his/her office hours. Additional resources for help include the Department Head, School Dean and Dean of Student Affairs.
On the Campus
Like the classroom, creating a proper campus environment is also of great importance to assure academic and individual success. The Board of Trustees has established campus-wide standards of student conduct and simple campus rules, which are enforced at all times. These are particularly important in large common areas, such as the cafeteria, bookstore, vending, campus offices, College Center, Student Center, Activities Center, campus quads, athletic areas and other highly frequented areas.

Standards of Student Conduct
These standards of student conduct and disciplinary action for violation of rules were established by a student-college staff committee in compliance with section 22635 of the State Educational Code, printed and distributed for students’ information and guidance.

Student conduct at Long Beach City College must conform to district policy and regulations and college procedures. Violations, for which students are subject to disciplinary action, include but are not limited to the following:

1. Willful disobedience to directions of college officials (including faculty) acting in the performance of their duties.
2. Violation of college rules and regulations, including those concerning student organizations, the use of college facilities or the time, place and manner of public expression or distribution of materials.
3. Dishonesty, such as cheating or knowingly furnishing false information to the college.
4. Forgery, alteration or misuses of college documents, records or identification.
5. Unauthorized entry to or use of the college facilities.
6. Obstruction or disruption of classes, administration, disciplinary procedures or authorized college activities.
7. Theft or damage to property belonging to the college, a member of the college community on campus or at a campus activity or a visitor to the campus.
8. Disorderly, lewd, indecent or obscene conduct.
9. Conduct which disrupts orderly operation of the college, or which disrupts educational activities of individual members of the college community including, but not limited to, the harassment of another member of the college community based on race, religion, national origin, gender, sexual orientation or any other legally protected status.
10. Use, possession, distribution or being under the influence of alcoholic beverages, illicit drugs or other controlled substances while on campus or in connection with college activities.
11. Assault or battery, abuse or any threat of force or violence directed toward any member of the college community or campus visitor engaged in authorized activities.
12. Possession, while on the college campus or at a college sponsored function, of any weapons (except by persons given permission by the superintendent-president or members of law enforcement agencies, such as police officers acting in their capacity as officers).
13. Possession of any article, not usually designated as a weapon, when used to threaten bodily harm.
14. Misuse of any computer technology, including equipment, software, network or Internet access. This includes non-compliance with any policy, regulation, rule or guideline developed by any segment of the College which relates to computer technology.

Campus Rules
1. Smoking is prohibited in all buildings.
2. Eating and drinking are prohibited in all buildings except where food is sold or is part of an approved and scheduled activity.
3. Gambling on the campus is prohibited. Gaming is restricted to the PCC Student Lounge and the LAC Activities Room.
4. Animals not indigenous to the campus grounds are not allowed on campus. Exceptions shall be made for certified companion animals and those animals previously approved by college officials for specific educational purposes.
5. Literature to be distributed must be approved in the office of the Dean of Student Affairs.
6. Children are not allowed on campus unless under the supervision of a parent/guardian or are officially enrolled in an approved college program. Children may not attend classes with a parent/guardian unless the course is specifically designed to include children. Children must be supervised so educational activities are not interrupted and may not be left unattended in common areas, such as the library, computer labs, cafeterias, quads or lounges.
7. Unauthorized vehicles (vehicles without a parking permit) must use visitor parking or purchase a one-day parking permit.
8. Students are required to be fully attired, including shirts or blouses and footgear.
9. Skateboarding, skating and bike riding are prohibited on campus grounds.
10. The use of radios, electronic recording devices, tape or compact disc players without headphones is prohibited on campus except in connection with approved campus/classroom activities.
11. Electronic recording devices may not be used in classrooms without the permission of the instructor.
Summary Suspension

When serious violations of college regulations or procedures occur as a result of inappropriate student conduct, the college shall take immediate action to resolve the problem. This action may occur as follows:

1. **Removal from Class by Instructor** - Any instructor is authorized to remove a student from his/her class for the class meeting where the infraction occurs, as well as the next scheduled class meeting. The instructor shall immediately report the removal of the student to the Dean of Student Affairs or designee, including the reason for removal, for appropriate action.

2. **Summary Suspension by Administration** - A summary suspension is an administrative action for the purpose of removing any immediate tension or threat to the well being of students and staff in order to assure that an appropriate academic environment exists. It is also for the purposes of further investigation of reported inappropriate conduct and to determine what disciplinary action, if any, is appropriate. The Dean of Student Affairs or designee may summarily suspend a student for good cause for a period of up to 10 instructional days to ensure that the intended purpose is served.

Disciplinary Action

Violations of the above regulations and rules subject students to the following types of disciplinary action, which are to be administered by the appropriate college authorities. These disciplinary actions are listed in degree of severity but not necessarily in sequential order. Disciplinary actions may be imposed singly or in combination. A student has the right to appeal any of the actions through established procedures of due process.

1. **Warning** - Notice to the student that continuation or repetition of specified conduct may be cause for other disciplinary action.

2. **Reprimand** - Notice to the student in writing that officially recognizes a violation of the standards of student conduct or campus rules. The reprimand admonishes the student to avoid future infractions in order to avoid additional formal action.

3. **Probation** - An official disciplinary action, which returns the offender to the college community on a promise of appropriate future behavior. Any violation of this promise mandates formal action.

4. **Social Suspension** - Social Suspension limits a student’s attendance on campus to scheduled classroom hours. Other privileges can be set forth in the Notice of Social Suspension for a specified period of time. The imposition of social suspension involves notification in writing of the reason for social suspension to the student(s) or president of the student organization involved.

5. **Disciplinary Suspension** - Disciplinary suspension follows a hearing based on due process of law. It shall be invoked by the college president, appropriate administrator, or other staff members designated by the president upon students for misconduct when other corrective measures have failed or when the seriousness of the situation warrants such action.

6. **Expulsion** - An expulsion is a long-term or permanent denial of all campus privileges including class attendance. The Board of Trustees may expel a student after a hearing by a campus body or upon recommendation of the Superintendent-President. Permanent expulsion and active prosecution shall automatically result for any student found to be in possession of a gun. Board action is not necessary in this instance.

7. **Restitution** - Reimbursement for damage or for misappropriation of property. Reimbursement may take the form of appropriate service to repair or otherwise compensate for damage.
LONG BEACH CITY COLLEGE
GENERAL EDUCATION PLANS
Academic Year 2004-2005

All students must consult a counselor when following Plans A, B or C
ALL INFORMATION CONTAINED HEREBIN IS SUBJECT TO CHANGE WITHOUT NOTICE

**PLAN A** The General Education Requirements for the Associate Degree: Designed for students planning to obtain an Associate Degree. The general education requirement is only a component to the Associate Degree. Refer to “Degrees and Programs - Plan A” in the LBCC catalog for complete information.

**PLAN B** The CSU-GE Breadth Requirements: Designed for students transferring to the California State University (CSU). Courses on this pattern are lower division general education breadth requirements specific to the California State University and used to obtain a full or partial certification.

**PLAN C** The Intersegmental General Education Transfer Curriculum (IGETC) Requirements: Designed for students transferring to the University of California (UC) or the California State University (CSU). Courses on this pattern are lower division general education requirements unique to IGETC and were established by the UC and CSU.

| ALTERNATIVE GENERAL EDUCATION PLANS: | Consult a counselor to determine the best general education pattern for you. |
| CHANGES TO THE GENERAL EDUCATION PLANS (ABC Guide): | The ABC Guide is an evolving document that is reviewed and updated annually by the Associate Degree/General Education Committee (AD/GE) to accommodate curriculum changes and pertinent information. The guide is available in the LBCC Catalog, Schedule of Classes, the LAC and PCC Student Success/Transfer Services Centers, and at the LBCC website [http://students.lbcc.edu](http://students.lbcc.edu). Students are responsible for securing an updated copy of the ABC Guide at the beginning of the fall semester. |
| CURRICULUM GUIDES: | There are two types of curriculum guides: the LBCC Curriculum Guide and the Transfer Curriculum Guide. The LBCC Curriculum Guide contains information on specific fields of concentration and lists courses required for the Associate Degree or Certificate for that field. The Transfer Curriculum Guide contains lower division major preparation courses required at specific CSUs or UCs. Courses listed on the Transfer Curriculum Guide are articulated courses that are offered at LBCC. The information on the Transfer Curriculum Guide derives from various college catalogs and articulation agreements. To view the LBCC Curriculum Guides and/or Transfer Curriculum Guides log on to the LBCC website [http://students.lbcc.edu](http://students.lbcc.edu). To view the most current articulation agreements, log on to [www.assist.org](http://www.assist.org). The ASSIST database is the official repository of articulation and transfer for the State of California. |
| CERTIFICATION: | The process whereby Long Beach City College approves lower division general education coursework for CSU/UC transfer. Units earned and credited to the CSU and/or IGETC certification will only be certified by LBCC for courses taken from approved certification lists. The 50% Rule requires that 50% of the courses used for Plan B must be completed at LBCC; Plan C requires that 50% of the courses must be completed at a California Community College. (For additional information on residency requirements for Plans B and C or Plan A see RESIDENCY section on next page). See a counselor for transfer and career preparation. |

| **ASSOCIATE OF ARTS (AA)/SCIENCE (AS) DEGREE GENERAL INFORMATION** |
| **RECOMMEND PRIOR TO ENROLLMENT:** | Take LBCC Assessment Test. Submit high school Advanced Placement (AP) test scores and school/college transcripts to Admissions and Records. |
| **REQUEST FOR GRADUATION:** | Must be submitted to the Records Office no later than the seventh week of the last semester of the program. |
| **ADDITIONAL ASSOCIATE DEGREES:** | Each additional Associate Degree requires: |
| | Twenty additional units at LBCC AFTER receiving the last degree AND |
| | Completion of all degree requirements in the new area of concentration for the year after work is started on the 2nd degree. |

| **CSU/UC GENERAL INFORMATION FOR APPLICATION AND PRIORITY FILING & DEADLINES** |
| UC Fall Semester or Quarter (November 1- November 30) |
| CSU Fall Semester or Quarter (October 1-November 30) |
| **NOTE:** Terms/Semesters of acceptance may vary among schools. Please consult a counselor to determine whether your school and major are accepting applications for specific terms/semesters. |

| **PRIVATE UNIVERSITY TRANSFER:** | Most private universities have specific lower division and general education requirements. It is HIGHLY RECOMMENDED that students consult the catalog of the college/university to which they plan to transfer. A counselor may assist students develop a plan consistent with their educational goals. Students are advised to plan early so that they will be well-prepared at the time of transfer. |
### PLAN A - Associate Degree

**General Education requirements for graduation from Long Beach City College.**

A minimum of 18 units is required in Plan A.

Unless otherwise indicated, a G.E. course may not be double counted for credit in more than one area.

#### ENGLISH

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English: I, I'H, I'T or ESL: 34, 34X</td>
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#### COMMUNICATION AND ANALYTICAL THINKING

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CBIS: 8B, 11, 14A</td>
<td>3</td>
</tr>
<tr>
<td>English: 3, 3H or Reading: 82, 83, 84</td>
<td>3</td>
</tr>
<tr>
<td>Library: 3</td>
<td>1</td>
</tr>
<tr>
<td>Mathematics: 28, 36, 37, 37H, 40, 45, 47, 50, 60, 64, 70, 80, 85, 110, 112, 130</td>
<td>3</td>
</tr>
<tr>
<td>Philosophy: 11, 12</td>
<td>3</td>
</tr>
<tr>
<td>Speech: 10, 20, 25, 30, 60</td>
<td>3</td>
</tr>
</tbody>
</table>

#### MATHEMATICS

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics: 28, 36, 37, 37H, 40, 45, 47, 50, 60, 64, 70, 80, 84</td>
<td>3</td>
</tr>
<tr>
<td>Statistics: I, 1'H</td>
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#### NATURAL SCIENCES

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Astronomy: I, 1L</td>
<td>1</td>
</tr>
<tr>
<td>Environmental Science: I</td>
<td>1</td>
</tr>
<tr>
<td>Geology: 1, 1'H, 2F, 2L, 3, 3'H, 4, 5, 7, 16, 17, 18</td>
<td>3</td>
</tr>
<tr>
<td>Physical Geography: 1</td>
<td>1</td>
</tr>
<tr>
<td>Physics: 2A, 2B, 3A, 3B, 3C, 10</td>
<td>3</td>
</tr>
</tbody>
</table>

#### BIOLOGICAL SCIENCES

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anatomy: I, 1'H</td>
<td>1</td>
</tr>
<tr>
<td>Biology: 1A, 1B, 2, 5, 11, 15, 18, 20, 20'H, 22, 25, 28, 30, 31, 37, 41A/L, 41H/41L, 60, 60'L, 61, 62</td>
<td>3</td>
</tr>
</tbody>
</table>

#### PHYSICAL SCIENCES

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Astronomy: I</td>
<td>1</td>
</tr>
<tr>
<td>Chemistry: I'A, I'B, 2A, 3A, 3B</td>
<td>3</td>
</tr>
<tr>
<td>Environmental Science: I</td>
<td>1</td>
</tr>
<tr>
<td>Geology: 1, 1'H, 2F, 2L, 3, 3'H, 4, 5, 7, 16, 17, 18</td>
<td>3</td>
</tr>
<tr>
<td>Physical Geography: 1</td>
<td>1</td>
</tr>
<tr>
<td>Physics: 2A, 2B, 3A, 3B, 3C, 10</td>
<td>3</td>
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#### AMERICAN HISTORY

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>History: 8A+8B, 8AH+8BH</td>
<td>3</td>
</tr>
<tr>
<td>10, 11, 25, 27A, 27B</td>
<td>3</td>
</tr>
</tbody>
</table>

#### POLITICAL SCIENCE

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political Science: I, I'H</td>
<td>1</td>
</tr>
</tbody>
</table>

#### PHYSICAL EDUCATION ACTIVITY

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Education: 3 or 4</td>
<td>2</td>
</tr>
<tr>
<td>F &amp; N: 20 or</td>
<td>2</td>
</tr>
<tr>
<td>Biology: 60 and 61 and Psych: 1</td>
<td>3</td>
</tr>
</tbody>
</table>

### PLAN B - CSU General Education Breadth

For any of the California State Universities. Certification of the completion of the General Education requirements will be done at the time of transfer only. To be certified by LBCC at least 50% of the courses must be taken at LBCC. (To apply courses from other schools to this plan, student must see a counselor.)

#### ENGLISH

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English: I, I'H</td>
<td>1</td>
</tr>
</tbody>
</table>

#### COMMUNICATION AND COMPOSITION

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBIS: 8B, 11, 14A</td>
<td>3</td>
</tr>
<tr>
<td>English: 3, 3H</td>
<td>3</td>
</tr>
<tr>
<td>Library: 3</td>
<td>1</td>
</tr>
<tr>
<td>Mathematics: 28, 36, 37, 37H, 40, 45, 47, 50, 60, 64, 70, 80, 85, 110, 112, 130</td>
<td>3</td>
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<tr>
<td>Philosophy: 11, 12</td>
<td>3</td>
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<tr>
<td>Speech: 10, 20, 25, 30, 60</td>
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#### PHYSICAL EDUCATION ACTIVITY

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<tbody>
<tr>
<td>Health Education: 3 or 4</td>
<td>2</td>
</tr>
<tr>
<td>F &amp; N: 20 or</td>
<td>2</td>
</tr>
<tr>
<td>Biology: 60 and 61 and Psych: 1</td>
<td>3</td>
</tr>
</tbody>
</table>

OR:  

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anatomy: 41 and DMI: 60 and Psych: 1</td>
<td>3</td>
</tr>
</tbody>
</table>

### PLAN C - University of California and California State University Intersegmental General Education Transfer Curriculum (IGETC)

- **Plan A**
- **Plan B**
- **Plan C**

No specific Physical Education requirement.

All IGETC requirements must be completed and certified prior to transfer. There are no exceptions provided by the CSU and UC for the IGETC. To initiate and complete the IGETC certification process students must meet with a counselor.
HUMANITIES AND ARTS

One Class Required (3 Units Minimum)

Art: 1H, 2H, 3H, 4H, 9, 10, 11, 11H, 15, 23, 24, 26AD, 30, 31, 34AD, 35AD, 50, 51AD, 60AD, 70AD, 71AD, 80
Creative Arts: 1, 1A, 1B, 2
Dance: 1
English: 2, 26, 32, 33, 35, 36, 37, 38, 39, 41, 42, 43A, 43B, 44, 44H, 45, 45H, 46, 47, 48, 49, 72AD, 79
Film: 1
French: 1, 1A, 1B, 2A, 2B, 3, 4, 8AD, 8AH, 10
German: 1, 2, 2A, 2B, 3, 3H, 4, 4H, 8AD, 25A-D
HUMANITIES: 1H*, 3*, 7*
Interior Design: 80, 90
Italian: 1, 1A, 2
Japanese: 1, 1A, 1B
Music: 6, 30A, 30B, 31, 33A-D, 35, 40, 40H
Philosophy: 3*, 6*, 6H*, 7, 7H, 8, 9, 14
R/TV: 1
Spanish: 1, 1A, 1B, 2, 2A, 2B, 3H, 4, 8AD, 9, 10, 25A-D
Speech: 50
Theater Arts: 1, 25
Vietnamese: 1, 1A, 1B

PROFICIENCIES

See Reverse

SOCIAL SCIENCES

One Class Required (3 Units Minimum)

Anthropology: 1, 2H, 3
Child Development: 47
Economics: 1A, 1AH, 1B, 4, 5
Fashion Design: 32
Geography: 2, 5, 40, 48
Health Education: 10
History: 1, 1AH, 1B, 1BH, 2A, 2B, 2C, 2CH, 5A, 5B, 6, 9A, 9B, 9C, 18, 25, 27A, 27B, 48
(History 8A, 8B, 10 may be taken for the A.S. Deg.)
Interdisciplinary Studies: 10
Political Science: 2, 4, 9, 10
(PolSci 1H, 3 may be taken for the A.S. Deg.)
Psychology: 1, 1H, 2, 4, 10, 11, 14, 33
Public Administration: 1
Social Science: 1*, 1H*, 7*
Sociology: 1, 1H, 2, 11, 12, 13, 40

HEALTH EDUCATION

(Plan A)

OR

LIFELONG UNDERSTANDING & SELF-DEVELOPMENT

(Plan B)

3 Units Minimum

EITHER: Health Education: 3 or 4
(No P.E. courses required if Health Ed. 3 is taken)
OR:
Two P.E. activity classes (a minimum of 1 semester unit and one of the following:
Health Education: 2 or 4
F & N: 20 or
Biology: 60 and 61 and Psych: 1 or
Anatomy: 41 and 59 and 60 and Psych: 1 or
(Note: Meets Physical Education requirement listed above)

Legend

* Denotes laboratory classes.
+ A (+) between courses indicates both courses must be taken.
* Indicates course limitations may exist. (For an explanation of limitations, please refer to the UCTA which is available on the ASSIST website at www.assist.org or consult a counselor.)

Cross-listed courses. A cross-listed course is interdisciplinary and is the “same as” another course. A cross-listed course CANNOT be used in more than one discipline NOR can it be used to certify more than one area on Plans B or C. See list of courses below:

HUMAN 1 = SOCSSC 1: Comparative World Cultures
HUMAN 1H = SOCSSC 1H: Honors Comparative World Cultures
HUMAN 3 = PHIL 3: Intro to Issues/Phil, Psych & Religion
HUMAN 7 = SOCSSC 7: American Pluralism and Identity

Area C

Three Classes Required (0 Units Minimum)

NOTE: ONE CLASS IN AREA C1 AND ONE IN C2 WITH A MINIMUM OF 9 UNITS.

Area C1:

Art: 1, 1H, 2, 2H, 3, 3H, 4, 4H, 5, 5H, 6, 7, 9, 10, 11, 11H, 30, 31, 80
Creative Arts: 41
Dance: 1
Film: 1
Interior Design: 80, 90
Music: 6, 30A, 30B, 31, 33A-D, 35, 40, 40H
R/TV: 1
Speech: 50
Theater Arts: 1, 25, 30

Area C2:

Chinese: 1, (1A+1B), 2
English: 2, 26, 32, 33, 35, 36, 37, 38, 39, 41, 42, 43A, 43B, 44, 43B, 44, 45H, 46, 47, 48, 49, 72AD, 79
French: 1, (1A+1B), 2, (2A+2B), 3, 4
German: 1, (1A+1B), 2, (2A+2B), 3, 3H, 4, 4H
HUMANITIES: 1*, 3*, 7*
Italian: 1, (1A+1B)
Japanese: 1, (1A+1B)
Philosophy: 3*, 6*, 6H*, 7, 7H, 8, 9, 14
Spanish: 1, (1A+1B), 2, (2A+2B), 3, 4, 9, 10
Vietnamese: 1, (1A+1B)

Area D

Three Classes Required (9 Units Minimum)

NOTE: Courses must be taken in at least two different disciplines.

D1
Anthropology: 1, 2H, 3, 10

D2
Economics: 1A, 1AH, 1B, 4

D3
History: 2A, 2B, 2C, 2CH, 9A, 9B, 9C, 27A, 27B; Social Science: 1*

D4
History: 25

D5
Geography: 2, 40

D6
History: 1, 1AH, 1B, 1BH, 5A, 5B, 6, 8A, 8AH, 8B, 8BH, 18

D7
HUMANITIES: 1*, 3*, 7*; Social Science: 7*; Speech: 25

D8
Political Science: 2, 3, 4, 9, 10;
Public Administration: 1

D9
Psychology: 1, 1H, 11, 14, 33

D10
Sociology: 1, 1H, 11, 13

Area E-Lifelong Understanding & Self-Development

Three Units Required

Select one course from:
CDECE 47, F & N 20, HLED 3, 4, 10, Psychology 4, 10 OR Select one course from: HE 2, PEA 2AD, PEPP 7AD, PEPP 41 and 1 unit of P.E. Activity

Area 3

Three Classes Required (9 Units Minimum)

NOTE: At least one class must be taken from the Arts and one from the Humanities plus one from either Area.

Area 4

Three Courses Required (9 Units Minimum)

NOTE: Courses must be taken in at least two different disciplines.

4A
Anthropology: 1, 2*, 2H*, 3, 10

4B
Economics: 1A, 1AH, 1B, 4

4E
Geography: 2, 40

4G
HUMANITIES: 1H*, 3*, 7*; Philosophy: 3*;
Social Science: 1**, 1H**, 7*; Speech: 25

4H
Political Science: 1*, 1H* 2, 3, 4, 9, 10

4I
Psychology: 1*, 1H*, 11, 14

4J
Sociology: 1*, 1H*, 2, 11, 13

Area 6 - Foreign Language Proficiency - See Reverse

No Specific Health Education/Lifelong Understanding & Self-Development Requirement
### CONTINUOUS ENROLLMENT AND CONTINUES ATTENDANCE

**CONTINUOUS ENROLLMENT** is enrollment in and receiving a grade (A, B, C, D, F, CR or NC) for at least one class per ACADEMIC YEAR (August to June) at LBCC or any other accredited higher education institution after being initially enrolled at LBCC. Students enrolled in non-credit courses may qualify for continuous enrollment if the course instructor has noted satisfactory progress in the class rollbook. For additional information, see Degrees and Programs section of the Catalog.

**REQUIREMENTS:**
- 50% of the units required for a degree must be completed at LBCC.
- For the field of concentration (LBCC Major), 50% of the requirements as defined by the appropriate curriculum guide must be completed at LBCC.
- And, in addition, one of the following:
  - A minimum of 20 units within the last 30 units applied to the degree must be completed at LBCC, OR
  - B) At least 50% of the units required for a degree must be completed at LBCC.

### CERTIFICATION ATTENDANCE CONTINUES ENROLLMENT CONTINUOUS PROGRAMS

**AT LEAST 50% OF THE COURSES** on the general education guide for CSU must be completed at LBCC in order to qualify for CERTIFICATION. You must see a counselor to use non-LBCC courses on this plan. When a transcript is certified by LBCC, it is marked to indicate that the lower division general education requirements for CSU have been met. Completion of the full 39 unit pattern is recommended. With permission of the CSU, students may transfer to a CSU and return to LBCC to complete classes for certification.

**AT LEAST 50% OF THE COURSES** on the general education guide for CSU must be completed at LBCC in order to qualify for CERTIFICATION. You must see a counselor to use non-LBCC courses on this plan. When a transcript is certified by LBCC, it is marked to indicate that the lower division general education requirements for CSU have been met. Completion of the full 39 unit pattern is recommended. With permission of the CSU, students may transfer to a CSU and return to LBCC to complete classes for certification.

### READING: (Effective Fall 2004 for newly matriculated students)

- Completion of READ 82 or 83 ("C" or better) at LBCC (courses taken at other colleges may be extra requirements; check the appropriate curriculum guide).

### MATHEMATICS: (Effective Fall 2004 for newly matriculated students)

- A qualifying score on the LBCC Assessment Test or successful completion of a grade of "C" or higher in a college math course at the level of MATH 110 or Math 110B or higher in ELTC 225. An SAT I Math Score of 520 (500 for SAT Math exams taken prior to April 1995), or an ACT Math Score of 14 will also fulfill the requirement.

### WRITING: (Effective Fall 2004 for newly matriculated students)

- Fulfill requirements of ENGLISH COMPOSITION section above.
- A grade of "C" or better is required in Areas A & B.

### PLAN A – ASSOCIATE DEGREES (AA/AS)

- **AT LEAST 50% OF THE COURSES** on the general education guide for CSU must be completed at LBCC in order to qualify for CERTIFICATION. You must see a counselor to use non-LBCC courses on this plan. When a transcript is certified by LBCC, it is marked to indicate that the lower division general education requirements for CSU have been met. Completion of the full 39 unit pattern is recommended. With permission of the CSU, students may transfer to a CSU and return to LBCC to complete classes for certification.

### PLAN B – CALIFORNIA STATE UNIVERSITY (CSU-GE Breadth)

- **FOR ADMISSION:** Generally, 2.0 overall G.P.A. in CSU transferable units. (LBCC courses numbered 1-99 are CSU transferable). Some majors may require a higher G.P.A. (see application and major requirements for more information).

### PLAN C – INTERSEGMENTAL GENERAL EDUCATION CURRICULUM (IGETC)

- **FOR ADMISSION:** The CSU system recommends completion of 60 units for junior standing. Generally, a minimum of 56 transferable units is required for those students not eligible for admission to CSU from high school. The UC requires 60+ transferable units for admission.

### DEGREES AND PROGRAMS

- **FOR ADMISSION:** Generally, 2.0 overall G.P.A. in CSU transferable units. (LBCC courses numbered 1-99 are CSU transferable). Some majors may require a higher G.P.A. (see application and major requirements for more information).

### FOREIGN LANGUAGE PROFICIENCY:

- Those students using the IGETC for transfer to one of the nine campuses of the University of California must show proficiency in a foreign language.
- Chinese
- Japanese
- French
- German
- Spanish
- Russian

- **FOR ADMISSION:** The CSU system recommends completion of 60 units for junior standing. Generally, a minimum of 56 transferable units is required for those students not eligible for admission to CSU from high school. The UC requires 60+ transferable units for admission.

- **FOR ADMISSION:** The CSU system recommends completion of 60 units for junior standing. Generally, a minimum of 56 transferable units is required for those students not eligible for admission to CSU from high school. The UC requires 60+ transferable units for admission.

### NOT APPLICABLE

- Requires a "C" or better in each class.
**Associate Degree and Transfer Programs**

In accordance with the Long Beach City College mission statement, our school offers three possible degree patterns. These three patterns are listed below as Plan A, B, and C. If a student wants to select courses to prepare for a career immediately after graduation from Long Beach City College, he or she should choose Plan A. Under Plan A, a student can finish an Associate Degree and combine it with one of Long Beach City College’s Certificate Programs or prepare for transfer. Many employers prefer their employees to have both a degree and a certificate. If students are interested in an Associate Degree and a career, then Plan A should be followed. All students, however, should be aware that such a plan requires continuous enrollment. All students seeking such career goals need advice to achieve good results. To accomplish the most with your time in school, students are encouraged to meet with a counselor. Counselors know best how to combine a degree with a Certificate program.

If a student wants to complete an Associate Degree and transfer to a B.A./B.S. program, then the general education (G.E.) patterns Plan B and C should be followed. Plan B will prepare students for transfer to the California State University System. Plan C will prepare students for transfer to either the University of California or the California State University systems. It is imperative for students to see a counselor for use of this plan. Students may also choose to attend a private university or college, or they may wish to transfer out of state. If you have such plans, see a counselor or go to the Transfer Center. While the UC System requires continuous enrollment, the CSU adds a definition of continuous attendance for successful transfer. If students are careful in the courses they select, they will be able to complete an Associate Degree and a transfer program at the same time. The best way for a student to prepare such a program would be to make an appointment with a counselor. Long Beach City College’s counselors have a complete list of transfer requirements and can help to design the most efficient program to meet your needs.

Finally, the G.E. patterns listed as Plan A, B, and C represent three different ways one can prepare for a degree. The plan best suited for you requires careful consideration. Long Beach City College Counselors have the knowledge you need to get the most out of your education. If a student wanted a program that combined a career, transfer and a degree, a counselor could show him/her how to achieve all three in the shortest amount of time. Therefore, making an appointment with a counselor as soon as possible is probably the first logical step everyone should take in their educational career.

**STUDENTS SHOULD BE AWARE THAT STARTING ONE PLAN DOESN’T PRECLUDE CHANGING TO ANOTHER. IT IS POSSIBLE TO CHANGE PLANS WITH PROPER COUNSELING.**

**STUDENTS SHOULD BE ADVISED THAT THE ASSOCIATE DEGREE COMPRIS ES TWO MAJOR COMPONENTS: A GENERAL EDUCATION PATTERN AND A FIELD OF CONCENTRATION. A TRANSFER PROGRAM COMPRIS ES THREE MAJOR COMPONENTS: ADMISSION REQUIREMENTS, A GENERAL EDUCATION REQUIREMENT AND A MAJOR FIELD OF PREPARATION.**

**Determination of Requirements to be Used for Certificates, the A.A./A.S. Degree and General Education Certification**

Students may be granted an A.A./A.S. Degree and/or be certified for general education based on the requirements in effect at any time between their initial enrollment at Long Beach City College and the present, provided continuous enrollment is maintained throughout. If continuous enrollment is not maintained, students may only use requirements in effect beginning with such time as continuous enrollment was established and maintained to the present.

**Definition of Continuous Enrollment**

“Continuous enrollment” shall be defined as enrollment in, and receiving a grade for, at least one class per academic year at Long Beach City College or any other accredited higher educational institution, after having initially enrolled at Long Beach City College. Continuous enrollment secures “catalog rights” for the student. Catalog rights are defined as guaranteeing students the specific degree requirements of the year they first enrolled. Continuous enrollment applies to all students interested in earning an Associate Degree or transferring to the University of California.

“Continuous Attendance” is a definition of enrollment that applies to those Long Beach City College students interested in transferring to the CSU system. Since the CSU system defines “continuous attendance” as enrollment at an accredited college “…for at least one semester or two quarters in any one calendar year,” transfer students must be careful to combine “continuous enrollment” with “continuous attendance.” The difference between these two definitions rests on how a school defines a “year.” Long Beach City College must use the academic year (fall and spring semesters) and the CSU system must use the calendar year (January to December). When students combine continuous enrollment and attendance definitions, they need to attend at least one class every semester until they transfer. Only this way can they secure their catalog rights. Because of the confusion these two definitions might create, Long Beach City College strongly recommends that all new students see a counselor.

Acceptable grades that will satisfy continuous enrollment are A-F, CR and NC. This policy is effective for students who established continuous enrollment at the start of the Fall 1983 semester or later. Coursework transferred from other institutions will be evaluated for satisfaction of all Associate Degree requirements, including the proficiency requirements and for certificates of completion.
Military personnel who had to withdraw with grades of MW because of military orders will be given one academic year after the end of the military conflict to return to college without losing their continuous enrollment status and catalog rights.

Students who encounter problems fulfilling both the general education and the field of concentration requirements in effect for any one year may appeal immediately to the Graduation Appeals Committee.

Dual Associate Degrees
Students seeking multiple degrees in the same term must meet the following requirements:

1. To obtain a dual degree students must complete a minimum of 80 semester units and a third degree would require a total of 100 semester units. Each additional degree would require an additional 20 semester units that are unique to the additional degree.

2. Fifty percent or 20 units (whichever is less) of the major requirements from the second degree must be distinct from the first degree. In addition to the above requirements, degree requirements, including degree residency requirements, scholarship, field of concentration, and general education and proficiency requirements must also be met.

Post Associate Degree(s):
Students wishing to obtain an additional Associate Degree after they have received their first degree must obtain twenty additional units at LBCC after receiving the last degree. Degree requirements for an additional degree will start at the time the students enroll after receiving the initial Associate Degree. In addition to the above requirements, degree requirements, including degree residency requirements, scholarship, field of concentration, and general education and proficiency requirements must also be met.

Philosophy of Education Leading to a Career, a Career Certificate or a Certificate of Completion.

Long Beach City College provides many opportunities for students to gain marketable skills. Critical thinking experiences are included as part of the training. Changing technologies have placed greater demands on workers and critical thinking skills are necessary for success in most occupations.

Occupational programs teach the theory and the practical applications of a career. The goal of an occupational program is gainful employment. The course of study for such a program will enable students to become familiar with the requirements and methods of an occupation to progress beyond an entry-level position. One of the college’s goals is to help students make informed career decisions.

A career certificate is defined as a course of study consisting of at least 18 units; a certificate of completion is defined as a course of study consisting of less than 18 units—both in a specific occupational area. Students must complete 50 percent or more of the total units required for a certificate while enrolled at Long Beach City College. For specific unit requirements, consult the program director. All career certificates and certificates of completion are reviewed by advisory committees comprised of representatives of the industry, students and faculty. This assures that programs meet the current and future needs of industry.

Criteria
A goal of education leading to a career is to make occupations accessible to students. The elements of such an education include: understanding the origins, technology, skills and theories involved in that occupation. Part of any occupational program should include the ability for students to analyze changing conditions in their areas of employment. Finally, an understanding of how a career fits into the current economy helps students to find alternatives when their career changes over time.

Philosophy of General Education, Associate Degrees

General education is designed to introduce students to the variety of means through which people comprehend the past, present and future world. It reflects the conviction of Long Beach City College that those who receive an Associate Degree should possess in common certain basic principles, concepts and methodologies of the various disciplines. The general education experience should enable individuals to use this knowledge when evaluating and appreciating the physical environment, arts, culture and the society in which they live. Most importantly, since education is a life-long process, general education should lead to better self-understanding and the capacity to adapt, respond and grow in a changing world.

In its general education program, Long Beach City College strives to create coherence and integration among the separate requirements. Further, through this program, the college involves students in examining the values inherent in proposed solutions to major social problems.

Criteria
Since it is expected to produce the skills, methods or knowledge common to all, a course which satisfies the general education requirement should be of an introductory or survey nature. In addition, a non-survey course may qualify as general education if its course design incorporates a substantial integration of the basic principles and methodologies of the discipline in relation to the specific subject matter of the course.

Plan A:
Associate Degree (Degree and/or Career Option)

1. Students may use this plan to simply complete an Associate Degree.

2. Those students interested in preparing for a career upon graduation may use this plan by combining the Associate Degree with a Certificate Program.

3. This plan may also be used to combine a career, degree and transfer goals.
4. Students must maintain continuous enrollment and complete a field of concentration.

5. If you are considering transferring to CSU or UC and need additional units to complete the 18 unit general education requirement for Plan A, it is recommended that you select needed units from the CSU General Ed/Breadth or the Intersegmental General Education Transfer Curriculum (IGETC).

6. For the best program see a counselor.

**Plan B:**

**General Education Certification Pattern for CSU Transfer and The Associate Degree**

1. Students may use this program to combine the CSU general education requirements with an Associate Degree.

2. Those students interested only in transfer to a CSU can achieve that goal by following the certification pattern listed here.

3. To complete an Associate Degree with this program, a student must complete a field of concentration and the Associate Degree general education and proficiency requirements.

4. Students must maintain continuous attendance.

5. See a counselor to select courses which meet both CSU and Associate Degree requirements at the same time.

**Plan C:**

**Intersegmental General Education Transfer Curriculum (IGETC) for the UC/CSU Systems and the Associate Degree**

The Intersegmental Committee of the Academic Senates for the combined university and college systems in the state of California approved the Intersegmental General Education Transfer Curriculum (IGETC) which was implemented Summer 1991.

1. The IGETC is a series of courses that community college students can use to satisfy lower division general education requirements at any CSU or UC campus.

2. The IGETC provides an option to the California State University General Education requirements and replaces the University of California Transfer Core Curriculum.

3. Completion of the IGETC is not a requirement for transfer to a CSU or UC, nor is it the only way to fulfill the lower-division general education requirements of the CSU or UC prior to transfer. Students may find it advantageous to take courses at the community college fulfilling CSU’s General Education requirements or those of a particular UC campus.

4. To complete an Associate Degree with this program, a student must complete a field of concentration and the Associate Degree general education and proficiency requirements.

5. Students must maintain continuous attendance.

**Plan A**

**Additional Graduation Requirements**

1. **Units** - The Associate Degree requires a minimum of 60 units passed, including the field of concentration, required general education courses and free electives (if applicable) as defined in the college catalog. The curriculum guide for the field of concentration and the LBCC graduation requirements identify the exact number of units.

2. **Scholarship** - An overall grade point average (G.P.A.) of 2.0 (“C” average) based on all accredited college work that is applied to the degree, no matter where completed.

3. **Residence** - Either a.) a minimum of 20 units within the last 30 units of work applied to the degree must be completed at LBCC or b.) at least 50 percent of the units required for the degree must be completed at LBCC.

4. **Field of Concentration** - Completion of 50 percent or more, in residence (which may include credit earned by exam, where applicable), of the requirements for the chosen field of concentration as defined in the appropriate curriculum guide. The field of concentration, the general education and the proficiency requirements must be those in effect for the same year.

   **Note:** There is no “double-counting”–that is, courses required for the field of concentration may not also fulfill general education requirements, unless specifically noted.

5. **General Education and Proficiency requirements** - Refer to Plan A for the requirements in general education and proficiency in reading, writing, mathematics and computers. The field of concentration, the general education and the proficiency requirements must be those in effect for the same year. A student may use a course to fulfill a general education requirement in effect at the time the course was completed, even though the course may have been subsequently removed from the list of approved general education courses.

6. **Matriculation** - Matriculation materials must be submitted to the Admissions and Records Office prior to the application for graduation.

Changes to the Associate Degree requirements may be made after the printing of the catalog. Students should consult a counselor or the appropriate Associate Degree curriculum guide to determine the current status of degree requirements. Students who encounter problems fulfilling both the general education and the field of concentration requirements in effect for any one year may appeal immediately to the Graduation Appeals Committee. Completing the degree requirements is the responsibility of the student.
These requirements become effective for students entering the 1992 Summer session. Students who entered Long Beach City College prior to the 1992 Summer session and who have been continuously enrolled may use the graduation requirements in effect at any time between their initial enrollment at Long Beach City College and the present.

“Continuous enrollment” is defined as enrollment in, and receiving a grade for, at least one class per academic year at either Long Beach City College or any other accredited higher education institution, after having initially enrolled at Long Beach City College. Acceptable grades that will satisfy continuous enrollment are A-F, CR and NC. Students enrolled in non-credit courses may qualify for continuous enrollment if the instructor has noted their satisfactory participation in the class rollbook. This policy is effective for students who established continuous enrollment at the start of the Fall 1983 semester or later.

Coursework transferred from other institutions will be evaluated for satisfaction of all associate degree requirements, including the proficiency requirements, and for certificates of completion.

Plan B
Additional Requirement Information for California State University

1. To obtain a Bachelor’s Degree from any of the California State University campuses, students are required to complete a minimum of 48 semester units of general education courses in the following areas: Area A (9 units), Area B (12 units), Area C (12 units), Area D (12 units), Area E (3 units).

Up to 39 lower-division units may be completed at and certified [see below] by California community colleges. Long Beach City College recommends the pattern of 39 lower-division units as listed in Plan B. After the student has transferred, the CSU campus will then specify a minimum of nine more upper-division units to be taken primarily in Areas B, C and D.

[Certification means that LBCC will officially designate on transcripts sent to any CSU those general education courses, which have been completed, and then the CSU campus will accept those courses toward fulfillment of the breadth requirements. It is very important for students to consult with their counselor regarding the selection of courses from a valid list for certificate purposes.]

2. No course may be used to fulfill more than one general education requirement. In most cases you may not use courses from your major department to also fulfill general education requirements (“double-counting”) unless the same course is required both in your major and in general education and no alternative is available.

3. All courses numbered 1-99 in the catalog will transfer to the CSU at least as elective credit.

4. Completing the general education requirements and the major requirements is the responsibility of the student.

General Education-Major Requirements
The Baccalaureate Degree has two major components: general education and a major field of study. The major allows one to concentrate in depth in a field of study. General education, which should be done primarily at the lower division level (first two years of college), is designed to provide a common educational overview of the great accomplishments of humanity.

While attending Long Beach City College, students planning to transfer to the California State University system should follow the recommended pattern of general education-breadth requirements listed. (Note: Courses that fulfill these CSU requirements do not necessarily meet the requirements for the University of California system).

In addition, students should take the specific lower division courses required for their chosen major; these are listed on transfer curriculum guides available in the Counseling Centers. Careful educational planning will enable students to prepare for transfer and also complete the graduation requirements for an Associate Degree. Consult a counselor for assistance in correlating these requirements.

Admission Requirements
Students may apply to any of the 22 campuses of the California State Universities: Bakersfield, Channel Islands, Chico, Dominguez Hills, Fresno, Fullerton, Hayward, Humboldt, Long Beach, Los Angeles, Monterey Bay, Northridge, Pomona, Sacramento, San Bernardino, San Diego, San Francisco, San Jose, San Luis Obispo, San Marcos, Sonoma and Stanislaus.

Lower Division Transfers - Undergraduate transfer applicants with fewer than 56 transferable semester units of study may qualify for regular admission if they are eligible as freshmen and have been in continuous attendance since high school graduation; or were eligible as freshmen except for the subject requirements and have completed appropriate college courses in the missing subjects (all transfers must have a 2.0 minimum grade point average and be in good standing at last college attended). Applicants not eligible as freshmen cannot be admitted as lower division transfers. They must establish eligibility by completing the requirements for upper division transfers.

Undergraduate transfer applicants with fewer than 56 semester units of transferable college credit, who have not completed the subject requirements, may do so by:

1. Completing appropriate courses with a “C” or better in adult school or high school summer sessions; OR
2. Completing appropriate courses in college with a “C” or better. One course of three semester (or four quarter) units will be considered equivalent to one year of high school study; OR
3. Earning appropriate scores on specified examinations.
Upper Division Transfers - Upper division transfers may qualify for admission if they have completed 56 transferable semester (84 quarter) units and have completed appropriate college courses to make up any missing college preparatory subject requirements. (It is also possible for an applicant eligible as a freshman to be admitted as an upper division transfer.)

The missing college preparatory subject requirements may be made up in the following ways:

1. Complete the missing subjects in ways specified for lower division applicants; OR
2. a) High school graduates prior to 1988: Complete with grades of “C” or better the CSU general education requirements in communication in the English language (9 units in Areas A1, A2, A3) and math (from Area B4); OR
b) 1988 and later high school graduates: Complete with grades of “C” or better a minimum of 30 semester (45 quarter) units selected from courses in English, arts and humanities, social science, science and math of at least equivalent level to courses that meet general education or transfer curriculum requirements. Each student must complete all of CSU general education requirements in communication in the English language (9 units in Areas A1, A2, A3) and the general education requirement in math (from Area B4) as part of the 30-semester unit requirement.

Please consult with the Long Beach City College Counseling Department and Transfer Center regarding appropriate courses and tests to satisfy the subject requirements, as well as continuous attendance issues and criteria used to determine eligibility as first-time freshman.

Courses numbered 1-99 in the Long Beach City College catalog are transferable as general education and/or elective credit to the CSU. Students with 60 transferable units will be admitted as juniors. A maximum of 70 semester transferable units earned in a California community college will be accepted by a CSU campus (Berkeley, Davis, Irvine, Los Angeles, Riverside, San Diego, San Francisco, Santa Barbara and Santa Cruz) is well advised to concentrate on university and college requirements and on available prerequisite and introductory courses required by the major. The specific UC requirement for American history and institutions is met by those students who have earned a grade of “B” or better in their high school history and government classes.

Courses acceptable at the University of California are identified as such at the end of each catalog description (see courses of instruction). A student may transfer up to 70 semester units from Long Beach City College.

Admission Requirements
There are basically three options by which a transfer student from Long Beach City College may meet University of California admission requirements. In all cases, transfer students who are California residents must have at least a “C” average (2.0) in all transferable coursework to be admitted to the University. Other requirements depend on whether a student was eligible for admission to the university when he/she graduated from high school. (Note: There are changes in the “A-F” subject requirements for students who graduated from high school June 1986 and later.) The options are as follows:

Option 1: If a student was eligible for admission to the university when he/she graduated from high school, that student may transfer at any time provided that a “C” average in transferable community college courses has been maintained.

Option 2: If a student was not eligible for admission after high school because subject requirements were not met, the student may take college courses in the subjects which were missed and transfer upon their completion. Students need a grade of “C” or better in each of these required courses and an overall “C” average in all transferable college course work. If less than 12 semester or quarter units of transferable college coursework are completed, the examination requirements for freshman applicants must also be satisfied.

Option 3: If a student was not eligible for admission after high school graduation because they did not achieve the required score on the Eligibility Index and may also have lacked the required “A-F” subjects, the student must:

(1) Complete 60 semester units of transferable college credit with a grade point average of at least 2.4 and satisfy either (2) or (3) below.

(2) Complete appropriate college courses with a “C” grade or better in the “A-F” subjects that were lacking. (The university will waive up to two units, i.e., two academic years, of the required high school coursework except in math and English.)

(3) Complete with grades of “C” or better the following college courses:
(a) English: one transferable college course in English.
(b) Math: math courses equivalent to three years of high school math (i.e., elementary algebra, intermediate algebra and geometry); or one course in math or statistics for which intermediate algebra is the prerequisite (for applicants who graduated prior to June 1986,
the math course must have elementary algebra as a prerequisite).

c) U.S. history, lab science, foreign language: one transferable college course selected from these subjects. Students are advised to see a counselor to ensure they are following the correct academic program.

**Private Colleges and Universities**

**Transfer Information**

Private colleges and universities, often called independent institutions, offer a diversity of educational programs and opportunity. There are great differences in size, educational purpose and emphasis among the more than 50 independent colleges and universities in the state of California.

Long Beach City College has developed curriculum guides for many popular majors at nearby independent colleges and universities. The Library, Transfer Services and Career Planning Center also have complete sets of college catalogs for inspection and reference. It is advisable for students to write directly to the independent college or university for a catalog and information concerning their particular interest or major.

Transfer students who plan to attend a private college or university are encouraged to consult with a college counselor to plan their academic program.

**Long Beach City College Certificate and Degree Programs**

Long Beach City College provides students with an instructional program in higher education that may culminate in a Completion Certificate, a Career Certificate, an Associate in Arts or an Associate in Science Degree or appropriate preparation for transfer to a four-year college or university.

Certificate (Career or Completion) and/or Associate Degrees are offered in the fields of concentration on the following list(s). The requirements for each field of concentration are listed on the curriculum guides available in the Counseling Center at the Liberal Arts and the Pacific Coast campuses as well as the LBCC Catalog.

In addition, a Curriculum Guide may be developed to meet the educational need of individual students that would include two or more appropriately related subject areas. Such an alternate plan requires the approval of the appropriate instructional dean and the Office of School and College Relations.

The notations used in the following table are:

- **T=Transfer Preparation** – College courses in general education and the major taken during the freshman and sophomore years to prepare for transfer to a university (i.e. CSU-Long Beach, Chapman, UC-Irvine, USC, etc.)

- **A=Associate Degree** – Two-year college degree awarded by Long Beach City College which includes general education courses and a major.

- **CA=Career Certificate** – One to two year programs in occupational/technical areas at Long Beach City College which provide training in job skills and employment opportunities.

**SCHOOL OF BUSINESS & SOCIAL SCIENCE**

**BUSINESS**

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**Computer & Business Info Systems**

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**SOCIAL SCIENCE**

**Public Services**

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**Social Science**

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**SCHOOL OF CREATIVE ARTS & APPLIED SCIENCE**

**CREATIVE ARTS**

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**Fine Arts**

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<tr>
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<tr>
<td>Degrees and Programs</td>
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</tr>
<tr>
<td><strong>Music/Radio/Television</strong></td>
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<tr>
<td>X X X Music</td>
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</tr>
<tr>
<td>X X X Commercial Music: Composer/Arranger</td>
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<tr>
<td>X X X Commercial Music: Professional Instrumentalist</td>
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<tr>
<td>X X X Commercial Music: Professional Technology</td>
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<td>X X X Commercial Music: Professional Vocalist</td>
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<tr>
<td>X X X Commercial Music: Record Producer</td>
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<td>X X X Commercial Music: Recording Engineer</td>
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<tr>
<td>X X X Commercial Music: Songwriter</td>
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<tr>
<td>X X X Radio/Television: Broadcast News</td>
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<tr>
<td>X X X Radio/Television: Multimedia Production</td>
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<tr>
<td>X X X Radio/Television: Performance</td>
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</tr>
<tr>
<td>X X X Radio/Television: Producer</td>
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| **Speech Communication** |
| X X Speech Communication |

| **Theatre Arts** |
| X X Dance |
| X X Film |
| X X Theatre: General, Acting, and Technical Emphases |

| **APPLIED SCIENCES** |
| **Child Development** |
| X X X Child Development |
| X X Early Childhood Education |
| X X School Age Child Care |
| X X Special Education Assistant |

| **Family & Consumer Studies** |
| X X Dietetics Program: Dietetic Technician and Dietetic Service Supervisor |
| X X Family and Consumer Studies |
| X X Fashion Design |
| X X Fashion Design – Assistant Designer |
| X X Fashion Design – Patternmaker |
| X X Fashion Design – Samplemaker |
| X X Fashion Merchandising |
| X X Floral Design |
| X X Interior Design |
| X X Interior Design: Technical Skills |

| **SCHOOL OF HEALTH & SCIENCE** |
| **MATHEMATICS & SCIENCE** |
| X X Biological Sciences |

| **Life Science** |
| X X Engineering |
| X X Mathematics |
| X X Physical Science |

| **Mathematics & Engineering** |
| X X Physical Sciences |

| **NURSING & ALLIED HEALTH** |
| X X Medical Assisting: Clinical and/or Administrative Certificate |

| **SCHOOL OF LANGUAGE ARTS** |
| **English** |
| X X Desktop Publishing |
| X X English: Language & Literature, Creative Writing Sequence |
| X X Journalism: Newspaper/Magazine, Public Relations, Publication Specialist |
| X Photojournalism |

| **Foreign Language** |
| X X Foreign Language |

| **SCHOOL OF PHYSICAL EDUCATION & ATHLETICS** |
| **Physical Education** |
| X X Physical Education/Recreation |

| **SCHOOL OF TRADES & INDUSTRIAL TECHNOLOGIES** |
| **TRADE & INDUSTRIAL** |
| Aero-Pilot Training |
| X X X Aviation (Professional Pilot) |
| X X Aviation Administration |

| **AutoBody** |
| X X Auto Body Repair |

| **Auto Mechanics/Diesel** |
| X X Advanced Transportation Technology: Alternate Fuels |
| X X Advanced Transportation Technology: Electric Vehicles |
| X X Auto Mechanics |
| X X Diesel Mechanics |

| **Aviation Maintenance** |
| X X Aviation Maintenance |

| **Construction & Related Trades** |
| X X Air Conditioning/Refrigeration-Theory and Practical Experience |
| X X Air Conditioning/Refrigeration-Theory Only |
| X X Cabinet Making/Furniture Making |
| X X Carpentry Tech/Trade Home Remodel & Repair |
| X X Horticulture |
| X X Mechanical Maintenance Technology |

| **Drafting** |
| X X Architectural Design (Transfer) |
| X X Drafting – Architectural (Occupational) |
| X X Drafting – Mechanical & Design (Occupational) |
| X X Machine Operator/Manufacturing Technology |
### Degrees and Programs

<table>
<thead>
<tr>
<th>T</th>
<th>A</th>
<th>CA</th>
<th>Numerical Control Tech/Manufacturing Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

| X  | Tool Design/Manufacturing Technology |
| X  | X   |                                           |

**Electronics/Electricity**

| X  | Electrical Technology |
| X  | X   |                             |

| X  | Electronics Technology |
| X  | X   |                             |

**Manufacturing Technology**

| X  | Machine Tool Technology |
| X  | X   |                             |

| X  | Sheet Metal |
| X  | X   |                             |

| X  | Welding Technology (Prep) |
| X  | X   |                             |

**INTERDISCIPLINE STUDIES**

| X  | Liberal Arts |
| X  | X   |                             |
### COMPLETION CERTIFICATES

Long Beach City College offers a variety of Completion Certificates. A completion certificate certifies a competency in a given area and requires 18 units or less. Listed below is a list of Completion Certificates as well as a list of curriculum guides that provide detailed information required to obtain a Completion Certificate, etc.

<table>
<thead>
<tr>
<th>COMPLETION CERTIFICATE</th>
<th>CURRICULUM GUIDES</th>
</tr>
</thead>
<tbody>
<tr>
<td>3D Studio MAX – Animation Technician</td>
<td>Drafting, Mechanical Design</td>
</tr>
<tr>
<td>3D Studio MAX – Modeling Technician</td>
<td>Drafting, Mechanical Design</td>
</tr>
<tr>
<td>3D Studio MAX – Texture and Lighting Technician</td>
<td>Drafting, Mechanical Design</td>
</tr>
<tr>
<td>Activity/Recreation Leadership Training</td>
<td>Human Services</td>
</tr>
<tr>
<td>Adult and Elder Care</td>
<td>Advanced Transportation Technology, Auto Mechanics</td>
</tr>
<tr>
<td>Advanced Transportation Technology – Light-Medium Duty Alternate Fuels</td>
<td>Advanced Transportation Technology, Auto Mechanics</td>
</tr>
<tr>
<td>Advanced Transportation Technology – Electric Vehicle</td>
<td>Advanced Transportation Technology, Auto Mechanics</td>
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<tr>
<td>Air Reservation Specialist</td>
<td>Travel Industry</td>
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<tr>
<td>Application Developer</td>
<td>Computer and Business Information Systems</td>
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<tr>
<td>Applied Music Instructor</td>
<td>Music</td>
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<tr>
<td>AutoCAD I, Fundamentals</td>
<td>Drafting, Mechanical Design</td>
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<tr>
<td>AutoCAD II, Advanced Concepts</td>
<td>Drafting, Mechanical Design</td>
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<tr>
<td>AutoCAD III, Visualization, Rendering, Animation</td>
<td>Drafting, Mechanical Design</td>
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<td>Baking and Pastry 1</td>
<td>Baking, Culinary Arts</td>
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<td>Baking and Pastry 2</td>
<td>Baking, Culinary Arts</td>
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<tr>
<td>Basic Business Communication</td>
<td>Administrative Assistant, Word Processing</td>
</tr>
<tr>
<td>Basic Computing and Internet Literacy</td>
<td>Administrative Assistant, Computer Applications</td>
</tr>
<tr>
<td>Basic Customer Service</td>
<td>Customer Service Representative</td>
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<tr>
<td>Basic Data Entry</td>
<td>Data Entry</td>
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<tr>
<td>Basic Legal Office Procedures</td>
<td>Legal Secretary</td>
</tr>
<tr>
<td>Basic Microsoft Office</td>
<td>Administrative Assistant, Computer Applications</td>
</tr>
<tr>
<td>Basic Office Computer Skills</td>
<td>Office Assistant, Word Processing</td>
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<tr>
<td>Basic Office Skills</td>
<td>Office Assistant, Legal Secretary</td>
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<tr>
<td>Basic Word Processing</td>
<td>Medical Transcription, Office Assistant, Word Processing</td>
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<tr>
<td>Cabinetmaker Trainee</td>
<td>Cabinet/Furniture Making</td>
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<tr>
<td>CAD Professional</td>
<td>Drafting, Mechanical Design</td>
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<tr>
<td>Carpenter Trainee</td>
<td>Carpentry</td>
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<tr>
<td>Chemical Dependency</td>
<td>Human Services</td>
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<tr>
<td>Child Development Permit Specialization-Art for Children</td>
<td>Child Development: Early Childhood Education</td>
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<tr>
<td>Child Development Permit Specialization-Child Health</td>
<td>Child Development: Early Childhood Education</td>
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<tr>
<td>Child Development Permit Specialization-Children with Exceptional Needs</td>
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<tr>
<td>Child Development Permit Specialization-Family Child Care</td>
<td>Child Development: Early Childhood Education</td>
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<tr>
<td>Child Development Permit Specialization-Infant/Toddler</td>
<td>Child Development: Early Childhood Education</td>
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<tr>
<td>Child Development Permit Specialization-Literacy</td>
<td>Child Development: Early Childhood Education</td>
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<tr>
<td>Child Development Permit Specialization-Multicultural</td>
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<tr>
<td>Child Development Permit Specialization-Music</td>
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<tr>
<td>Child Development Permit Specialization-School Age</td>
<td>Child Development: Early Childhood Education</td>
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<tr>
<td>Child Development – Early Childhood Education-Associate Teacher</td>
<td>Child Development: Early Childhood Education</td>
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<tr>
<td>Child Development – Early Childhood Education-Assistant Teacher</td>
<td>Child Development: Early Childhood Education</td>
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<tr>
<td>Commercial Cake Decorating</td>
<td>Baking, Culinary Arts</td>
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<tr>
<td>Commercial Formal Buffet</td>
<td>Culinary Arts</td>
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<tr>
<td>Communications Electronics</td>
<td>Electronics</td>
</tr>
<tr>
<td>COREL WordPerfect</td>
<td>Administrative Assistant, Legal Secretary, Medical</td>
</tr>
<tr>
<td>Criminal Forensics</td>
<td>Transcription, Office Assistant, Word Processing</td>
</tr>
<tr>
<td>Cruise Specialist</td>
<td>Administration of Justice</td>
</tr>
<tr>
<td>Emergency Medical Technician</td>
<td>Travel Industry</td>
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<td></td>
<td>Medical Assistant</td>
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</table>
COMPLETION CERTIFICATE
Family Development

Fashion Design Update
Fluoroscopy
Food Preparation 1
Food Preparation 2
Food Preparation 3
Food Service Sanitation
Health Unit Coordinator
Home Health Aide
Home Remodeling & Repair Technician
Hotel, Restaurant: Institutional Cooking 1
Hotel, Restaurant: Institutional Cooking 2
Hotel, Restaurant: Institutional Cooking 3
Introduction to Baking
Introduction to Chocolate
Java Web Programmer
Mammography
Mechatronics
Medical Insurance Billing
Microsoft Access

Microsoft Excel

Microsoft Windows System Administration
Microsoft Word

Network Cabling Specialist
Network Installation
Network Installation and Design
Nurse Aide/Assistant
Nutrition for Culinary Arts
Oracle Developer (DBA) Associate
Oracle Developer Associate
Oracle Developer Professional
Phlebotomy
Pre-apprenticeship Training
Professional Gourmet Cooking
ProTools Assistant
Quick Service Tech – Brake Inspections
Quick Service Tech – Lubrication Service
Quick Service Tech – Tire Service
Studio Assistant
Technical Design Animator
Traffic Signals Systems 1
Travel Destinations
Travel Industry Management Specialist
Vocational Media – Commercials
Vocational Media – Film Acting
Vocational Media – Voice-Over
Web Construction
Windows 2000 Network Administrator

CURRICULUM GUIDES
Child Development, Child Development – Early
Childhood Education, Child Development – School Age
Child Care, Child Development – Special Education Assistant

Fashion Design
Diagnostic Medical Imaging
Baking, Culinary Arts
Culinary Arts
Culinary Arts
Baking, Culinary Arts
Medical Assistant
Vocational Nursing
Carpentry
Culinary Arts
Culinary Arts
Culinary Arts
Baking, Culinary Arts
Baking, Culinary Arts
Computer and Business Information Systems
Diagnostic Medical Imaging
Electronics
Medical Assistant
Administrative Assistant, Computer Application Specialist, Data Entry
Administrative Assistant, Computer Application Specialist, Data Entry, Office Assistant, Word Processing
Computer and Business Information Systems
Administrative Assistant, Computer Application Specialist, Legal Secretary, Office Assistant, Word Processing
Electronics
Electronics
Electronics
Vocational Nursing
Culinary Arts
Computer and Business Information Systems
Computer and Business Information Systems
Computer and Business Information Systems
Medical Assistant
Carpentry
Culinary Arts
Computer and Business Information Systems
Auto Mechanics
Auto Mechanics
Auto Mechanics
Computer and Business Information Systems
Drafting, Mechanical Design
Electrical Technology
Travel Industry
Travel Industry
Theatre Arts
Theatre Arts
Theatre Arts
Computer and Business Information Systems
Computer and Business Information Systems
The following certificate and Associate Degree programs are offered by Long Beach City College. Consult Curriculum Guides available in the Counseling Centers for information regarding grade point average, general education/graduation requirements and additional procedures and references. Please refer to this key for the symbols used in the following pages:

†This course has a prerequisite; prerequisite courses must be completed with at least a "C" or "CR" grade (see catalog or schedule of classes).
‡If you have been awarded the LBUSD articulation certificate for this course, you may be eligible to receive college credit. Consult Counseling or School/College Relations Office for procedure to follow.
*In general, “double-counting” is not allowed. That is, one course may not be used to fulfill both a field of concentration requirement and to fulfill a general education requirement. This class is an exception to that rule.
•Meets the computer proficiency requirement for the degree.

**ACCOUNTING**
Career Certificate and/or Associate in Arts

Students prepare for an entry-level position in the accounting office. Student is provided partial lower division preparation for the baccalaureate degree in Business Administration. This certificate will prepare students for a variety of entry-level accounting positions. This Associate Degree will prepare students for career advancement once a certificate has been earned. Appropriate course selection will also facilitate transfer in a related major. For more departmental information call (562) 938-4220.

**REQUIRED COURSES**  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
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<tbody>
<tr>
<td>ACCTG 1A</td>
<td>Principles of Accounting (F, SP, S)</td>
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<tr>
<td>†ACCTG 1B</td>
<td>Principles of Accounting (F, SP, S)</td>
<td>4</td>
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<tr>
<td>ACCTG 205F</td>
<td>Fundamentals of Tax (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>†ACCTG 228</td>
<td>Computerized Gen. Ledger Acct. Systems (F, SP)</td>
<td>2</td>
</tr>
<tr>
<td>†ACCTG 229</td>
<td>Spreadsheet Accounting (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>ACCTG 230F</td>
<td>Quick Books Accounting (F, SP)</td>
<td>1</td>
</tr>
<tr>
<td>*CAOTC 35</td>
<td>Microsoft Office (F, SP)</td>
<td>3</td>
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<tr>
<td>CAOTO 15</td>
<td>Business Communications (F, SP)</td>
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<tr>
<td>CAOTT 233</td>
<td>Computer Keyboarding (F, SP, S)</td>
<td>1</td>
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<tr>
<td>GBUS 5</td>
<td>Introduction to Business (F, SP, S)</td>
<td>3</td>
</tr>
<tr>
<td>GBUS 251</td>
<td>Business Mathematics (F)</td>
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**TOTAL UNITS** 18

**RECOMMENDED but not required courses:**

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<tr>
<td>ACCTG 200A</td>
<td>Intro to Accounting (F, SP, S)</td>
<td>3</td>
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<tr>
<td>ACCTG 205F</td>
<td>Fundamentals of Tax (F)</td>
<td>3</td>
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<tr>
<td>†ACCTG 228</td>
<td>Computerized Gen. Ledger Acct. Systems (F, SP)</td>
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<tr>
<td>†ACCTG 229</td>
<td>Spreadsheet Accounting (F, SP)</td>
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<tr>
<td>GBUS 216A,B</td>
<td>Fundamentals of Investments (F, SP)</td>
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<tr>
<td>LAW 18A</td>
<td>Business Math (F, SP)</td>
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</table>

**TOTAL UNITS** 29

**ACCOUNTING CLERK**
Career Certificate and/or Associate in Arts

This field of concentration is designed to prepare the student for entry as a clerk in a financial department or in other clerical positions in a business setting. This certificate will prepare students for a variety of clerical positions in a business setting. This Associate Degree will prepare students for career advancement once a certificate has been earned. Appropriate course selection will also facilitate transfer in a related major. For more departmental information call (562) 938-4328.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
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<tbody>
<tr>
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<tr>
<td>ACCTG 230F</td>
<td>Quick Books Accounting (F, SP)</td>
<td>1</td>
</tr>
<tr>
<td>*CAOTC 35</td>
<td>Microsoft Office (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>CAOTO 15</td>
<td>Business Communications (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>CAOTT 233</td>
<td>Computer Keyboarding (F, SP, S)</td>
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</tr>
<tr>
<td>GBUS 5</td>
<td>Introduction to Business (F, SP, S)</td>
<td>3</td>
</tr>
<tr>
<td>GBUS 251</td>
<td>Business Mathematics (F)</td>
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**TOTAL UNITS** 18

**RECOMMENDED but not required courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
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<td>3</td>
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<tr>
<td>ACCTG 205F</td>
<td>Fundamentals of Tax (F)</td>
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</tr>
<tr>
<td>†ACCTG 228</td>
<td>Computerized Gen. Ledger Acct. Systems (F, SP)</td>
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<tr>
<td>†ACCTG 229</td>
<td>Spreadsheet Accounting (F, SP)</td>
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</tr>
<tr>
<td>GBUS 216A,B</td>
<td>Fundamentals of Investments (F, SP)</td>
<td>1:1</td>
</tr>
<tr>
<td>LAW 18A</td>
<td>Business Math (F, SP)</td>
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**TOTAL UNITS** 29

**IN ADDITION, select SIX (6) units from the following:**

<table>
<thead>
<tr>
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<th>Course Name</th>
<th>Units</th>
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<tbody>
<tr>
<td>ADJUS 10</td>
<td>Writing for Criminal Justice (F, SP)</td>
<td>3</td>
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<tr>
<td>ADJUS 12</td>
<td>Crime and Delinquency (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 14</td>
<td>Juvenile Law and Procedure (F, SP)</td>
<td>3</td>
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<tr>
<td>ADJUS 16</td>
<td>Narcotics &amp; Organized Crime (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 17</td>
<td>Computer Use in Criminal Justice (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 18</td>
<td>Police Field Operations (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 19</td>
<td>Fingerprint Classification &amp; Identification (SP)</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 20</td>
<td>Introduction to Corrections (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 45</td>
<td>Drug Abuse and Law Enforcement (INF)</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 250</td>
<td>Basic Law Enforcement Training (INF)</td>
<td>16</td>
</tr>
<tr>
<td>ADJUS 253</td>
<td>Understanding Domestic Violence (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 269</td>
<td>Pre-Employment Prep for Law Enforcement (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 271</td>
<td>Work Experience – Adm. Of Justice (F, SP)</td>
<td>2:2 or 3:3 or 4:4</td>
</tr>
</tbody>
</table>

**ACCOUNTING CLERK**
Career Certificate and/or Associate in Arts

This field of concentration is designed to prepare the student for entry as a clerk in a financial department or in other clerical positions in a business setting. This certificate will prepare students for a variety of clerical positions in a business setting. This Associate Degree will prepare students for career advancement once a certificate has been earned. Appropriate course selection will also facilitate transfer in a related major. For more departmental information call (562) 938-4328.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 1A</td>
<td>Principles of Accounting (F, SP, S)</td>
<td>4</td>
</tr>
<tr>
<td>ACCTG 230F</td>
<td>Quick Books Accounting (F, SP)</td>
<td>1</td>
</tr>
<tr>
<td>*CAOTC 35</td>
<td>Microsoft Office (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>CAOTO 15</td>
<td>Business Communications (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>CAOTT 233</td>
<td>Computer Keyboarding (F, SP, S)</td>
<td>1</td>
</tr>
<tr>
<td>GBUS 5</td>
<td>Introduction to Business (F, SP, S)</td>
<td>3</td>
</tr>
<tr>
<td>GBUS 251</td>
<td>Business Mathematics (F)</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS** 18

**RECOMMENDED but not required courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 200A</td>
<td>Intro to Accounting (F, SP, S)</td>
<td>3</td>
</tr>
<tr>
<td>ACCTG 205F</td>
<td>Fundamentals of Tax (F)</td>
<td>3</td>
</tr>
<tr>
<td>†ACCTG 228</td>
<td>Computerized Gen. Ledger Acct. Systems (F, SP)</td>
<td>2</td>
</tr>
<tr>
<td>†ACCTG 229</td>
<td>Spreadsheet Accounting (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>GBUS 216A,B</td>
<td>Fundamentals of Investments (F, SP)</td>
<td>1:1</td>
</tr>
<tr>
<td>LAW 18A</td>
<td>Business Math (F, SP)</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS** 29

**IN ADDITION, select SIX (6) units from the following:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJUS 10</td>
<td>Writing for Criminal Justice (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 12</td>
<td>Crime and Delinquency (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 14</td>
<td>Juvenile Law and Procedure (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 16</td>
<td>Narcotics &amp; Organized Crime (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 17</td>
<td>Computer Use in Criminal Justice (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 18</td>
<td>Police Field Operations (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 19</td>
<td>Fingerprint Classification &amp; Identification (SP)</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 20</td>
<td>Introduction to Corrections (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 45</td>
<td>Drug Abuse and Law Enforcement (INF)</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 250</td>
<td>Basic Law Enforcement Training (INF)</td>
<td>16</td>
</tr>
<tr>
<td>ADJUS 253</td>
<td>Understanding Domestic Violence (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 269</td>
<td>Pre-Employment Prep for Law Enforcement (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 271</td>
<td>Work Experience – Adm. Of Justice (F, SP)</td>
<td>2:2 or 3:3 or 4:4</td>
</tr>
</tbody>
</table>
Curriculum Guides

Consult guides available in Counseling Centers for specific general education and required grades.
Basic Computing and Internet Literacy

REQUIRED COURSES
CAOTC 34 Introduction to Computers & Applications 3
CAOTC 35 Microsoft Office 3
CAOTC 45 Internet for Office and Personal Use 2
OR
CBIS 2 Advanced MS Office - Help Desk Emphasis 3
CBIS 6 Introduction to Information Systems 4
CBIS 206A Navigating the Internet 1
TOTAL UNITS 8

ADDITIONAL REQUIREMENTS: 2.5 minimum GPA in courses for this certificate. Completion of certificate courses within three semesters.

Basic Microsoft Office Certificate

REQUIRED COURSES
CAOTC 35 Microsoft Office 3

TOTAL UNITS 3

REQUIRED COMPETENCY: Instructor verification of 80 percent or better accuracy on Word, Excel, Access, and PowerPoint Core practice exams or Microsoft Office Specialist certification.

Basic Office Skills Certificate

REQUIRED COURSES
CAOTC 39A Microsoft Word for Office, Beginning 1
CAOTC 45 Internet for Office and Personal Use 2
CAOTO 214A Filing 1
CAOTO 260 Business Telephone Procedures 1
BOTH
CAOTT 200A Beginning Typing/Keyboarding 1
CAOTT 200B Beginning Typing/Keyboarding B 1
OR
CAOTT 200 Beginning Typing/Keyboarding 3

TOTAL UNITS 7-8

REQUIRED COMPETENCY: Typing certificate of at least 25 words per minute for 5 minutes with 5 or fewer errors completed within the previous 12 months.

COREL WordPerfect Certificate

REQUIRED COURSES
CAOTC 236A Word Processing-WordPerfect, Beg 1
CAOTC 236B Word Processing-WordPerfect, Int 1
CAOTC 236C Word Processing-WordPerfect, Adv 1
CAOTC 236D Word Processing, WordPerfect, Expert 1

TOTAL UNITS 4

REQUIRED COMPETENCY: Typing certificate of at least 25 words per minute for 5 minutes with 5 or fewer errors completed within the previous 12 months.

Microsoft Access Certificate

REQUIRED COURSES
CAOTC 47A Access for Office Applications, Beg 3
CAOTC 47B Access for Office Applications, Int 3

TOTAL UNITS 6

REQUIRED COMPETENCY: Instructor verification of 80 percent or better accuracy on Access Core practice exam or Microsoft Office Specialist certification.

Microsoft Excel Certificate

REQUIRED COURSES
CAOTC 41E Excel for Windows-Beginning 1
CAOTC 41F Excel for Windows-Intermediate 1
CAOTC 41J or Excel for Windows-Advanced 1

TOTAL UNITS 3

REQUIRED COMPETENCY: Instructor verification of 80 percent or better accuracy on Excel Core and Expert practice exams or Microsoft Office Specialist certification.

Microsoft Word Certificate

REQUIRED COURSES
CAOTC 39A Microsoft Word for the Office, Beg 1
CAOTC 39B Microsoft Word for the Office, Int 1
CAOTC 39C Microsoft Word for the Office, Adv 1
CAOTC 39D Microsoft Word for the Office, Expert 1

TOTAL UNITS 4

REQUIRED COMPETENCIES: Typing certificate of at least 35 words per minute for 5 minutes with 5 or fewer errors completed within the previous 12 months. Instructor verification of 80 percent or better accuracy on Word Core and Expert practice exams or Microsoft Office Specialist certification.

ADVANCED TRANSPORTATION TECHNOLOGY

ALTERNATE FUELS

Associate in Science and/or Career Certificate

Or Certificate of Completion

The certificate and degree programs will prepare students for an entry-level position as a light/medium and heavy duty technician in such fields as car, bus, truck, and specialty equipment diagnosis and repair industry. Students prepare for a career in alternative fuel vehicle conversion, maintenance and repair using state-of-the-art equipment. Computerized engine management is emphasized. For more departmental information call (562) 938-3067.

REQUIRED COURSES
AMECH 490 Introduction to Alternative Fuels 3.5
AMECH 491 Heavy Duty Alternative Fuels 3.5
AMECH 492 Heavy Duty Alt Fuel Diag & Repair 3.5
AMECH 493 Alt Fuel Conversion, Diag & Repair 3.5
Subtotal Units 14

Select one (1) class from the following:
AMECH 233 Electrical & Fuel 9
AMECH 236 Computers & Emissions 9
AMECH 333M1 Electrical Systems (9 weeks) 4.5
AMECH 333M2 Fuel Systems (9 weeks) 4.5
AMECH 336M1 Computer Systems (9 weeks) 4.5
AMECH 336M2 Emissions Controls (9 weeks) 4.5
AMECH 438 Emission Controls (night) 6
AMECH 440 Computer Systems (night) 6
AMECH 442 Fuel Systems (night) 6
AMECH 444 Electrical Systems (night) 6
DIESL 282 Diesel Four-Cycle Engine 10
DIESL 289 Caterpillar 3406 AND 3116 10
DIESL 293AD General Engines 4
Subtotal Units 4-10
TOTAL UNITS 18-24

COMPLETION CERTIFICATES

Advanced Transportation Technology–Light–Medium Duty Alternate Fuels Certificate

REQUIRED COURSES
AMECH 490 Introduction to Alternative Fuels 3.5
AMECH 493 A/F Conversion, Diagnosis & Repair 3.5

TOTAL UNITS 7
Advanced Transportation Technology–Heavy Duty
Alternate Fuels Certificate

REQUIRED COURSES                      UNITS
AMECH 491 Heavy Duty Alternative Fuels   3.5  
AMECH 492 H/D Alt. Fuel Diagnosis & Repair, 3.5
TOTAL UNITS                              7

ADVANCED TRANSPORTATION TECHNOLOGY

Electric Vehicles
Associate in Science/Career Certificate
The certificate and degree programs will prepare students for an entry-level position as a light/medium and heavy-duty technician in such fields as car, bus, truck and specialty equipment diagnosis and repair industry. Students prepare for a career in electric vehicle conversion, maintenance and repair using state-of-the-art equipment. For more departmental information call (562) 938-3067.

REQUIRED COURSES                      UNITS
AMECH 480 Introduction to Electric Vehicles   3  
AMECH 481 Advanced Electric Vehicles        3  
AMECH 483 Competition Electric Vehicles     3  
AMECH 490 Introduction to Alternative Fuels 3.5
Subtotal Units                              12.5

Select SIX (6) units from the following:
ABODY 211 Introduction to Basic Autobody     9  
ABODY 214 Painting Techniques                9  
ABODY 419AD Auto Body Repair                 4  
AMECH 233 Electrical & Fuel                  9  
AMECH 236 Computers & Emissions              9  
AMECH 333M1 Electrical Systems (9 weeks)     4.5  
AMECH 336M1 Computer Systems (9 weeks)       4.5  
AMECH 336M2 Emissions Controls (9 weeks)     4.5  
AMECH 438 Emission Controls (night)          6  
AMECH 440 Computer Systems (night)           6  
AMECH 444 Electrical Systems (night)         6  
DIESL 391A Hydraulics (Forklift)             3  
SHMET 201 Sheet Metal 1                      10  
SHMET 220A Surface Development & Fabrication 5  
SHMET 420AD Sheet Metal Fabrication          3  
Subtotal Units                              6
TOTAL UNITS                                 18.5

COMPLETION CERTIFICATE
Advanced Transportation Technology–Electric Vehicle Certificate

REQUIRED COURSES                      UNITS
AMECH 480 Introduction to Electric Vehicles   3  
AMECH 481 Advanced Electric Vehicles        3  
TOTAL UNITS                              6

AIR CONDITIONING/REFRIGERATION

THEORY & PRACTICAL EXPERIENCE

Career Certificate and/or Associate in Science
Students prepare for entry-level positions in air conditioning and refrigeration. The program includes H.V.A.C.R. (Heating, Ventilation, Air Conditioning, and Refrigeration) technology for commercial and industrial applications. Emphasis will be placed on training an individual to have the theory and manipulative skills that will enable that person to be a productive member of the air conditioning and refrigeration industry. For more departmental information call (562) 938-3053 or 938-3054.

REQUIRED COURSES                      UNITS
AC_R 211 Air Conditioning & Refrig. Fundamentals 10  
AC_R 212 Electrical Theory & Component App 10  
†AC_R 213 Psychrometrics, Ducting & Load Calc 10  
†AC_R 214 Troubleshooting Total Comfort Systems 10
TOTAL UNITS                              40

RECOMMENDED but not required course:
FORK 801 Forklift Safety & Operation        1

AIR CONDITIONING/REFRIGERATION

THEORY ONLY

Career Certificate and/or Associate in Science
Student is provided the basic theory, upgrading and/or continuing education in H.V.A.C.R. (Heating, Ventilation, Air Conditioning and Refrigeration). For more departmental information call (562) 938-3053 or 938-3054.

REQUIRED COURSES                      UNITS
†AC_R 420AD Air Conditioning/Refrigeration Service & Repair 6:6:6:6
Subtotal Units                          24

Select SIX (6) units from the following courses:
†AC_R 421A-B Automatic Controls for Refrigeration, Air Conditioning & Heating 3:3  
AC_R 422 Air Conditioning System Design & Installation 3  
AC_R 400A-B Uniform Mech. Code I & II 3:3  
AC_R 450A-B Transport Refrigeration 5:5  
†AC_R 271AD or 272AD or 273AD Work Experience (Maximum 4 units) 2-4  
FORK 801 Forklift Safety & Operation 1
Subtotal units                          6
TOTAL UNITS                              30

ARCHITECTURAL DESIGN
(Transfer)

Career Certificate and/or Associate in Science
This field of concentration is designed to provide foundation knowledge of the practice of architecture with the option of maximizing the number of lower division transfer units. This certificate will prepare students for an entry-level position in a variety of design profession settings and will serve as a foundation for specialization. This Associate Degree will prepare students for a design-related career, and appropriate course selection will facilitate transfer to a professional degree program. The Associate Degree requires only 24 units from the following courses identified with "†". The Program Certificate requires 37 units as specified below. For more departmental information call (562) 938-4718.

Consult guides available in Counseling Centers for specific general education and required grades.
Complete with a "C" average TWENTY FOUR (24) units from the following:

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCHT 60, Architectural Design (F, S)</td>
<td>8</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>ARCHT 61, Architectural Design (F, S)</td>
<td>4</td>
</tr>
<tr>
<td>and</td>
<td></td>
</tr>
<tr>
<td>ARCHT 62, Architectural Design (F, S)</td>
<td>4</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>ARCHT 64, Architectural Design (F, S)</td>
<td>8</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>ARCHT 65, Architectural Design (F, S)</td>
<td>4</td>
</tr>
<tr>
<td>and</td>
<td></td>
</tr>
<tr>
<td>ARCHT 66, Architectural Design (F, S)</td>
<td>4</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>ARCHT 70AB, Architectural Design (F, S)</td>
<td>8:8</td>
</tr>
</tbody>
</table>

Subtotal Units 24

Select SIX (6) units from the following:

- ART 1 Art & Civilization (F, SP) 3
- ART 3 Modern and Contemporary Art (F, SP) 3
- ART 17AD Illustration I, Perspective (F) 3
- *ART 30 Fund. of Art/Volume, Plane & Form (F, SP) 3
- *ART 31 Fund. of Art/Comp. & Color (F, SP) 3

Subtotal Units 6

Select THREE (3) units from the following:

- †MAT 40 OR A more advanced Trigonometry level of Mathematics 3

Subtotal Units 3

Select FOUR (4) units from the following:

- †PHYS 2A General Physics 4
- †PHYS 3A Physics for Sci. & Eng. Mechanics 5

Subtotal Units 4-5

**TOTAL UNITS** 37-38

**ART**

Art History, Ceramics, Computer Art, Drawing & Painting, Design, Illustration, Jewelry/Metalsmithing, Photography, Printmaking, Sculpture

Associate in Arts

This field of concentration is designed to provide a fundamental education for a variety of specializations within the field. It also substantially fulfills lower division requirements for a baccalaureate degree in this major. This Associate Degree will prepare students for transfer to a four-year college for university. For more departmental information call (562) 938-4319.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 1 Art and Civilization (F, SP, S)</td>
<td>3</td>
</tr>
<tr>
<td>ART 2 Art and Civilization (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>†ART 15 Beginning Drawing (F, SP, S)</td>
<td>3</td>
</tr>
<tr>
<td>†ART 23 Beginning Painting (F, SP, S)</td>
<td>3</td>
</tr>
<tr>
<td>ART 30 Fundamentals of Art: Volume, Plane &amp; Form (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>ART 31 Fundamentals of Art: Composition &amp; Color (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>ART 34AD Applied Design (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>ART 41 Introduction to Computergraphics (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>ART 50 Ceramics I (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>ART 60 Beginning Sculpture (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>ART 81AD Introduction to Fine Art Photography (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>†ART 292 Professional Skills for Artists (SP)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Subtotal CORE Units</strong></td>
<td>36</td>
</tr>
</tbody>
</table>

**RECOMMENDED courses based on area of interest:**

**ART HISTORY**

- ART 3 Modern & Contemporary Art (F, SP) 3
- ART 4 Tribal Art (S) 3
- ART 5 History of Asian Art (F) 3
- ART 6 Art on the Town/Museum Study Visits (INF) 3
- ART 7 Art on the Town/Studio & Gallery Visits (INF) 3
- ART 8 Art on the Town/Special Exhibits (INF) 3
- ART 11 Pre-Columbian Art (F, SP) 3

*NOTE:* (Students considering a baccalaureate degree in Art History should be aware that most four-year schools also require a foreign language proficiency usually in German or French.)

**CERAMICS**

- ART 51AD Ceramics II (F, SP) 3
- ART 52AD Ceramics III (F, SP) 3
- †ART 53AD Ceramics IV (F, SP) 3

**COMPUTER ART**

- †ART 42 Intro to 3D & Multimedia Computergraphics (F, SP) 3
- †ART 43AD Computer Art for the Internet (F, SP) 3
- †ART 44AD Computer Art for Graphic Design (F, SP) 3
- †ART 45AD Computer Art for Drawing & Painting (F, SP) 3
- †ART 46AD Computer Art & Design in 3-D Modeling (F, SP) 3
- †ART 47AD Computer Art & Design for Multimedia (F, SP) 3

**DRAWING AND PAINTING**

- ART 14AD Beginning Drawing, Overview (F, SP) 1.5
- †ART 16AD Intermediate Drawing (F, SP) 3
- ART19AD Life Drawing (F, SP) 3
- ART 22AD Painting Overview (F, SP) 1.5
- ART 24 Beginning Watercolor (F, SP) 3
- †ART 26AD Figure Painting (F, SP) 3
- †ART 27AD Intermediate Painting (F, SP, S) 3
- ART 28AD Portrait Drawing & Painting (F, SP) 1.5

**DESIGN**

- ART 32 Intermediate Design (F, SP) 3
- †ART 43AD Computer Art for the Internet (F, SP) 3
- ART 44AD Computer Art for Graphic Design (F, SP) 3
- †ART 55AD Introduction to Graphic Design (F, SP, S) 3
- ART 56AB Lettering & Typography(One semester) 1.5

**ILLUSTRATION**

- ART 17AD Illustration I: Perspective (F) 3
- ART 18AD Illustration II: Rendering (S) 3
- ART 19AD Life Drawing (One semester only) (F, SP) 3
- †ART 26AD Figure Painting (F, SP) 3
- †ART45AD Computer Art for Draw & Painting (F,SP)3

**JEWELRY/METALSMITHING**

- ART 33AD Exploration of the Decorative Arts (F, SP) 3
- ART 35AD Jewelry/Metalsmithing 1 (F, SP) 3
- †ART 36AD Jewelry/Metalsmithing 2 (F, SP) 3
- †ART 37AD Jewelry/Metalsmithing 3 (F, SP) 3
- †ART 38AD Jewelry/Metalsmithing 4 (F, SP) 3
### PHOTOGRAPHY

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 80 Elements of Photography</td>
<td>3</td>
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</tbody>
</table>

### PRINTMAKING

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 70AD Printmaking, Silkscreen (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>ART 71AD Printmaking, Intaglio (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>†ART 72AD Printmaking, Advanced (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>ART 74AD Advanced Printmaking Overview (F, SP)</td>
<td>1.5</td>
</tr>
</tbody>
</table>

### SCULPTURE

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>†ART 61AD Intermediate Sculpture (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>ART 62AD Sculpture - Metal Fabrication (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>ART 63AD Sculpture - Metal (INF)</td>
<td>3</td>
</tr>
<tr>
<td>†ART 64AD Sculpture - Carving (INF)</td>
<td>1.5</td>
</tr>
</tbody>
</table>

### AUTO BODY REPAIR

**Career Certificate and/or Associate in Science**

Students learn skills necessary for entry-level jobs in the automotive industry relating to painting & collision repair. For more departmental information call (562) 938-3072 or 938-3054.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABODY 211 Introduction Basic Auto Body Repair</td>
<td>9</td>
</tr>
<tr>
<td>†ABODY 212 Minor Collision Repair</td>
<td>9</td>
</tr>
<tr>
<td>ABODY 213 Major Collision Repair</td>
<td>9</td>
</tr>
<tr>
<td>†ABODY 214 Painting Techniques</td>
<td>9</td>
</tr>
<tr>
<td>†AMECH 421 Auto Mechanics 1</td>
<td>3</td>
</tr>
<tr>
<td>SHMET 220A Surface Development &amp; Fabrication</td>
<td>5</td>
</tr>
<tr>
<td>WELD 450AB Welding (Inert Gas) (One Semester)</td>
<td>2</td>
</tr>
<tr>
<td>WELD 460AD Welding (Acetylene Gas) (Two Semesters Only)</td>
<td>2</td>
</tr>
</tbody>
</table>

**TOTAL UNITS**

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>48</td>
</tr>
</tbody>
</table>

### AUTO MECHANICS

**Career or Completion Certificate and/or Associate in Science**

Students prepare for entry-level jobs in the automotive service industry. The 200 series of courses are taught during the day and the 400 series in the evening. Students may take day or evening classes or a combination of the two to fulfill the Career Certificate and degree requirements. For more departmental information call (562) 938-3075 or 938-3054.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>†AMECH 231 Engine Repair &amp; Auto Transmissions</td>
<td>9</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>AMECH 434 Engine Repair</td>
<td>6</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>†AMECH 436 Automatic &amp; Standard Transmission</td>
<td>6</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>AMECH 232 Brakes/Steering Systems</td>
<td>9</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>AMECH 430 Auto Wheel Alignment</td>
<td>6</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>AMECH 432 Automotive Brake Systems</td>
<td>6</td>
</tr>
<tr>
<td>†AMECH 233 Auto Electrical &amp; Fuel Systems</td>
<td>9</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>AMECH 442 Automotive Fuel Systems</td>
<td>6</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>AMECH 444 Automotive Electrical Systems</td>
<td>6</td>
</tr>
<tr>
<td>†AMECH 236 Auto Emission &amp; Computer Control</td>
<td>9</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>AMECH 438 Auto Emission Controls</td>
<td>6</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>AMECH 440 Automotive Computer Systems</td>
<td>6</td>
</tr>
<tr>
<td>MACH 50A Machine Tool Operations and Practices</td>
<td>3</td>
</tr>
<tr>
<td>WELD 460AD Welding (General)(one semester only)</td>
<td>2</td>
</tr>
</tbody>
</table>

**TOTAL UNITS**

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>41-53</td>
</tr>
</tbody>
</table>

### COMPLETION CERTIFICATE

**Advanced Transportation Technology–Electric Vehicle Certificate**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMECH 480 Introduction to Electric Vehicles</td>
<td>3</td>
</tr>
<tr>
<td>AMECH 481 Advanced Electric Vehicles</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS**

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
</tr>
</tbody>
</table>

**Advanced Transportation Technology–Light– Medium Duty Alternate Fuels Certificate**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMECH 490 Introduction to Alternative Fuels</td>
<td>3.5</td>
</tr>
<tr>
<td>AMECH 493 A/F Conversion, Diagnosis &amp; Repair</td>
<td>3.5</td>
</tr>
</tbody>
</table>

**TOTAL UNITS**

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
</tr>
</tbody>
</table>

**Advanced Transportation Technology–Heavy Duty Alternate Fuels Certificate**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMECH 491 Heavy Duty Alternative Fuels</td>
<td>3.5</td>
</tr>
<tr>
<td>AMECH 492 H/D Alt. Fuel Diagnosis &amp; Repair</td>
<td>3.5</td>
</tr>
</tbody>
</table>

**TOTAL UNITS**

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
</tr>
</tbody>
</table>

**NOTE:** See LBCC Advanced Transportation Technology Guides for Electric Vehicles or Alternate Fuels for Career Certificate and/or Associate Degree.

### Quick Service Technician – Brake Inspection Certificate

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMECH 803 Quick Service Technician – Brake Inspection</td>
<td>2</td>
</tr>
</tbody>
</table>

**TOTAL UNITS**

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
</tr>
</tbody>
</table>

### Quick Service Technician – Lubrication Service Certificate

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMECH 801 Quick Service Technician – Brake Inspection</td>
<td>2</td>
</tr>
</tbody>
</table>

**TOTAL UNITS**

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
</tr>
</tbody>
</table>

### Quick Service Technician – Tire Service Certificate

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMECH 802 Quick Service Technician – Tire Service</td>
<td>2</td>
</tr>
</tbody>
</table>

**TOTAL UNITS**

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
</tr>
</tbody>
</table>

### AVIATION ADMINISTRATION

**(Transfer) Associate in Science**

Students prepare for transfer to four-year institutions with similar majors, including the Aviation Administration/B.S. Industrial Tech with option in Aviation Administration at Cal State University, Los Angeles. In addition, students prepare for an entry-level
position in any aviation business office. For more
departmental information call (562) 938-4387.

REQUIRED COURSES

AVIATION MAINTENANCE (Airframe/Powerplant Mechanic)

Career Certificate and/or Associate in Science

Students prepare to take FAA Airframe and Powerplant (A & P) Mechanics License Test. With the A & P Mechanic’s license, men and women find excellent career opportunities in general, commercial and military aviation. For more departmental information call (562) 938-3069 or 938-3054.

REQUIRED COURSES

AVMNT 211 General Aviation Maintenance Tech. 7
AVMNT 241 Airframe Structures 8
AVMNT 242 Aircraft Systems/Components 1 8
AVMNT 243 Aircraft Systems/Components 2 8
AVMNT 251 Powerplant Theory & Maintenance 8
AVMNT 252 Powerplant Systems/Components 1 8
AVMNT 253 Powerplant Systems/Components 2 8
TOTAL UNITS 55

NOTE: Students with prior training at the Aviation Maintenance Technician School or with substantial experience, should consult with one of the A & P Maintenance instructors or the Department Head before enrolling.

AVIATION PROFESSIONAL PILOT

(Transfer)

Career Certificate and/or Associate in Science

This field of concentration (when combined with the flight training necessary to get appropriate pilot certificates and ratings) prepares students for an entry-level commercial pilot position. It also provides a foundation for airline and corporate pilot careers. It also prepares students for transfer to four-year institutions with similar majors, including the Professional Pilot/B.S. Industrial Tech with option in Aviation Administration at Cal State University, Los Angeles. For more departmental information call (562) 938-4387.

REQUIRED COURSES

AVMNT 251 Powerplant Theory & Maintenance 8
AVMNT 252 Powerplant Systems/Components 1 8
AVMNT 253 Powerplant Systems/Components 2 8
TOTAL UNITS 55

NOTE: Students with prior training at the Aviation Maintenance Technician School or with substantial experience, should consult with one of the A & P Maintenance instructors or the Department Head before enrolling.

AVIATION PROFESSIONAL PILOT

(Transfer)

Career Certificate and/or Associate in Science

This field of concentration (when combined with the flight training necessary to get appropriate pilot certificates and ratings) prepares students for an entry-level commercial pilot position. It also provides a foundation for airline and corporate pilot careers. It also prepares students for transfer to four-year institutions with similar majors, including the Professional Pilot/B.S. Industrial Tech with option in Aviation Administration at Cal State University, Los Angeles. For more departmental information call (562) 938-4387.

REQUIRED COURSES

AVMNT 251 Powerplant Theory & Maintenance 8
AVMNT 252 Powerplant Systems/Components 1 8
AVMNT 253 Powerplant Systems/Components 2 8
TOTAL UNITS 55

NOTE: Students with prior training at the Aviation Maintenance Technician School or with substantial experience, should consult with one of the A & P Maintenance instructors or the Department Head before enrolling.

AVIATION MAINTENANCE (Airframe/Powerplant Mechanic)

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REQUIRED COURSES

AVMNT 211 General Aviation Maintenance Tech. 7
AVMNT 241 Airframe Structures 8
AVMNT 242 Aircraft Systems/Components 1 8
AVMNT 243 Aircraft Systems/Components 2 8
AVMNT 251 Powerplant Theory & Maintenance 8
AVMNT 252 Powerplant Systems/Components 1 8
AVMNT 253 Powerplant Systems/Components 2 8
TOTAL UNITS 55

NOTE: Students with prior training at the Aviation Maintenance Technician School or with substantial experience, should consult with one of the A & P Maintenance instructors or the Department Head before enrolling.

AVIATION PROFESSIONAL PILOT

(Transfer)

Career Certificate and/or Associate in Science

This field of concentration (when combined with the flight training necessary to get appropriate pilot certificates and ratings) prepares students for an entry-level commercial pilot position. It also provides a foundation for airline and corporate pilot careers. It also prepares students for transfer to four-year institutions with similar majors, including the Professional Pilot/B.S. Industrial Tech with option in Aviation Administration at Cal State University, Los Angeles. For more departmental information call (562) 938-4387.
### Curriculum Guides

Subtotal Units  5  
TOTAL UNITS  27  
RECOMMENDED COURSES  
PHYS 10 Conceptual Physics  4  

NOTE: It is extremely important to take PHYS 10, or a similar course (a one-semester general physics class) to satisfy the general education science/lab science requirement. This should be done early in the student’s program. PHYS 10 has limited availability at LBCC. If it is not available when needed, the student should take an equivalent class at another college. Consult an LBCC counselor for equivalencies.

### Baking

**Associate in Science/Career or Completion Certificate**

Students learn skills for positions in baking and pastry for institutional, restaurant, airline catering, convention center, cruise line, supermarket, and hotel restaurant type food operations. Students will enhance their skills in baking, pastry and chocolate. For more departmental information call (562) 938-4502 or 938-4332.

**REQUIRED COURSES**  

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>F_N 250 Nutrition for Culinary</td>
<td>(F, SP) 2</td>
</tr>
<tr>
<td>CULAR 20 Applied Food Service Sanitation Hotel/Rest. Mgmt.</td>
<td>(F, SP) 3</td>
</tr>
<tr>
<td>CULAR 200AD Introduction to Chocolate</td>
<td>(F, SP, S) 1</td>
</tr>
<tr>
<td>CULAR 204 Introduction to Baking</td>
<td>(F) 5</td>
</tr>
<tr>
<td>†CULAR 205 Baking &amp; Pastry I</td>
<td>(SP) 5</td>
</tr>
<tr>
<td>†CULAR 206 Baking &amp; Pastry II</td>
<td>(INF) 5</td>
</tr>
<tr>
<td>CULAR 207 Commercial Cake Decorating</td>
<td>(INF) 5</td>
</tr>
<tr>
<td>†¶CULAR 213A Food Preparation 1</td>
<td>(F, SP) 11.5</td>
</tr>
</tbody>
</table>

Complete a minimum of four (4) units from the following:

†CULAR 271AD Work Experience: Food Services (F, SP) 2:2:2:2
†CULAR 272AD Work Experience: Food Services (F, SP) 3:3:3:3
†CULAR 273AD Work Experience: Food Services (F, SP) 4:4:4:4

TOTAL UNITS  40.5  
COMPLETION CERTIFICATE  
Introduction to Baking Certificate

**REQUIRED COURSE**  

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CULAR 204 Intro to Baking</td>
<td>(INF) 5</td>
</tr>
</tbody>
</table>

TOTAL UNITS  5  

Baking and Pastry 1 Certificate

**REQUIRED COURSE**  

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CULAR 204 Intro to Baking</td>
<td>(INF) 5</td>
</tr>
<tr>
<td>†CULAR 205 Baking and Pastry</td>
<td>(SP) 5</td>
</tr>
</tbody>
</table>

TOTAL UNITS  10  

### Commercial Cake Decorating Certificate

**REQUIRED COURSE**  

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CULAR 207 Commercial Cake Decorating</td>
<td>5</td>
</tr>
</tbody>
</table>

TOTAL UNITS  5

**Food Preparation 1 Certificate**

**REQUIRED COURSE**  

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CULAR 213A Food Preparation 1</td>
<td>11.5</td>
</tr>
</tbody>
</table>

TOTAL UNITS  11.5

**Food Service Sanitation Certificate**

**REQUIRED COURSE**  

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CULAR 20 Applied Food Service Sanitation Hotel/Restaurant Management</td>
<td>(F, SP) 3</td>
</tr>
</tbody>
</table>

TOTAL UNITS  3

### Biological Sciences

** Associate in Arts or Science**

This field of concentration provides the student with an introductory education to this field, not necessarily career related, ending with the associate degree, or a partial lower division preparation for transfer to a baccalaureate degree in the biological sciences. No certificates are offered in the Life Science Department. This Associate Degree will provide the student with an introductory education to this field of study, not necessarily career related, but ending with the Associate Degree or a partial lower division preparation for transfer to a Baccalaureate Degree in the biological sciences. For more departmental information call (562) 938-4403 or 938-4418.

**REQUIRED COURSES**

Select courses from the following to total 18 units

Complete 9 - 12 units in courses from any of the following biological science programs: ANAT (F, SP, S) BIO (excluding BIO 47, 48 or 49) (F, SP, S) PHYSI (F, SP)

Subtotal Units  9-12

Complete 6 - 9 units in courses from any of the following physical science OR mathematics programs: ASTR, CHEM, ENVRS 1, PGEOG 1 [excluding all other Geography courses], GEOL, MATH [excluding MATH 110, 805 and 815], Physical Science, PHYS

Subtotal Units  6-9

TOTAL UNITS  18

### Business Administration

** (Transfer)**

**Career Certificate and/or Associate in Arts**

This field of concentration allows students to earn the Associate Degree while partially preparing them for transfer into the business administration major at a university. In addition, it prepares the student for an entry-level position in any business office. This

Consult guides available in Counseling Centers for specific general education and required grades.
BUSINESS GENERAL

Career Certificate and/or Associate in Arts

This field of concentration is designed to acquaint the student with the business world in general. With additional course work, it can prepare students for either employment or further education. Students with definite career/educational goals are recommended to follow the appropriate curriculum guide for their specific field of concentration. This Associate Degree will prepare students for an entry-level position in a variety of business settings and will serve as a foundation for specialization. This Associate Degree will prepare students for career advancement once a certificate has been earned. Appropriate course selection will also facilitate transfer in a related major. For more departmental information call (562) 938-4328.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 1A Principles of Accounting (F, SP, S)</td>
<td>4</td>
</tr>
<tr>
<td>†ACCTG 1B Principles of Accounting (F, SP, S)</td>
<td>4</td>
</tr>
<tr>
<td>‡ECON 1A-B Principles of Economics (Macro/Micro)</td>
<td>3-3</td>
</tr>
<tr>
<td>LAW 18A Business Law (F, SP, S)</td>
<td>3</td>
</tr>
<tr>
<td>CBIS 6 Intro to Information Systems</td>
<td>3</td>
</tr>
</tbody>
</table>

Select ONE of the following options:

- CBIS 8B Visual BASIC Programming | 4
- ‡CBIS 208B Advanced Visual BASIC Programming | 4
- ‡‡CBIS 2 Advanced MS Office – Help Desk Emphasis | 3
- ºCBIS 6 Intro to Information Systems | 4

Select ONE of the following courses:

- †MATH 37 Finite Mathematics | 3
- †MATH 47 Calculus for Business | 3
- †MATH 50 Precalculus Mathematics | 4
- †MATH 60 First Calculus Course | 5

TOTAL UNITS 23-26

RECOMMENDED courses but not required:

- ºCBIS 36 Systems Analysis and Design (SP) | 3
- GBUS 5 Introduction to Business (F, SP, S) | 3
- IBUS 1 Introduction to International Business (F, SP) | 3
- LAW 18B Business Law (F, SP) | 3
- PHIL 7 Introduction to Ethics | 3
- PHIL 12 Introduction to Logic | 3
- ‡STAT 1 Elementary Statistics | 3

BUSINESS INTERNATIONAL

Career Certificate and/or Associate in Arts

Students learn both theoretical knowledge and practical skills in the wide-ranging field of international business. Transfer students will gain a strong international elective base for further study in a variety of fields. Working students acquire new skills and career opportunities. Any of the courses in this concentration provide knowledge of the global economy and discussions of international issues important to personal growth. These certificates and degree programs prepare students for entry-level positions in a wide range of international business as well as entrepreneurial opportunities. For more departmental information call (562) 938-4629.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
</table>
| †IBUS 1 Introduction to International Business (F,SP) | 3
| IBUS 20 Export-Import Practice (F,SP) | 3
| IBUS 30 International Business Management (SP) | 3
| IBUS 40 International Banking & Finance (F) | 3
| IBUS 52 International Marketing (F) | 3
| IBUS 60 International Business Law (SP) | 3

Subtotal units 18

Complete 3 units from the list of authorized electives listed below:

- ACCTG (Any) Accounting | 3
- CBIS (Any) Computer/Busines Systems | (see below)
- FOR1 (Any) Foreign Studies | 3
- GBUS 5 Introduction to Business (F,SP) | 3
- GEOG (Any) Geography (see recommendations below) | 3
- IBUS 273AD Work Experience (see below) | 4
- LAW 18 Business Law | 3
- MGMT (Any) Management | 3
- MKTG (Any) Marketing | 3
- POLSC 4 World Politics | 3

Subtotal units 3

TOTAL UNITS 21
**RECOMMENDED courses:**
- CAOTO 15 Business Communications 3
- CBIS 6 Introduction to Information Systems 4
- COMIS 1A Using the IBM Microcomputer 1
- IBUS 273AD Work Experience 4
- GEOG 40 World Regional Geography 3

**BUSINESS MANAGEMENT**
Career Certificate and/or Associate in Arts
The certificate and degree programs prepare students for a wide range of entry and mid-level positions in business management. Students can enhance their skills in management by studying the internal and external forces that affect all organizations. With additional courses identified on a transfer curriculum guide for Business Administration, students can prepare for a baccalaureate degree in this field. For more departmental information call (562) 938-4332 or 938-4941.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT 49A Introduction to Management (F, SP, S)</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 49B Human Resources Management (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 58 Leadership and Supervision (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>MGMT60 Management &amp; Organizational Behavior (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 80 Small Business Entrepreneurship (F, SP, S)</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal Units 15

Select **TWO (2)** classes from the following:

- IBUS 1 Introduction to International Business (F, SP) 3
- IBUS 30 International Business Management (SP) 3
- MGMT 273AD Work Experience (F, SP) 4
- MKTG 47 Essentials of Marketing (F, SP) 3

Subtotal Units 6-7

Select **TWO (2)** classes from the following:

- †ACCTG 1A-B Principles of Accounting (F, SP, S) 4:4
- ACCTG18 Credit & Financial Statement Analysis (SP) 3
- †ACCTG 200A Introduction to Accounting 3
- †CAOTC 35 Microsoft Office (F, SP) 3
- CAOTO 15 Business Communication (F, SP) 3
- †CBIS 6 Intro to Information Systems (F, SP S) 4
- *ECON 1A-1B Macro & Micro Economic Analysis 3:3
- GBUS 5 Introduction to Business (F, SP, S) 3
- LAW 18A Business Law (F, SP, S) 3
- MKTG 40 Salesmanship (F, SP) 3
- MKTG 41 Advertising (F, SP) 3

Subtotal units 6-8

TOTAL UNITS 27-30

**CABINET/FURNITURE MAKING TECHNOLOGY**

Associate in Science/Career or Completion Certificate
Students prepare for entry-level positions in the cabinet making and furniture industry. Students can earn an Associate of Science Degree or Career Certificate in Cabinet/Furniture Making or a Completion Certificate in Cabinetmaker Trainee or Aircraft Interior Cabinetmaker Trainee. For more departmental information call (562) 938-3064 or 938-3055.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CABMK 201 Intro to Wood Products Manufacturing</td>
<td>9</td>
</tr>
<tr>
<td>†CABMK 202 Traditional Wood Products Mfg</td>
<td>9</td>
</tr>
<tr>
<td>†CABMK 203 Contemporary Wood Products Mfg</td>
<td>9</td>
</tr>
</tbody>
</table>

TOTAL UNITS 27

**COMPLETION CERTIFICATES**

Cabinetmaker Trainee Certificate

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CABMK 301 Introduction to Wood Products Mfg.</td>
<td>4</td>
</tr>
<tr>
<td>†CABMK 302 Millwork and Cabinet Making 2</td>
<td>4</td>
</tr>
<tr>
<td>†CABMK 303 Millwork and Cabinet Making 3</td>
<td>4</td>
</tr>
<tr>
<td>†CABMK 304 Millwork and Cabinet Making 4</td>
<td>4</td>
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</tbody>
</table>

TOTAL UNITS 16

**CARPENTRY TECHNOLOGY**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CARP 211 Carpentry 1</td>
<td>10</td>
</tr>
<tr>
<td>†CARP 212 Carpentry 2</td>
<td>10</td>
</tr>
<tr>
<td>†CARP 213 Carpentry 3</td>
<td>10</td>
</tr>
<tr>
<td>†CARP 440 Blueprint Reading</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal Units 33

Select **SEVEN (7)** units from the following:

- CARP 219 Residential Roof Framing (SP) 4
- CARP 222 Residential Stairs (F) 4
- CARP 225 Metal Framing (S) 4
- CARP 230 Cost Estimating (F) 4
- CARP 240 OSHA Safety for Construction 2

Subtotal Units 7

TOTAL UNITS 40

**COMPLETION CERTIFICATE**

Carpenter Trainee Certificate

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARP 311 Carpentry Trade 1</td>
<td>3</td>
</tr>
<tr>
<td>†CARP 312 Carpentry Trade 2</td>
<td>3</td>
</tr>
<tr>
<td>†CARP 313 Carpentry Trade 3</td>
<td>3</td>
</tr>
<tr>
<td>†CARP 314 Carpentry Trade 4</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal Units 12

Select 3-4 Units from the Following Courses:

- ARCHT 360M1 Basic AutoCAD for Architecture 1.5
- ARCHT 360M2 Architecture Design–AutoCAD 1.5
- CABMK 301 Millwork & Cabinet Making 1 4
- CARP 230 Cost Estimating (F) 4
- CARP 440 Blueprint Reading 3
- ELECT 240 Electrical Code-Residential 3
- HORT 223AD Landscape Construction 4

TOTAL UNITS 15-16

Consult guides available in Counseling Centers for specific general education and required grades.
Home Remodeling & Repair Technician Certificate

REQUIRED COURSES
CARP 415A Home Remodeling & Repair 2
†CARP 415B Home Remodeling & Repair 2
†CARP 415C Home Remodeling & Repair 2
†CARP 415D Home Remodeling & Repair 2

Subtotal Units 8

Select 3-4 Units from the Following Courses:
ARCHT 360M1 Basic AutoCAD for Architecture 1.5
and
ARCHT 360M2 Architecture Design—AutoCAD 1.5
CABMK 301 Millwork & Cabinet Making I 4
CARP 230 Cost Estimating (F) 4
ELECT 240 Electrical Code-Residential 3
HORT 223AD Landscape Construction 4

Subtotal Units 11-12

Pre-apprenticeship Training Certificate

REQUIRED COURSES
CARP 250 Pre-apprenticeship Training 5.5

TOTAL UNITS 5.5

Children Development

Associate in Arts

This field of concentration is designed for students who wish to transfer to a four-year degree program in Child Development or Early Childhood Education or Liberal Studies, as well as providing students with a CDECE 12-unit state requirement for employment in Early Childhood Education Programs. For more departmental information call (562) 938-4549 or 938-4454.

REQUIRED COURSES
**+CDECE 45 Child Development (F, SP) 3
**+CDECE 47 Human Development (F, SP) 3
**+CDECE 48 Child, Family & Community (F,SP) 3
**+CDECE 66 The Preschool Child (F, SP) 3
*PSYCH 1 Introduction to Psychology 3
**Complete THREE (3) units minimum in any other Child Development course. 3

Subtotal Units 15

Select ONE of the following courses:
*SOCIO 1 Introduction to Sociology 3
*ANTHR 2 Cultural Anthropology 3

Subtotal Units 3

Select ONE of the following courses:
**+CDECE 61 Child in Multi-Cultural Classroom (SP)3
*HUMAN 1 Comparative World Cultures 3
*SOCIO 40 Marriage and the Family 3

Subtotal Units 3

Select ONE of the following:
*ANAT 41 Anatomy & Physiology 5
**+BIO 60 AND 60L Human Biology AND Lab 4:1

Subtotal Units 5

TOTAL UNITS 26

RECOMMENDED courses:
CDF 210A Skills & Strategies for Family Workers I 3
CDF 210B Skills & Strategies for Family Workers II 3
HS 50 Laws and Ethics 3
CDAD 273AD Work Experience 4

TOTAL UNITS 17

Family Development Certificate

REQUIRED COURSES
**+CDECE 47 Human Development 3
**+CDECE 48 Child, Family & Community 3

TOTAL UNITS 12

Child Development:

Early Childhood Education

Associate in Arts/Career or Completion Certificate

Students prepare to work in early childhood programs. For STATE MINIMUM REQUIREMENTS (Title 22): This program satisfies the State of California licensing requirement for employment in early childhood education programs (private, church, industrial, coop). The minimum licensing requirement is that six units be completed before employment and that an additional six units be completed immediately thereafter. It is recommended that the requirement for courses in DS 1* and DS 2* be satisfied with at least three semester units in each category. It is also recommended that a minimum of six semester units be taken in the DS 3* - Program/ Curriculum with the option that if the person is working specifically with infants or school-age children that they should apply three units in DS 4* or DS 5* towards these six units. The DS designation for each course can be found following the course title.

For CHILD DEVELOPMENT PERMIT - SCHOOL AGE EMPHASIS (formerly called Children's Center Permit) (Title 5): The School Age Child Care Certificate program, plus 16 units in general education including one course in humanities, social science, mathematics, and/or science, and English, and an experience component, satisfies the requirements for a Child Development Permit-School Age Emphasis to teach in subsidized early childhood education programs (State programs run by school districts). See Permit Matrix, last page of this guide, for further clarification. For more departmental information call (562) 938-4549 or 938-4454.
Consult guides available in Counseling Centers for specific general education and required grades.
### Child Development Permit Specialization Area—Children with Exceptional Needs Certificate

**REQUIRED COURSES** | **UNITS**  
--- | ---  
Choose SIX (6) units from the following:  
CDSED 5 Community Resources/Special Educ (SP) | 3  
CDSED 67 The Exceptional Child (F, SP) | 3  
CDSED 70 Teaching Exceptional Students (SP) | 3  
**TOTAL UNITS** | **6**

### Child Development Permit Specialization Area—Family Child Care Certificate

**REQUIRED COURSES** | **UNITS**  
--- | ---  
ºCDECE 71 AD or 72 AD or 73 AD Work Experience (not to exceed 3 units) | 2:3:4  
CDFDC 212 Family Child Care Management | 3  
**TOTAL UNITS** | **6**

### Child Development Permit Specialization Area—Infant/Toddler Certificate

**REQUIRED COURSES** | **UNITS**  
--- | ---  
CDECE 40 Infant Development & Educaring | 3  
CDECE 41 Toddler Development & Educaring | 3  
**TOTAL UNITS** | **6**

### Child Development Permit Specialization Area—Literacy Certificate

**REQUIRED COURSES** | **UNITS**  
--- | ---  
CDECE 34 Children’s Literature | 3  
CDECE 201 Literacy in Early Childhood | 3  
**TOTAL UNITS** | **6**

### Child Development Permit Specialization Area—Multicultural Certificate

**REQUIRED COURSES** | **UNITS**  
--- | ---  
ANTHR 2 Cultural Anthropology | 3  
**OR**  
HUMAN 7 American Pluralism and Identity | 3  
CDECE 61 Children in the Multicultural Classroom | 3  
**TOTAL UNITS** | **6**

### Child Development Permit Specialization Area—Music Certificate

**REQUIRED COURSES** | **UNITS**  
--- | ---  
CDECE 55 Music for Children | 2  
MUSIC 31 Music Fundamentals | 3  
One additional course in music | 1  
**TOTAL UNITS** | **6**

### Child Development Permit Specialization Area—School Age Certificate

**REQUIRED COURSES** | **UNITS**  
--- | ---  
Choose SIX (6) units from the following:  
CDSA 62 Creative Expression School Age Children (F, SP) | 2  
CDSA 63 The School Age Child (F or SP) | 3  
CDSA 65 School Age Curriculum (F or SP) | 3  
†CDSA 75 School Age Child Care Practicum (F,SP) | 3  
**TOTAL UNITS** | **11**

### Child Development Permit Specialization Area—Special Education

**REQUIRED COURSES** | **UNITS**  
--- | ---  
CDSED 67 The Exceptional Child (F, SP) | 3  
**TOTAL UNITS** | **3**

### CHILD DEVELOPMENT: SCHOOL AGE CHILD CARE

**Career Certificate and/or Associate in Arts**

This field of concentration is designed for students preparing to teach in before-and-after school aged child care programs. It also provides students preparing for a career as an elementary school teacher an opportunity to gain knowledge of the school-age child as well as effective curriculum and guidance methods. This certificate leads towards positions as aides, teachers, directors in before-and-after school programs or as recreation aides or leaders. For more departmental information call (562) 938-4549 or 938-4454.

For **CHILD DEVELOPMENT PERMIT – SCHOOL AGE EMPHASIS** (formerly called Children’s Center Permit) (Title 5): The School Age Child Care Certificate program, plus 16 units in general education including one course in humanities, social science, mathematics, and/or science, and English, and an experience component, satisfies the requirements for a Child Development Permit-School Age Emphasis to teach in subsidized early childhood education programs (State programs run by school districts). See Permit Matrix, last page of this guide, for further clarification.

**REQUIRED COURSES** | **UNITS**  
--- | ---  
¶CDECE 45 Child Development (F, SP) | 3  
**OR**  
CDECE 47 Human Development (F, SP) | 3  
CDECE 48 Child, Family and Community (F, SP) | 3  
**Subtotal Units** | **6**

### School Age

**REQUIRED COURSES** | **UNITS**  
--- | ---  
CDSA 62 Creative Expression, School Age Children (F, SP) | 2  
CDSA 63 The School Age Child (F or SP) | 3  
CDSA 65 School Age Curriculum (F or SP) | 3  
†CDSA 75 School Age Child Care Practicum (F,SP) | 3  
**Subtotal Units** | **11**

### Special Education

**REQUIRED COURSES** | **UNITS**  
--- | ---  
CDSED 67 The Exceptional Child (F, SP) | 3  
**Subtotal Units** | **3**

### Select **FIVE (5)** units from the following:

- CDECE 19 Child Nutrition & Safety (SP) | 2  
- CDECE 55 Music for Children (F, SP) | 2  
- CDECE 56 Creative Movement for Young Children | 2  
- CDECE 59 Child Behavior (F, SP) | 3  
†CDECE 60A Admin. of Child Dev. Programs (F) | 3  
†CDECE 60B Advanced Supervision of ECE (SP) | 3  
CDECE 61 Child in the Multi-Cultural Classroom | 3

### COMPLETION CERTIFICATES

**Family Development Certificate**

**REQUIRED COURSES** | **UNITS**  
--- | ---  
**++CDECE 47 Human Development** | 3  
**++CDECE 48 Child, Family & Community** | 3  
CDE 210A Skills & Strategies for Family Workers I | 3  
CDE 210B Skills & Strategies for Family Workers II | 3  
**TOTAL UNITS** | **12**
CHILD DEVELOPMENT:
SPECIAL EDUCATION ASSISTANT
Career Certificate and/or Associate in Arts

Students prepare to work as an assistant with children who have exceptional needs or special education needs. Students interested in becoming teachers in public schools should consult the Transfer Information Sheet "Teacher Preparation." For more departmental information call (562) 938-4549 or 938-4454.

Special Education

REQUIRED COURSES UNITS
CDSED 5 Community Resources/Special Educ (SP) 3
CDSED 67 The Exceptional Child (F, SP) 3
†CDSED 69 Special Education Practicum (F, SP) 3
CDSED 70 Teaching Exceptional Students (SP) 3
Subtotal Units 12

Early Childhood

CDECE 47 Human Development (F, SP) 3
CDECE 59 Child Behavior (F, SP) 3
COMDI 2A-B American Sign Language, Beginning 3:3
(1 semester required)
Subtotal Units 9

Select FIVE units from the following:
CDECE 19 Child Nutrition and Safety (F or SP) 2
CDECE61 Children/Multi-Cultural Classroom (SP) 3
†CDECE 71AD, 72AD, 73AD Work Experience (Not to exceed 4 units) 2:3:4
COMDI 2B American Sign Language, Beginning 3
†COMDI 3A-B Total Communication w/Deaf, Int 3:3
PEPP 6AD Introduction to Principles of Adapted P.E. 2
Subtotal Units 5
TOTAL UNITS 26
(18 of the 26 required units must be taken at Long Beach City College.)

Recommended: A valid Red Cross First Aid Certificate

RECOMMENDED courses:
CDF 210A Skills & Strategies for Family Workers I 3
CDF 210B Skills & Strategies for Family Workers II 3
HS 50 Laws and Ethics 3
CDAD 273AD Work Experience 4
OR
HS 73AD Work Experience 4
CDAD 270 Adult Development 3
OR
HS 26 Introduction to Gerontology 3
F N 255C Nutrition for Adults and Aging 1

COMPLETION CERTIFICATES
Adult and Elder Care Certificate

REQUIRED COURSES UNITS
HS 50 Laws and Ethics 3
CDAD 273AD Work Experience 4
OR
HS 73AD Work Experience 4
CPR certification is required prior to enrolling in any of the classes listed below:
CDAD 270 Adult Development 3
OR

HS 26 Introduction to Gerontology 3
F N 255C Nutrition for Adults and Aging 1
*PSYCH 1 Introduction to Psychology 3
*SOCIO 1 Introduction to Sociology 3
TOTAL UNITS 17

Family Development Certificate

REQUIRED COURSES UNITS
***†CDECE 47 Human Development 3
***†CDECE48 Child, Family & Community 3
CDF 210A Skills & Strategies for Family Workers I 3
CDF 210B Skills & Strategies for Family Workers II 3
TOTAL UNITS 12

COMPUTER APPLICATIONS SPECIALIST
Career or Completion Certificate and/or Associate in Arts

Students prepare for an entry-level position working with computer application software, including operating systems, programming, word processing, spreadsheet applications, desktop publishing, and telecommunications. The Concentration in Computer Business Information Systems emphasizes help-desk support, while the Concentration in Computer Applications and Office Technologies focuses on administrative support. This certificate prepares students for an entry-level position in a variety of business settings and serves as a foundation for specialization as a software trainer, PC support specialist, software support specialist, help desk technician, software/hardware salesperson, or software tester. This Associate degree prepares students for career advancement once a certificate has been earned. Appropriate course selection also facilitates transfer in a related major. For more information about CBIS courses, call (562) 938-4623 or email cbis@lbcc.edu; for CAOT classes, call (562) 938-3033.

REQUIRED CORE COURSES FOR BOTH CONCENTRATIONS UNITS
•CBIS 6 Introduction to Information Systems (F, SP, S)4
CAOTO 15 Business Communications (F, SP) 3
Subtotal Units 7

Select ONE from the following:
•†CAOTT 200 Beg. Typing/Keyboarding (F, SP, S) 3
•†CAOTT 200A Beg Typing/Keyboarding, Lev 1  1
CAOTT 233 Computer Keyboarding (F, SP, S) 1
Subtotal Units 1-3

CHOOSE ONE AREA OF CONCENTRATION (CBIS OR CAOT)

CONCENTRATION IN COMPUTER BUSINESS INFORMATION SYSTEMS (CBIS)

REQUIRED COURSES UNITS
•†CBIS2 Adv MS Office-Help Desk Emphasis (F,SP,S)3
•CBIS 3A Windows Command Line (F, SP, S) 1
•†CBIS 3B Advanced Operating Systems (F, SP) 1
•CBIS 8B Visual BASIC Programming (F, SP) 4
CBIS 38 Database Concepts (F, SP) 4
†CBIS 40 MS Office Expert Level (F, SP) 3
CBIS 206A Navigating the Internet (F, SP, S) 1

Consult guides available in Counseling Centers for specific general education and required grades.
CBIS 207AD Web Construction (F, SP, S) 2
Subtotal Units 19

Required Work Experience in the CBIS Computer Labs:
†CBIS 71AD Work Experience-Comp Bus Info Sys 2
†CBIS 72AD Work Experience - Comp Bus Info Sys 3
†CBIS 73AD Work Experience - Comp Bus Info Sys 4
Subtotal Units 2-4
TOTAL UNITS 29-33

CONCENTRATION IN COMPUTER APPLICATIONS AND OFFICE TECHNOLOGIES (CAOT) REQUIRES:
• CAOTC 31A, B Microsoft Windows Operating System, Levels 1, 2 (F, SP, S) 1:1
• CAOTC 35 Microsoft Office (F, SP) 3
• CAOTC 39B, C, D Microsoft Word for Office, Levels 2, 3, 4 (F, SP, S) 1:1:1
• CAOTC 41F, J Excel for Windows, Levels 2, 3 (F, SP, S) 1:1
• CAOTC 44E PowerPoint for Windows, Adv. (F, SP, S) 1
• CAOTC 45 Internet for Office and Personal Use (F, SP, S) 2
• CAOTC 47A Access for Office Applications, Beginning (F, SP) 3
• CAOTC 215A Microsoft Outlook (F, SP) 2
Subtotal Units 18

Electives for CAOT Concentration
Select any THREE (3) units from the following:
• CAOTC 34 Intro to Computers & Applications (F, SP) 3
• CAOTC 41E Excel for Windows-Beginning (F, SP, S) 1
• CAOTC 215A Microsoft Outlook (F, SP) 2
Subtotal Units 18

TOTAL UNITS 29-33

COMPLETION CERTIFICATES
Basic Computing and Internet Literacy Certificate
REQUIRED COURSES
• CBIS 2 Advanced MS Office - Help Desk Emphasis 3
• CBIS 6 Introduction to Information Systems 4
• CBIS 206A Navigating the Internet 1

TOTAL UNITS 8

ADDITIONAL REQUIREMENTS: 2.5 minimum GPA in courses for this certificate. Completion of certificate courses within three semesters.

Basic Microsoft Office Certificate
REQUIRED COURSES
• CAOTC 35 Microsoft Office 3

TOTAL UNITS 3

REQUIRED COMPETENCY: Instructor verification of 80 percent or better accuracy on Word, Excel, Access, and PowerPoint Core practice exams or Microsoft Office Specialist certification.

Microsoft Access Certificate
REQUIRED COURSES
• CAOTC 47A Access for Office Applications, Beg. 3
• CAOTC 47B Access for Office Applications, Interm. 3

TOTAL UNITS 6

REQUIRED COMPETENCY: Instructor verification of 80 percent or better accuracy on Access Core practice exam or Microsoft Office Specialist certification.

Microsoft Excel Certificate
REQUIRED COURSES
• CAOTC 41E Excel for Windows-Beginning 1
• CAOTC 41F Excel for Windows-Intermediate 1
• CAOTC 41J Excel for Windows-Advanced 1

TOTAL UNITS 3

REQUIRED COMPETENCY: Instructor verification of 80 percent or better accuracy on Excel Core and Expert practice exams or Microsoft Office Specialist certification.

Microsoft Word Certificate
REQUIRED COURSES
• CAOTC 39A Microsoft Word for the Office, Begin 1
• CAOTC 39B Microsoft Word for the Office, Interm. 1
• CAOTC 39C Microsoft Word for the Office, Adv 1
• CAOTC 39D Microsoft Word for the Office, Expert 1

TOTAL UNITS 4

REQUIRED COMPETENCIES: Typing certificate of at least 35 words per minute for 5 minutes with 5 or fewer errors completed within the previous 12 months. Instructor verification of 80 percent or better accuracy on Word Core and Expert practice exams or Microsoft Office Specialist certification.

COMPUTER and BUSINESS INFORMATION SYSTEMS
Career or Completion Certificate and/or Associate in Arts

The CBIS Department has four Career Certificate programs and one Completion Certificate program for students interested in working in the computer industry. Track 1 is intended for those students interested in working as help desk technicians assisting end-users resolve software and hardware problems. Track 2 is intended for students interested in developing computer application software in business and industry as an entry-level computer programmer on PCs, mid-range or larger sized computers. Track 3 is intended for students interested—in a solid foundation of programming and software engineering skills for use in Computer Science.
Track 4 is intended for students who want to know how networking is going to affect their work life, and want to understand what this technology is all about or are trying to find out if a network would help their organization. It will also prepare students for MS Windows Certification. The CBIS department offers several Completion Certificates. Many of these are also designed to prepare the student to pass industry certification exams such as Sun Java Programmer and Developer, Microsoft Windows MCSE related exams, and several Oracle Database certificate exams. This Career Certificate will prepare students for an entry-level position in a variety of business settings:

**Track 1 - Microcomputer Help-Desk Technician:** PC Support Specialist, Software Support

**Track 2 - Programmer:** Java, C++, Visual BASIC, RPG II, Access, Desktop Support, AS/400 programming and operations

**Track 3 - Programmer – Computer Science**

**Track 4 - Networking - System Administrator or Networking Support**

The Associate Degree will prepare students for transfer to the four-year college or university. For more departmental information email: cbis@lbcc.edu or see cbis.lbcc.edu web site or call (562) 938-4479.

### Track 1- Microcomputer Help-Desk Technician

Track 1 is intended for students interested in working as a help desk technician or in technical support of the PC systems.

**REQUIRED COURSES FOR TRACK 1 UNITS**

- CBIS 2 Advanced MS Office – Help Desk Emphasis (F, SP, S) 3
- †CBIS 3A Windows Command Line (F, SP, S) 1
- †CBIS 3B Advanced Operating Systems (F, SP) 1
- †CBIS 6 Intro to Information Systems (F, SP, S) 4
- †CBIS 40 MS Office Expert Level (F, SP) 3
- †CBIS 41 Networking Fundamentals (F, SP) 3
- †CBIS 200 Intro to IBM Compatible Computers 3.5
- †CBIS 206A Navigating the Internet (F, SP, S) 1
- †CBIS 207AD Web Construction (F, SP, S) 2
- †CBIS 260 Help Desk Concepts (SP) 2

**Total Units** 22.5

Required Work Experience in the CBIS Computer Labs - Choose a minimum of two units:
- †CBIS 71AD Work Experience-Comp Bus Info Sys 2
- †CBIS 72AD Work Experience-Comp Bus Info Sys 3

**Subtotal Units** 2

**TOTAL UNITS FOR TRACK 1** 24.5

*Recommended but not required course(s):*
- †CBIS 36 Systems Analysis and Design (SP) 3
- CBIS 251 Introduction to ASP.NET 3.5
- CAOTO 263 Customer Service 1
- CAOTO 264 Call Centers 1
- CAOTO 265 Customer Conflict Management 1
- SP 20 Elements of Intra Personnel Communication 3

**Track 2 - Programmer**

Track 2 is intended for students interested in becoming a computer programmer.

**REQUIRED COURSES FOR TRACK 2 UNITS**

- †CBIS 3A Windows Command Line (F, SP, S) 1
- †CBIS 3B Advanced Operating Systems (F, SP) 1
- †CBIS 6 Intro to Information Systems (F, SP, S) 4
- †CBIS 7 Business Programming Logic & Design(F, SP) 1
- †CBIS 36 Systems Analysis & Design (SP) 3
- †CBIS 38 Database Concepts (F) 4
- †CBIS 223 Unix/Linux Fundamentals (F, SP) 3

**Subtotal Units** 17

Choose one series of the following:

- †CBIS 8B Visual BASIC Programming: Intro (F, SP) 4
- †CBIS 208B Visual BASIC Programming: Adv(F, SP) 4
- †CBIS 11 Computer Programming/C++ I (F) 3.5
- †CBIS 12 Computer Programming/C++ II (SP) 3.5
- †CBIS 14A Intro to Java Programming (F, SP) 3.5
- †CBIS 288B Visual BASIC Programming: Intro (F, SP) 4
- †CBIS 242 Programming: Introduction to Oracle (F) 2.5
- †CBIS 243 Programming: Oracle Program Units (SP) 2
- †CBIS 246 Oracle DBA Fundamentals (SP) 2.5

**Subtotal Units** 7-8

Choose one of the following alternative languages:

- †CBIS 8B Visual BASIC Programming: Intro (F, SP) 4
- †CBIS 11 Computer Programming/C++ I (F) 3.5
- †CBIS 14A Intro to Java Programming (F, SP) 3.5

**Subtotal Units** 3-4

**TOTAL UNITS FOR TRACK 2** 26-29

*Recommended but not required course(s):*
- †CBIS 71AD Work Experience-Comp Bus Info Sys 2
- †CBIS 72AD Work Experience-Comp Bus Info Sys 3
- †CBIS 73AD Work Experience-Comp Bus Info Sys 4
- CBIS 206C World Wide Web Database Programming 1.5
- CBIS 207E Advanced Web Construction 2.5
- CBIS 251 Introduction to ASP.NET 3.5

**Track 3 - Programmer – Computer Science**

Track 3 is intended for students interested in Computer Science courses that will help them succeed after transferring to a CSU or UC School Computer Science major program. You must see a counselor specific computer science transfer requirements to a CSU or UC school. Not all of the courses in this track will meet the specific degree requirements of a particular school.

**REQUIRED COURSES FOR TRACK 3 UNITS**

- †CBIS 3A Windows Command Line (F, SP, S) 1
- †CBIS 3B Advanced Operating Systems (F, SP) 1
- †CBIS 6 Intro to Information Systems (F, SP, S) 4
- †CBIS 7 Business Programming Logic & Design(F, SP) 1
- †CBIS 36 Systems Analysis & Design (SP) 3
- †CBIS 38 Database Concepts (F) 4
- †CBIS 223 Unix/Linux Fundamentals (F, SP) 3

**Subtotal Units** 17

Choose one series of the following:

- †CBIS 8B Visual BASIC Programming: Intro (F, SP) 4

*Consult guides available in Counseling Centers for specific general education and required grades.*
and

• CBIS 208B Visual BASIC Programming: Adv (F, SP) 4

OR

• CBIS 11 Computer Programming/C++ I (F) 3.5

• CBIS 12 Computer Programming/C++ II (SP) 3.5

and

• CBIS 13 C++ Data Structures and Algorithms 3.5

OR

• CS 21 Introduction to Computer Science I (F) 3.5

• CS 22 Introduction to Computer Science II (SP) 3.5

and

• CS 23 Fundamental Data Structures (F) (offered Fall 2005) 3.5

Subtotal Units 8-10.5

Choose one of the following alternative languages:

• CBIS 208A Visual BASIC Programming: Intro (F, SP) 4

• CBIS 11 Computer Programming/C++ I (F) 3.5

• CBIS 14A Intro to Java Programming (F, SP) 3.5

Subtotal Units 3-4

TOTAL UNITS FOR TRACK 3 28-31.5

Recommended but not required course(s):

• CBIS 71AD Work Experience-Comp Bus Info Sys 2

• CBIS 72AD Work Experience-Comp Bus Info Sys 3

• CBIS 73AD Work Experience-Comp Bus Info Sys 4

Please see a counselor for specific UC or CSU transfer requirements for these courses:

• CS 51 Intro to Computer Architecture (offered Fall 2005) 3.5

• CS 52 Introduction to Software Engineering (offered Fall 2005) 3.5

• MATH 55A Discrete Mathematics I 5

• MATH 55B Discrete Mathematics II 5

• MATH 60 First Calculus Course 5

• MATH 70 Second Calculus Course 5

• MATH 80 Third Calculus Course 5

• PHYS 3A Physics for Sci & Eng-Mechanics 5

• PHYS 3B Physics for Sci & Eng-E & M 4

• PHYS 3C Physics for Sci & Eng—Modern Physics 4

Track 4 - Networking

This area of concentration is to prepare students for a job as a network professional and for students who want to know how networking is going to affect their work life, and want to understand what this technology is all about, or are trying to find out if a network would help their organization. It will also prepare students for CompTIA, Network+, and MS Windows Certification.

REQUIRED COURSES FOR TRACK 4 UNITS

• CBIS 3A Windows Command Line (F, SP, S) 1

• CBIS 3B Advanced Operating Systems (F, SP) 1

• CBIS 6 Intro to Information Systems (F, SP, S) 4

• CBIS 41 Networking Fundamentals (F, SP) 3

• CBIS 200 Intro to IBM Compatible Computers 3.5

• CBIS 220 i-Net+ Internet Technologies (F, SP) 3

• CBIS 223 Unix/Linux Fundamentals (F, SP) 3

• CBIS 225 Microsoft Windows Client O.S. (F) 2.5

• CBIS 226 Microsoft Windows Server O.S. (F) 2.5

• CBIS 227 Microsoft Windows Networking (SP) 2.5

TOTAL UNITS FOR TRACK 4 26

Recommended but not required course(s):

• CBIS 71AD Work Experience-Comp Bus Info Sys 2

• CBIS 72AD Work Experience-Comp Bus Info Sys 3

• CBIS 73AD Work Experience-Comp Bus Info Sys 4

• CBIS 229 Microsoft ISA Server (offered Fall 2005) 2.5

• CBIS 270 Intro to Inform. Security (offered Fall 2005) 1

• CBIS 271 Network Security Fundamentals (offered Fall 2005) 3

• ELTC 250 Networking Wiring Installation 1

• ELTC 251 Cisco Networking I, Introduction 3

• ELTC 252 Cisco Networking II, Routers 3

• ELTC 253 Cisco Networking III, LAN 3

• ELTC 254 Cisco Networking IIII, WAN 3

COMPLETION CERTIFICATES

Java Web Programmer Certificate

REQUIRED COURSES UNITS

• CBIS 7 Business Programming Logic & Design (F, SP) 1

• CBIS 14A Introduction to Java Programming (F, SP) 3.5

• CBIS 38 Database Concepts (SP) 4

• CBIS 220 i-Net+ Internet Technologies (F, SP) 3

• CBIS 207AD Web Construction (F, SP, S) 2

TOTAL UNITS 13.5

Oracle Developer Associate Certificate

REQUIRED COURSES UNITS

• CBIS 36 System Design and Analysis (SP) 3.0

• CBIS 38 Database Concepts (F) 4

• CBIS 242 Programming: Introduction to Oracle (F) 2.5

• CBIS 243 Programming: Oracle Program Units (SP) 2

TOTAL UNITS 8.5

Oracle Developer Professional Certificate

REQUIRED COURSES UNITS

• CBIS 36 System Design and Analysis (SP) 3.0

• CBIS 38 Database Concepts (F) 4

• CBIS 242 Programming: Introduction to Oracle (F) 2.5

• CBIS 243 Programming: Oracle Program Units (SP) 2

• CBIS 244 Build Internet Applications I (F) 2.5

• CBIS 245 Build Internet Applications II (F) 2

TOTAL UNITS 16

Oracle Database Administrator (DBA) Associate Certificate

REQUIRED COURSES UNITS

• CBIS 36 System Design and Analysis (SP) 3.0

• CBIS 38 Database Concepts (F) 4

• CBIS 242 Programming: Introduction to Oracle (F) 2.5

• CBIS 246 Oracle DBA Fundamentals (SP) 2.5

TOTAL UNITS 9

Application Developer Certificate

REQUIRED COURSE UNITS

• CBIS 2 Adv MS Office—Help Desk Emphasis (F, SP, S) 3

• CBIS 6 Introduction to Information Systems (F, SP, S) 4

• CBIS 7 Business Programming Logic & Design (F, SP) 1

• CBIS 8B Visual Basic Programming (F, SP) 4

• CBIS 40 MS Office Expert Level (F, SP) 3

• CBIS 71AD Work Experience (F, SP, S) 2

TOTAL UNITS 17
CULINARY ARTS

Associate in Science/Career or Completion Certificate

Students will learn the skills for all phases of cooking for institutional, restaurant, airline catering, convention center, cruise line, supermarket, and hotel restaurant type food operations. It is appropriate for students currently employed to enhance their skills in food services. For more departmental information call (562) 938-4502 or 938-4332.

REQUIRED COURSES

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<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>F N 250</td>
<td>Nutrition for Culinary Arts (F, SP)</td>
<td>2</td>
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<td>CULAR 20</td>
<td>Applied Food Services-Sanitation in Hotel &amp; Restaurant Mgt. (F, SP)</td>
<td>3</td>
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<td>CULAR 200AD</td>
<td>Introduction to Chocolate (F, SP, S)</td>
<td>1</td>
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<td>CULAR 204</td>
<td>Introduction to Baking (F)</td>
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<td>†CULAR 213A</td>
<td>Food Preparation 1 (F, SP)</td>
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<td>†CULAR 213B</td>
<td>Food Preparation 2 (F, SP)</td>
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<tr>
<td>†CULAR 213C</td>
<td>Food Preparation 3 (F, SP)</td>
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Subtotal Units 44.5

Complete a minimum of four (4) units from the following:

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<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>†CULAR 271AD</td>
<td>Work Experience: Food Services (F, SP)</td>
<td>2:2:2:2</td>
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<tr>
<td>†CULAR 272AD</td>
<td>Work Experience: Food Services (F, SP)</td>
<td>3:3:3:3</td>
</tr>
<tr>
<td>†CULAR 273AD</td>
<td>Work Experience: Food Services (F, SP)</td>
<td>4:4:4:4</td>
</tr>
</tbody>
</table>

Subtotal Units 4

TOTAL UNITS 48.5

RECOMMENDED but not required courses:

†CULAR 205 Baking and Pastry I (SP) 5
†CULAR 206 Baking and Pastry II (INF) 5
CULAR 207 Commercial Cake Decorating (INF) 5
CULAR 214 Professional Gourmet Cooking (F) 2
CULAR 215 Commercial Formal Buffet (SP) 2
THRFB 18 Food Production Principles (INF) 3
THRFB 19 Food & Beverage Purchasing (INF) 3
THRFB 32 Catering for Hotel and Restaurant (INF) 3

COMPLETION CERTIFICATES

<table>
<thead>
<tr>
<th>Certificate</th>
<th>REQUIRED COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hotel, Restaurant: Institutional Cooking 1 Certificate</td>
<td>CULAR 201A Hotel, Restaurant: Institutional Cooking 1</td>
<td>8</td>
</tr>
<tr>
<td>Hotel, Restaurant: Institutional Cooking 2 Certificate</td>
<td>CULAR 201B Hotel, Restaurant: Institutional Cooking 2</td>
<td>8</td>
</tr>
<tr>
<td>Introduction to Baking Certificate</td>
<td>CULAR 204 Intro to Baking (INF)</td>
<td>5</td>
</tr>
<tr>
<td>Introduction to Chocolate Certificate</td>
<td>FDSRV 200AD Introduction to Chocolate</td>
<td>1</td>
</tr>
</tbody>
</table>

CUSTOMER SERVICE REPRESENTATIVE

Career or Completion Certificate and/or Associate in Arts

(Pending Chancellor’s Office Approval)

Students prepare for a customer service representative position in a call center or walk-in service center by developing essential skills for telephone and written communication, computer proficiency, data entry, time management, and successful customer interactions. This certificate prepares students for a career in customer service and serves as a foundation for specialization.

Consult guides available in Counseling Centers for specific general education and required grades.
This Associate degree prepares students for career advancement once a certificate has been earned. For more information regarding courses, call (562) 938-3033.

**REQUIRED COURSES**

**UNITS**

- CAOTC 31A, B Microsoft Windows Operating System, Levels 1, 2, 3 (F, SP, S) 1:1
- CAOTC 39A Microsoft Word for Office-Beg (F, SP, S) 1
- CAOTC 41E Excel for Windows - Beg (F, SP, S) 1
- CAOTC 45 Internet for Office & Personal Use (F, SP, S) 1
- CAOTC 215A Microsoft Outlook (F, SP) 2
- CAOTC 250A, B Data Entry - Levels 1, 2 (F, SP, S) 2:3
- CAOTO 15 Business Communications (F, SP, S) 3
- CAOTO 260 Business Telephone Procedures (F, SP, S) 3
- CAOTO 261 Business English (F, SP, S) 3
- CAOTO 262 Professional Development (F, SP, S) 1
- CAOTO 263 Customer Service (F, SP, S) 1
- CAOTO 264 Call Centers (F, SP, S) 1
- CAOTO 265 Customer Conflict Management (F, SP, S) 1
- CAOTT 209A Speed/Accuracy Bldg for Typists (F, SP) 1

**Subtotal Units** 26

Select any **THREE (3)** units from the following:

- CAOTC 34 Intro to Computers & Applications (F, SP) 3
- CAOTC 35 Microsoft Office (F, SP) 3
- CAOTC 39B, C, D Microsoft Word for Office, Levels 2, 3, 4 (F, SP, S) 1:1:1
- CAOTC 41F, J Excel for Windows, Levels 2, 3 (F, SP, S) 1:1
- CAOTC 47A, B Access for Office Applications, Levels 1, 2, 3 (F, SP, S) 3:3
- CAOTC 250C Data Entry - Level 3 (F, SP) 3
- CAOTC 30 Business Calculating Machines (F, SP, S) 2
- CAOTC 216 Proofreading Skills (F, SP, S) 1
- CAOTC 272AD Work Exp - CAOT (F, SP) 3
- CAOTT 209B Speed/Accuracy Bldg for Typists (F, SP) 1
- MKTG 40 Salesmanship 3

**Subtotal Units** 3

**TOTAL UNITS** 29

**REQUIRED COMPETENCY:** Typing certificate of at least 30 words per minute for 5 minutes with 5 or fewer errors completed within the previous 12 months. Data entry certificate of at least 9,000 keystrokes per hour and at least 98% accuracy on a 5-minute test within the previous 12 months.

**COMPLETION CERTIFICATES**

**Basic Customer Service Certificate**

**REQUIRED COURSES**

**UNITS**

- CAOTC 250A Data Entry - Level 1 2
- CAOTC 250B Data Entry - Level 2 3
- CAOTC 260 Business Telephone Procedures 1
- CAOTC 262 Professional Development 1
- CAOTC 264 Call Centers 1
- CAOTC 265 Customer Conflict Management 1

**TOTAL UNITS** 10

**REQUIRED COMPETENCY:** Data entry certificate of at least 9,000 keystrokes per hour and at least 98% accuracy on a 5-minute test within the previous 12 months.

**Basic Data Entry Certificate**

**REQUIRED COURSES**

**UNITS**

- CAOTC 250A Data Entry - Level 1 2
- CAOTC 250B Data Entry - Level 2 3
- CAOTT 209A Speed/Accuracy Bldg for Typists (F, SP) 1

**TOTAL UNITS** 10

**REQUIRED COMPETENCY:** Typing certificate of at least 40 words per minute for 5 minutes with 5 or fewer errors completed within the previous 12 months. Data entry certificate of at least 9,000 keystrokes per hour and at least 98% accuracy on a 5-minute test within the previous 12 months.

**DANCE**

**Associate in Arts**

Students learn an appreciation of dance as an art form as well as instruction in dance technique, choreography and aesthetics. Students are also provided partial lower division preparation for transfer to a baccalaureate degree in this field. This Associate Degree will prepare students for careers in body therapies, dance, and teaching or dance studio operation. For more departmental information call (562) 938-4563 OR 938-4383.

**REQUIRED COURSES**

**UNITS**

- DANCE 1 Dance Forms Through the Ages (F, SP) 3
- DANCE 10AB Fundamental of Ballet (1st semester) (F, SP) 1
- DANCE 14AB Beginning Modern Dance (1st semester) (F, SP) 1
- DANCE 20AB Beg. Dance-Jazz (1st semester) (F, SP) 1

**Subtotal Units (for Semester 1)** 6
Curriculum Guides

Semester 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANCE 10AB</td>
<td>Fundamental of Ballet (2nd semester)</td>
<td>1</td>
</tr>
<tr>
<td>DANCE 12AD</td>
<td>Conditioning for Dance-Pilates Method</td>
<td>1</td>
</tr>
<tr>
<td>DANCE 14AB</td>
<td>Modern Dance (2nd semester)</td>
<td>1</td>
</tr>
<tr>
<td>DANCE 20AB</td>
<td>Beginning Dance-Jazz (2nd semester)</td>
<td>1</td>
</tr>
</tbody>
</table>

*TART 1 Acting 1-Introduction to Acting (F, SP, S) 3

Select ONE of the following courses:

- DANCE 3AD Musical Theatre Dance 1
- DANCE 5AB Beginning Tap 1
- DANCE 8AD Stretch and Relaxation 1
- DANCE 33AD Dance Choreography Workshop 1

Subtotal Units (for Semester 2) 8

Semester 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>†DANCE 11AB</td>
<td>Intermediate Ballet (1st semester)</td>
<td>1</td>
</tr>
<tr>
<td>†DANCE 17AB</td>
<td>Inter. Modern Dance (1st semester)</td>
<td>1</td>
</tr>
<tr>
<td>†DANCE 21AB</td>
<td>Intermediate Dance-Jazz (1st semester)</td>
<td>1</td>
</tr>
<tr>
<td>†DANCE 31AB</td>
<td>Solo Choreography (1st semester)</td>
<td>1</td>
</tr>
</tbody>
</table>

OR

†DANCE 41AD Dance Performance (1st semester) 2

Select ONE of the following courses:

- TART 42AD Stage Lighting 2
- TART 43 Costume Crafts 2
- TART 47 Theatre Management (SP) 3
- TART 55 Stage Makeup 2

Subtotal Units (for Semester 3) 6-8

Semester 4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>†DANCE 11AB</td>
<td>Intermediate Ballet (2nd semester)</td>
<td>1</td>
</tr>
<tr>
<td>†DANCE 17AB</td>
<td>Intermediate Modern Dance (2nd semester)</td>
<td>1</td>
</tr>
<tr>
<td>†DANCE 21AB</td>
<td>Intermediate Jazz (2nd semester)</td>
<td>1</td>
</tr>
<tr>
<td>†DANCE 32AD</td>
<td>Group Choreography (2nd semester)</td>
<td>1</td>
</tr>
</tbody>
</table>

OR

†DANCE 41AD Dance Performance (F, SP) 2

Select ONE of the following courses:

- TART 6AB Intermediate Tap (F, SP) 1
- †DANCE 13AD Turns (SP) 1
- †DANCE 18AD Folk and Ethnic Dance (F, SP) 1
- †DANCE 60AD Special Projects in Dance (F, SP) 1

Subtotal Units (for Semester 4) 5-6

TOTAL UNITS 25-28

DATA ENTRY

Career Certificate and/or Associate in Arts

Students prepare for an entry-level data-entry position by learning to enter data accurately and rapidly from documents or during customer service calls, use database software, and operate calculating machines. This certificate prepares students for an entry-level position in a variety of office settings and serves as a foundation for specialization. The program is designed to build employment skills quickly. This Associate degree prepares students for career advancement once a certificate has been earned. For more departmental information call (562) 938-3033.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAOTC 31A</td>
<td>Microsoft Windows Operating System, Beginning (F, SP, S)</td>
<td>1</td>
</tr>
<tr>
<td>CAOTC 41E</td>
<td>Excel for Windows – Begin. (F, SP, S)</td>
<td>1</td>
</tr>
<tr>
<td>CAOTC 47A</td>
<td>Access for Office Applications, Beginning (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>CAOTC 250A</td>
<td>B, C Data Entry--Levels 1, 2, 3 (F, SP)</td>
<td>2:3:3</td>
</tr>
<tr>
<td>CAOTO 30</td>
<td>Business Calculating Machines (F, SP, S) 2</td>
<td></td>
</tr>
<tr>
<td>CAOTO 263</td>
<td>Customer Service (F, SP, S) 1</td>
<td></td>
</tr>
<tr>
<td>CAOTT 201</td>
<td>Intermediate Typing/Keyboarding (F, SP) 2</td>
<td></td>
</tr>
</tbody>
</table>

Subtotal Units 18

REQUIRED COMPETENCIES:

Typing certificate of at least 45 words per minute for 5 minutes with 5 or fewer errors by the end of the program. Data entry certificate of at least 9,000 keystrokes per hour for 5 minutes with at least 98 percent accuracy within the previous 12 months. Business calculating machines certificate of at least 170 keystrokes per minute for 5 minutes with 5 or fewer errors by the end of the program.

Select THREE (3) units from the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAOTC 31B</td>
<td>MS Windows Operating System, Adv</td>
<td>1</td>
</tr>
<tr>
<td>CAOTC 34</td>
<td>Introduction to Computers &amp; Applications</td>
<td>3</td>
</tr>
<tr>
<td>CAOTC 35</td>
<td>Microsoft Office</td>
<td>3</td>
</tr>
<tr>
<td>CAOTC 39A, B, C</td>
<td>D Microsoft Word for Office, Levels 1, 2, 3, 4</td>
<td>1:1:1:1</td>
</tr>
<tr>
<td>CAOTC 41F, J</td>
<td>Excel for Windows, Levels 2, 3</td>
<td>1:1</td>
</tr>
<tr>
<td>CAOTC 47B</td>
<td>Access for Office Applications, Intern</td>
<td>3</td>
</tr>
<tr>
<td>CAOTC 215A</td>
<td>Microsoft Outlook</td>
<td>2</td>
</tr>
<tr>
<td>CAOTC215B</td>
<td>Microsoft Outlook Prep-Access</td>
<td>0.5</td>
</tr>
<tr>
<td>CAOTC 246</td>
<td>Financial Applications</td>
<td>3</td>
</tr>
<tr>
<td>CAOTO 216</td>
<td>Proofreading Skills</td>
<td>1</td>
</tr>
<tr>
<td>CAOTT 202</td>
<td>Advanced Typing/Keyboarding</td>
<td>2</td>
</tr>
<tr>
<td>CAOTT 209AB</td>
<td>Speed/Accuracy Building for Typists</td>
<td>1:1</td>
</tr>
</tbody>
</table>

Subtotal Units 3

TOTAL UNITS 21

COMPLETION CERTIFICATES

Basic Data Entry Certificate

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAOTC 250A</td>
<td>Data Entry-Level 1</td>
<td>2</td>
</tr>
<tr>
<td>CAOTC 250B</td>
<td>Data Entry-Level 2</td>
<td>3</td>
</tr>
<tr>
<td>CAOTT 209A</td>
<td>Speed/Accuracy Building for Typists</td>
<td>1</td>
</tr>
</tbody>
</table>

TOTAL UNITS 6

REQUIRED COMPETENCIES:

Typing certificate of at least 40 words per minute for 5 minutes with 5 or fewer errors completed within the previous 12 months. Data entry certificate of at least 9,000 keystrokes per hour and at least 98 percent accuracy on a 5-minute test within the previous 12 months.

Microsoft Access Certificate

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAOTC 47A</td>
<td>Access for Office Applications, Begin</td>
<td>3</td>
</tr>
<tr>
<td>CAOTC 47B</td>
<td>Access for Office Applications, Intern</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS 6

Consult guides available in Counseling Centers for specific general education and required grades.
REQUIRED COMPETENCIES: Instructor verification of 80 percent or better accuracy on Access Core practice exam or Microsoft Office Specialist certification.

DESKTOP PUBLISHING
Career or Completion Certificate and/or Associate in Arts

Students learn to write, design, and produce publications (flyers, brochures, newsletters, in-house magazines) primarily on Macintosh computers. The program prepares students to work on newspapers, magazines, in advertising agencies or in other environments involving desktop publishing or to work on a free-lance basis. For successful employment, you should be able to type 30+ words a minute, write with a proficiency equal to placement in ENGL 1, and have a basic understanding of the principles of color and design theory. This certificate prepares students for an entry-level position in a variety of business settings and serves as a foundation for specialization. This Associate degree prepares students for career advancement once a certificate has been earned. Appropriate course selection also facilitates transfer in a related major. For more information regarding: Art classes call (562) 938-4319, Computer and Office Technologies classes call (562) 938-3033, Journalism classes call (562) 938-4675 or 938-4036.

REQUIRED CORE COURSES FOR BOTH CONCENTRATIONS

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 31 Fundamentals of Art/Composition &amp; Color</td>
<td>3</td>
</tr>
<tr>
<td>ART 41 Introduction to Computer Graphics</td>
<td>3</td>
</tr>
<tr>
<td>JOURN 1A Introduction to Desktop Publication</td>
<td>3</td>
</tr>
<tr>
<td>JOURN 25 Free-Lance Writing (F)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Subtotal Units</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

CHOOSE ONE AREA OF CONCENTRATION
(Art or Writing/Publishing):

Concentration in Art

Select TWELVE (12) units from the following:

| ART 43AD Computer Art for the Internet (F) | 3 |
| ART 44AD Computer Art for Graphic Design (SP) | 3 |
| ART 45AD Computer Art for Drawing and Painting | 3 |
| ART 55AD Introduction to Graphic Design | 3 |
| ART 56AB Lettering and Typography (SP) | 3 |
| **Subtotal Units** | **12** |
| **TOTAL UNITS W/ ART CONCENTRATION** | **24** |

Concentration in Writing/Publishing

Select TWELVE (12) units from the following:

| JOURN 1B Introduction to Desktop Publication (F, SP, S) | 3 |
| JOURN 6AD Working on the Magazine (SP) | 3 |
| JOURN 20 Begin Newswriting and Reporting (F, SP) | 3 |
| JOURN 71-73 AD Work Experience – Journalism | 2-4 |
| JOURN 80AD Working on the Newspaper (F, SP) | 3 |
| JOURN 85AD Editor Training (F, SP, S) | 3 |
| **Subtotal Units** | **12** |
| **TOTAL UNITS WITH WRITING/PUBLISHING CONCENTRATION** | **24** |

DIAGNOSTIC MEDICAL IMAGING SCIENCES
(RADIOLOGICAL TECHNOLOGY)
Associate in Science/Career or Completion Certificate

The Diagnostic Medical Imaging Program at Long Beach City College is dedicated to providing high-quality education and clinical practicum to qualified students. It is responsive to the diverse needs of the local medical community. It specializes in the education and training that lead to entry-level employment as a competent, ethical health care professional and an Associate of Science Degree. The program emphasizes the necessity of professional development and life-long learning. This field of concentration is designed to prepare the student for Certification by the State Department of Health Services, Radiological Health Section and Registration by the American Registry of Radiologic Technologists after testing. The end objective is to prepare students for employment as practicing Radiologic Technologists in Acute Care Hospitals, Medical Clinics and/or private offices. For any additional departmental information call (562) 938-4169.

Prerequisite Courses

The following courses must be completed within five years prior to the first Fall Semester of the program:

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>*ANAT 41 Anatomy &amp; Physiology (F, SP, S)</td>
<td>5</td>
</tr>
<tr>
<td>AH 60 Medical Terminology (F, SP, S)</td>
<td>3</td>
</tr>
<tr>
<td>AH 61 Integration of Patient Care (F)</td>
<td>2</td>
</tr>
<tr>
<td><strong>TOTAL UNITS</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

FIRST YEAR

Spring Semester

†DMI 10 Introduction to Radiologic Technology | 3 |
| **Subtotal Units** | **3** |

Summer Session

†DMI 20 Introduction to Radiologic Physics | 3 |
| **Subtotal Units** | **3** |

Fall Semester

*General Ed. Course (see explanation in footnote) | 3 |
*General Ed. Course (see explanation in footnote) | 3 |
*Computer Class. Any computer class which satisfies computer proficiency for graduation. For updated listing see General Course Pattern Guide | 1 |
†DMI 11 Radiographic Techniques | 1 |
†DMI 12 Contrast Fluoroscopic & Radiographic Proc. | 3 |
†DMI 21 Applied Radiologic Physics | 2 |
†DMI 30 Positioning for General Radiography | 3 |
†DMI 40A Clinical Radiography & Film Critique | 2.5 |
| **Subtotal Units** | **18.5** |

Spring Semester

†DMI 60 Radiologic Pathology | 3 |
†DMI 24 Radiation: Biology & Protection | 3 |
†DMI 31 Positioning for Cranial Radiography | 3 |
†DMI 40B Clinical Radiography & Film Critique | 6 |
| **Subtotal Units** | **15** |

SECOND YEAR

Summer Session

†DMI 40C Clinical Radiography & Film Critique | 6 |
| **Subtotal Units** | **6** |
### Fall Semester

*#General Ed. Course (see explanation in footnote) 3
†DMI 15 Computer Applications in Radiology 3
†DMI 40D Clinical Radiography & Film Critique 11

Subtotal Units 17

### Spring Semester

*# General Ed. Course (see explanation in footnote) 3
†DMI 14 Trends & Self-Assessment in Rad. Tech. 3
†DMI 40E Clinical Radiography & Film Critique 11
†DMI 61 Fluoroscopy 2

Subtotal Units 19

**Subtotal Units (in program)** 82.5

**Subtotal Units (including prerequisite courses)** 92.5

**RECOMMENDED courses but not required:**
- AH 210 Math for Meds 1
- †DMI 62 Mammography 3.5
- LEARN 11 Learning and Academic Strategies 2
- †AH 222 Intravenous Therapy 1

**COMPLETION CERTIFICATES**

- **Fluoroscopy Certificate**
  - (Must be licensed CRT or in Second Year of Diagnostic Medical Imaging Program)
  - REQUIRED COURSE UNITS
    - †DMI 61 Fluoroscopy 2
  - TOTAL UNITS 2

- **Mammography Certificate**
  - (Must be licensed CRT or in Second Year of Diagnostic Medical Imaging Program)
  - REQUIRED COURSE UNITS
    - †DMI 62 Mammography 3.5
  - TOTAL UNITS 3.5

### DIESEL MECHANICS

**Career Certificate and/or Associate in Science**

Students prepare for entry-level jobs in the diesel mechanics/heavy equipment industry. For more departmental information call (562) 938-3071 or 938-3054.

**COMPLETE OPTION #1 OR OPTION #2**

**OPTION #1:**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMECH 424 Automotive Air Conditioning</td>
<td>3</td>
</tr>
<tr>
<td>DIESL 281 Diesel Two Cycle Engine</td>
<td>10</td>
</tr>
<tr>
<td>DIESL 282 Diesel Four Cycle Engine</td>
<td>10</td>
</tr>
<tr>
<td>†DIESL 283 Diesel Fuel Systems</td>
<td>10</td>
</tr>
<tr>
<td>†DIESL 284 Diesel Engine Chassis</td>
<td>10</td>
</tr>
<tr>
<td>WELD 400AD Welding (General)</td>
<td>2</td>
</tr>
<tr>
<td><strong>TOTAL UNITS</strong></td>
<td>45</td>
</tr>
</tbody>
</table>

**OPTION #2:**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMECH 424 Automotive Air Conditioning</td>
<td>3</td>
</tr>
<tr>
<td>DIESL 289 Caterpillar 3406 &amp; 3116 Engine</td>
<td>10</td>
</tr>
<tr>
<td>DIESL 290 Caterpillar Transmissions &amp; Final Drive</td>
<td>10</td>
</tr>
<tr>
<td>DIESL 291 Caterpillar Hydraulics and Electrical</td>
<td>10</td>
</tr>
<tr>
<td>DIESL 292 Caterpillar Suspension &amp; Under Carriage</td>
<td>10</td>
</tr>
<tr>
<td>WELD 460AD Welding (Acetylene Gas)</td>
<td>2</td>
</tr>
<tr>
<td><strong>TOTAL UNITS</strong></td>
<td>45</td>
</tr>
</tbody>
</table>

**DIETETICS PROGRAM**

**Dietetic Service Supervisor/Dietetic Technician**

**Associate in Arts/Career Certificate**

This program is designed to train students to be employed as Dietetic Service Supervisors and Dietetic Technicians who function as managers/supervisors and nutritional care specialists in the dietary departments of hospitals or other health care facilities.

**Dietetic Service Supervisor:**

The Dietetic Service Supervisor is the food service director of a health care facility, is a member of the dietetic team, functioning under the supervision of a Registered Dietitian, Dietetic Technician or administrator. This program is the state approved program meeting federal OBRA and Title 22 requirements of the California State Licensing Regulation for food service supervisors in general acute care hospitals, acute psychiatric hospitals, skilled nursing facilities and intermediate care facilities. Upon successful completion of the program, the student is eligible to apply for a Dietetic Service Supervisor Certificate. The student may also receive the Associate in Arts degree if the graduation requirements are completed.

**Dietetic Technician:**

The Dietetic Technician is a nutritional counselor and is a member of the dietetic health care team, functioning under the direction of a Registered Dietitian. Approved by the American Dietetic Association, this program instructs the student in nutritional care, teaching techniques, nutrition principles, diet modification, nutritional counseling and food service management. Dietetic Technicians are trained to function as nutritional care specialists in the dietary departments of hospitals, clinics and other health care facilities. For the Dietetic Technician Program, students must fulfill the Associate Degree requirements (by completing the Career Certificates for both the Service Supervisor and the Technician programs and the graduation requirements). The students will then have earned both the Associate Degree and the TWO Commission on Dietetic Registration Career Certificates. The student is eligible to take the American Dietetic Association Registration Board Commission on Dietetic Registration Exam to become a Dietetic Technician: Registered.

For further information, please call (562) 938-4550 or 938-4193.

**Dietetic Service Supervisor Program**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>F_N 20 Nutrition &amp; Life (F, SP, S)</td>
<td>3</td>
</tr>
<tr>
<td>F_N 21 Food Selection &amp; Meal Preparation (F)</td>
<td>4</td>
</tr>
<tr>
<td>F_N 224 Sanitation, Safety &amp; Equipment (F)</td>
<td>3</td>
</tr>
<tr>
<td>F_N 225 Intro Food Service &amp; Work Organization (SP)</td>
<td>3</td>
</tr>
<tr>
<td>F_N 227 Supervision &amp; Training Tech. (SP)</td>
<td>3</td>
</tr>
<tr>
<td>F_N 228 Food Production Management (SP)</td>
<td>3</td>
</tr>
<tr>
<td>F_N 230AC Clinic. Field Exper. I (F, SP) (2 semesters required)</td>
<td>2:2</td>
</tr>
<tr>
<td>F_N 231 Menu Planning &amp; Food Purchasing (F)</td>
<td>3</td>
</tr>
</tbody>
</table>

*Consult guides available in Counseling Centers for specific general education and required grades.*
F_N 232 Medical Nutrition Therapy (SP) 3
TOTAL UNITS 29

NOTE: Completion of these courses entitles student to a Dietetic Service Supervisor Career certificate, approved by the California State Department of Health Services. Dietetic Service Supervisor completers must take the Dietetic Service Supervisor competency examination.

DIETETIC TECHNICIAN PROGRAM
Complete the Dietetic Service Supervisor Program required courses (above 29 units) and the following courses: UNITS
†F_N 234 Advanced Nutrition Care (F) 3
†F_N 235 Advanced Medical Nutrition Therapy (SP) 3
†F_N 236 Dietetic Seminar (SP) 1
†F_N 240AC Clinical Field Experience II (F, SP) (2 semesters required) 2:2
Subtotal Units 11
Subtotal Units(Courses from Dietetic Service Supervisor Program) 29
TOTAL UNITS 40

A Career Certificate in this program is not available without also earning the Associate Degree.

RECOMMENDED but not required courses:
F_N 250 Nutrition for the Active Person 1
F_N 233A-D Special Topics in Health Care Dietetics 1
F_N 260A-D Cultural Foods 1.5
F_N 261AD Modern Meals 1.5
F_N 262AD Meal Preparation for 1 & 2 Persons 1.5
F_N 341AD Modern Meals 0.5

NOTE: Any 300 band course in Food and Nutrition can be applied as an elective to the degree or certificate in this program.

COMPLETION CERTIFICATES
Nutrition for Culinary Arts Certificate
REQUIRED COURSES UNITS
F_N 250 Nutrition for Culinary Arts 2
TOTAL UNITS 2

DRAFTING - ARCHITECTURAL (Occupational Program)
Career Certificate and/or Associate in Science
Students learn entry-level job skills in architectural drafting. This Associate Degree will prepare students for a design-related career. The Core Skills Career Certificate will prepare students for an entry-level position as an architectural drafter trainee in a variety of design profession settings and will serve as a foundation for specialization. (Pending Chancellor’s Office Approval). The Advanced Skills Career Certificate will prepare students for an advanced position as an architectural drafter or senior draftsman in a variety of design professional settings and will serve as a foundation for specialization. For more departmental information call (562) 938-4718.

The Core Skills Career Certificate requires a minimum of 28 units from the following courses identified with a “†”.
The Advanced Skills Career Certificate requires a minimum of 37 units as specified below.

ASSOCIATE DEGREE
REQUIRED COURSES UNITS
#+ARCHT 60 Architectural Design (F, S) 8
OR
#+ARCHT 61 Architectural Design (F, S) 4
and
#+ARCHT 62 Architectural Design (F, S) 4
#+†ARCHT 64 Architectural Design (F, S) 8
OR
#+†ARCHT 65 Architectural Design (F, S) 4
and
#+†ARCHT 66 Architectural Design (F, S) 4
#†ARCHT 70AB Architectural Design (F, S) 8:8
OR
††ARCHT 71AD Architectural Design (S) 4:4:4:4
TOTAL UNITS 24

CORE SKILLS CAREER CERTIFICATE
REQUIRED COURSES UNITS
#+ARCHT 60 Architectural Design (F, S) 8
OR
#+ARCHT 61 Architectural Design (F, S) 4
and
#+ARCHT 62 Architectural Design (F, S) 4
#+†ARCHT 64 Architectural Design (F, S) 8
OR
#+†ARCHT 65 Architectural Design (F, S) 4
and
#+†ARCHT 66 Architectural Design (F, S) 4
#DRAFT 201 Into to Drafting 4
OR
#DRAFT 202 AutoCAD 1, Fundamentals 4
TOTAL UNITS 20

RECOMMENDED but not required courses:
#DRAFT 203 AutoCAD II, Advanced Concepts 4
OR
#DRAFT 204 AutoCAD II, Advanced Concepts 4

ADVANCED SKILLS CAREER CERTIFICATE
REQUIRED COURSES UNITS
#+ARCHT 60 Architectural Design (F, S) 8
OR
#+ARCHT 61 Architectural Design (F, S) 4
and
#+ARCHT 62 Architectural Design (F, S) 4
#+†ARCHT 64 Architectural Design (F, S) 8
OR
#+†ARCHT 65 Architectural Design (F, S) 4
and
#+†ARCHT 66 Architectural Design (F, S) 4
††ARCHT 70AB Architectural Design (F, S) 8:8
OR
††ARCHT 71AD Architectural Design (S) 4:4:4:4
#DRAFT 201 Into to Drafting 4
OR
#DRAFT 202 AutoCAD 1, Fundamentals 4
Select SIX (6) units from the following:
- **Carpentry I & II** (3)
- **Blueprint Reading for Electricians (F)** (3)
- **Blueprint Reading for Construction Trade (F, SP)** (3)
- Any course from Construction Trades Department

Subtotal Units: 6

Select THREE (3)-FOUR (4) units from the following:
- **Algebra & Trigonometry for Technicians** (4)
- *A more advanced level of Mathematics* (3-5)

Subtotal Units: 3-4

TOTAL UNITS: 37-38

**RECOMMENDED but not required courses:**
- **AutoCAD I, Fundamentals Certificate**
- **AutoCAD II, Advanced Certificate**
- **AutoCAD III, Visualization, Rendering, Animation Certificate**
- **CAD Professional Certificate**
- **3D Studio MAX-Modeling Technician Certificate**
- **3D Studio MAX-Texture & Lighting Technician Certificate**
- **3D Studio MAX-Animation Technician Certificate**
- **Technical Design Animator Certificate**

**ELECTRICAL TECHNOLOGY**

**Career Certificate and/or Associate in Science**

Students prepare for entry-level employment in numerous electrical and electrically related trades. Upon
Completion of the Electrical Technology program, the student will be able to install, maintain and repair electrical equipment and systems in a safe and workmanlike manner. The California Contractor’s License requirements recognize the courses listed below as partial fulfillment of the experience requirements. For more departmental information call (562) 938-4505.

<table>
<thead>
<tr>
<th>COURSES- DAY PROGRAM</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>REQUIRED</td>
<td>36.5</td>
</tr>
<tr>
<td>ELECTIVES</td>
<td>3.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COURSES- NIGHT PROGRAM</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>REQUIRED</td>
<td>31.5</td>
</tr>
<tr>
<td>ELECTIVES</td>
<td>8.5</td>
</tr>
</tbody>
</table>

**TOTAL** 40

**STUDENTS MAY FOLLOW EITHER:**

**DAY PROGRAM**

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELECT 200A General Industrial Electricity (F)</td>
<td>8</td>
</tr>
<tr>
<td>ELTC 250 Network Cabling Installation</td>
<td>1</td>
</tr>
</tbody>
</table>

**SECOND SEMESTER**

| †ELECT 200B General Industrial Electricity (SP) | 8 |
| ELECT 242 Electrical Code-Grounding | 1.5 |

**THIRD SEMESTER**

| †ELECT 200C General Industrial Electricity (F) | 8 |
| ELECT 435A Electrical Motor Control | 2 |

**FOURTH SEMESTER**

| †ELECT 200D General Industrial Electricity (SP) | 8 |
| Complete remaining 3.5 from electives listed after 4th Semester, Night Program. | 3.5 |

**TOTAL UNITS** 40

**NIGHT PROGRAM**

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELECT 202 Electrical Mathematics (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>+ELECT 204 Fundamentals of D.C. Electricity, 1st. semester (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>†+ELECT 210A Laboratory–Practices (F, SP)</td>
<td>1</td>
</tr>
<tr>
<td>Subtotal Units</td>
<td>7</td>
</tr>
<tr>
<td>+Must enroll in ELECT 204 and 210A concurrently</td>
<td></td>
</tr>
</tbody>
</table>

**SECOND SEMESTER**

| ELECT 240 Electrical Code–Residential (F, SP) | 3 |
| †+ELECT 209 Fundamentals of Motors and Generators, 2nd semester (F, SP) | 3 |
| †+ELECT 210B Laboratory–Practices (F, SP) | 1 |
| † ELECT 242 Electrical Code-Grounding (F, SP) | 1.5 |
| Subtotal Units | 8.5 |
| +Must enroll in ELECT 209 and 210B concurrently |

**THIRD SEMESTER**

| †+ELECT 212 Fundamentals of A.C. Electricity, 3rd semester (F) | 3 |
| †ELECT 245 Electrical Code-Commercial (F) | 3 |
| †+ELECT 210C Laboratory-Practices (F) | 1 |
| †ELECT 435A Electric Motor Control (F) | 2 |
| and 8.5 elective units can be completed during the 3rd and 4th semesters. See Fourth Semester below for list of appropriate electives. | |
| Subtotal Units | 9 |
| +Must enroll in ELECT 212 and 210C concurrently |

**FOURTH SEMESTER**

| †+ELECT 214 A.C. Principles and Practices (SP) | 3 |
| †ELECT 250 Electrical Code-Advanced (SP) | 3 |
| †+ELECT 210D Laboratory (SP) | 1 |

**Subtotal Units** 7

+Must enroll in ELECT 214 AND 210D concurrently.

**Complete remaining 8.5 electives from courses listed below:**

| †ELTC 41 Technical Applications of Minicomputers (INF) | 2 |
| ELTC 56A, B, C Robotics Technology (2 units each) | 2 |

and

| ELTC 56LA, B, C Robotics Tech Lab (1 unit each) | 1 |
| *ELTC 225 Algebra & Trigonometry for Technicians (F, SP) | 4 |
| ELTC 250 Network Cabling Installation | 1 |
| ELTC 251 Cisco Networking I, Introduction | 3 |
| †ELECT 224 Electrical Motors and Transformers (SP) | 3 |
| †ELECT226 Solid State Fundamentals for Electricians | 3 |
| ELECT 271 Electrical Cost Estimating (F) | 3 |
| †ELECT 275 Electrical Pipe Bending (A) (F) | 0.5 |
| †ELECT 276 Electrical Pipe Bending (B) (SP) | 0.5 |
| †ELECT 277 Blueprint Reading for Electricians (F) | 3 |
| ELECT 435B Electrical Motor Control (SP) | 2 |
| Subtotal Units | 8.5 |

**TOTAL UNITS** 40

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**ELECTRONICS TECHNOLOGY**

Career or Completion Certificate/Associate in Science

See Department Head for current information (562) 938-4505.

**ENGINEERING**

Associate in Science

This field of concentration is designed to recognize partial fulfillment of the requirements for transfer with junior standing for students seeking a baccalaureate degree in engineering. This Associate Degree will facilitate transfer for a four-year engineering degree. Students who wish to transfer may need to meet additional requirements. For more departmental information call (562) 938-4607.

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>†CHEM 1A General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>†ENGR 3B Engineering Graphics</td>
<td>3</td>
</tr>
<tr>
<td>†ENGR 17 Electrical Engineering Circuits (INF)</td>
<td>3</td>
</tr>
<tr>
<td>†ENGR 17L Electrical Engineering Circuits Lab (INF)</td>
<td>1</td>
</tr>
<tr>
<td>†ENGR 35 Statics (INF)</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 50 Introduction to Engineering (INF)</td>
<td>1</td>
</tr>
<tr>
<td>†*ENGL 1 Reading and Composition</td>
<td>3</td>
</tr>
<tr>
<td>†MATH 80 Third Calculus Course</td>
<td>5</td>
</tr>
<tr>
<td>†PHYS 3A Physics for Sci. &amp; Engr. - Mechanics</td>
<td>5</td>
</tr>
<tr>
<td>†PHYS 3B Physics for Sci. &amp; Engr. – E &amp; M</td>
<td>4</td>
</tr>
</tbody>
</table>

**Subtotal Units** 33

Select ONE of the following:

| †CBIS 12 Computer Programming/C++ | 3 |
| †ENGR 54 Computer Methods /C++ | 3 |

**Subtotal Units** 3

**TOTAL UNITS** 36

**NOTE**: A student must meet all prerequisites that make one eligible for a sequence of courses. Prerequisites are evaluated in the Admissions Office.
ENGLISH

Language and Literature Creative Writing
Associate in Arts

This field of concentration in the Language and Literature sequence prepares the student for baccalaureate study in English, Comparative Literature and Liberal Arts. The Creative Writing sequence also prepares the student for possible publication. For more departmental information call (562) 938-4358, 938-4365 or 938-4036.

LANGUAGE & LITERATURE SEQUENCE

REQUIRED COURSES

<table>
<thead>
<tr>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>†ENGL 1 or ENGL 1H Reading and Composition (F, SP, S) 3</td>
</tr>
<tr>
<td>†ENGL 2 Introduction to Literature/Composition (F, SP, S) 3</td>
</tr>
<tr>
<td>Subtotal Units 6</td>
</tr>
</tbody>
</table>

Select a minimum of NINE (9) units from the following courses, of which SIX (6) units must be a year's survey sequence (English, American or World)

†ENGL 41 American Literature I (F) 3
†ENGL 42 American Literature II (SP) 3
†ENGL 44 or ENGL 44H Literature of Western World I (F) 3
†ENGL 45 or ENGL 45H Literature of Western World II (SP) 3
†ENGL 46 or ENGL 46H Survey of English Literature I (F) 3
†ENGL 47 or ENGL 47H Survey of English Literature II (SP) 3

Subtotal Units 9

Select THREE (3) units from the following:
†ENGL 27A Creative Writing 2: Poetry (F, SP) 3
†ENGL 27B Creative Writing 2: Fiction (F, SP) 3
†ENGL 27C Creative Writing 2: Biography, Autobiography (INF) 3
†ENGL 27D Creative Writing 2: Stage and Screen Writing (F, SP) 3
†ENGL 27E Creative Writing 2: The Novel (F, SP) 3
†ENGL 97AD Writers' Workshop (F, SP) 3:3:3:3

Subtotal Units 3

TOTAL UNITS 21

RECOMMENDED courses but not required:
†ENGL 6AD Production of Literary Publications (INF) 3
JOURN 25 Free Lance/Feature Writing (F) 3

FAMILY & CONSUMER STUDIES

Associate in Arts/Career Certificate

Students are provided lower division transfer classes for a bachelor's degree in Home Economics/Family and Consumer Studies, and provide opportunities for developing skills and competencies for multiple roles of home, family and career. Students are advised to check with a four-year college/university for specific requirements for transfer. This certificate will prepare students for an entry-level position in any of the generalized fields of Family and Consumer Studies which include Child Development, Family & Consumer Studies, Fashion Design, Fashion Merchandising, Foods and Nutrition and Interior Design. For more departmental information call (562) 938-4454.

For the Career Certificate or Associate Degree, complete any EIGHTEEN (18) units from the list below:

REQUIRED COURSES

<table>
<thead>
<tr>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDECE 47 Human Development (F, SP) 3</td>
</tr>
<tr>
<td>FACS 50 Consumer Awareness (F, SP) 3</td>
</tr>
<tr>
<td>FACS 64 Life Management (F, SP) 3</td>
</tr>
<tr>
<td>FACS 211AB College &amp; Career Opportunities for Women (F, SP) 3</td>
</tr>
<tr>
<td>FD 9 Clothing Selection (F) 3</td>
</tr>
<tr>
<td>FD 10 Textile Fibers &amp; Fabrics 3</td>
</tr>
<tr>
<td>FD 20 Introduction to Fashion Merchandising 3</td>
</tr>
<tr>
<td>F_N 20 Nutrition &amp; Life (F, SP, S) 3</td>
</tr>
<tr>
<td>F_N 21 Food Selection &amp; Meal Preparation (F) 4</td>
</tr>
<tr>
<td>F_N 252AD Cake Decorating &amp; Sugar Cookery (F, SP) 3:3</td>
</tr>
<tr>
<td>ID 1 Fundamentals of Interior Design (F, SP) 3</td>
</tr>
<tr>
<td>ID 5 Interior Design Studio 1 (F, SP) 3</td>
</tr>
<tr>
<td>ID 10 Beginning Drafting: Interior Design (INF) 3</td>
</tr>
</tbody>
</table>

TOTAL UNITS 18

FASHION DESIGN

Associate in Arts/Career or Completion Certificate

Students prepare for entry-level jobs in fashion design, production and manufacturing. This program also
provides partial lower-division preparation for the baccalaureate degree in Fashion Design. This Career Certificate will prepare students for an entry-level position in the apparel design and manufacturing industry. This Associate Degree will prepare students for career advancement once a certificate has been earned. Field of concentration selection will also facilitate transfer in a related major. The Associate Degree requires only 19-20 units from the following courses identified with a (+). The Career Certificate requires 55-56 units as specified below. The Completion Certificate—Fashion Design Update requires 14-16 units as specified below. For more departmental information call (562) 938-4192 or 938-4454.

**ENTRY LEVEL CLASSES**

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>+FD 3 Intro to Careers in Design/Merchandising (F, SP)</td>
<td>2</td>
</tr>
<tr>
<td>FD 5 Intro Manufacturing for Design/Design (F)</td>
<td>2</td>
</tr>
<tr>
<td>+FD 9 Clothing Selection (F)</td>
<td>3</td>
</tr>
<tr>
<td>+FD 36A Pattern Drafting I: Basic Block</td>
<td>1.5</td>
</tr>
<tr>
<td>+FD 36B Pattern Drafting I: Pattern Manipulation</td>
<td>1.5</td>
</tr>
<tr>
<td>FD 37A Pattern Draping: Basic Sloper</td>
<td>1.5</td>
</tr>
<tr>
<td>FD 37B Pattern Draping: Sloper Manipulations</td>
<td>1.5</td>
</tr>
<tr>
<td>FD 200 Fashion Prediction/Promo: Crit Viewing (SP)</td>
<td>1</td>
</tr>
<tr>
<td>+FD 214AB Quick Sketch Croquis Drawing (One semester)</td>
<td>2</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>+FD 215AB Fashion Sketching I (F, SP)</td>
<td>2</td>
</tr>
</tbody>
</table>

Select TWO of the following courses:

+FD 24AB Begin Sewing (One semester) (F, SP, S) | 1.5 |
+FD 25AB Interm Sewing (One semester) (F) | 1.5 |
+FD 26AB Advanced Sewing (One semester) (F) | 2 |
FD 29AB Tailoring (F) | 2 |

**Subtotal Units** 19-20

**INTERMEDIATE LEVEL CLASSES**

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FD 10 Textile Fibers and Fabrics (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>FD 27AB Sewing Production (One semester) (F)</td>
<td>1.5</td>
</tr>
<tr>
<td>FD 32 History of Fashion (SP)</td>
<td>3</td>
</tr>
<tr>
<td>FD 38A Fashion Design I (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>FD 38B Fashion Design II (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>FD 41AD Fashion Show Production (One semester) (SP)</td>
<td>2.5</td>
</tr>
<tr>
<td>FD 245AD Computer Applications in Fashion (F, SP)</td>
<td>1</td>
</tr>
<tr>
<td>FD 244AD Computer Patternmaking (2 semesters)</td>
<td>1:1</td>
</tr>
</tbody>
</table>

Select ONE of the following courses:

IBUS 1 Introduction to International Business | 3 |
MKG 40 Salesmanship | 3 |
MGMT 80 Small Business Entrepreneurship | 3 |

**Subtotal Units** 22

**ADVANCED LEVEL CLASSES**

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FD 38C Fashion Design III (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>FD 38D Fashion Design IV (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>FD 39A Pattern Grading (INF)</td>
<td>1</td>
</tr>
<tr>
<td>FD 40 Advanced &amp; Production Pattern Drafting (INF)</td>
<td>1</td>
</tr>
<tr>
<td>FD 216AB Fashion Sketch Board/Portfolio Presentation (One semester) (SP)</td>
<td>2</td>
</tr>
</tbody>
</table>

Select Four (4) units from this section:

°FD 70AD Work Experience Issues (One semester) (F, SP) | 1 |
°FD 73AD Work Experience–Fashion Issues (One semester) (F, SP) | 1 |
+FD 32 History of Fashion (SP) | 3 |
FD 36B Pattern Drafting II: Pattern Manip. (F) | 1.5 |
FD 37A Pattern Draping I: Basic Sloper (SP) | 1.5 |
FD 37B Pattern Draping II: Sloper Manip. (SP) | 1.5 |
FD 200 Fashion Prediction/Promo: Crit Viewing (SP) | 1 |
+FD 214AB Quick Sketch Croquis Drawing | 2.2 |

**TOTAL UNITS** 55-56

**RECOMMENDED but not required courses:**

- ART 1 or 2 Art & Civilization 3
- ART 15 Beginning Drawing 3
- ART 41 Intro to Computer Graphics 3
- FD 211AB Textile Design: Beading 1
- FD 212AB Textile Design: Airbrush 1
- FD 213AB Textile Design: Hand Painting 1
- FD 233AB Specialized Sewing Tech: Lingerie Const .5
- FD 234AB Specialized Sewing Tech: Winter Sports .5
- FD235AB Specialized Sewing Tech: Quick Sew .5
- FD 236AB Specialized Sewing Tech: Couture Finish .5
- FD 258AD Swimwear 1
- IBUS 20 Export-Import Business Practices 3
- TART 43AD Costume Crafts 2

**COMPLETION CERTIFICATE**

**Fashion Design Update Certificate**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FD 70AD Work Experience Issues 1</td>
</tr>
<tr>
<td>FD 71AD, 72AD, 73AD Work Experience–Fashion Design 1-3</td>
</tr>
</tbody>
</table>

Select any 12 units from the courses listed below:

- FD 38C Fashion Design III (F, SP) 3
- FD 38D Fashion Design IV (F, SP) 3
- FD 41AD Fashion Show Production (SP) 2.5
- FD 200 Fashion Prediction/Promo: Crit Viewing (SP) 1
- FD 214AB Quick Sketch Croquis Drawing 2
- FD 216AB Fash Sketch Board/Portfolio Presentation (SP) 2
- FD 245AD Computer Applications in Fashion (F, SP) 1
- FD 244AD Computer Patternmaking (offered Fall, 05) 1

**TOTAL UNITS** 14-16

°FD 70AD must be taken concurrently with FD 71AD, 72AD or 73AD.

**FASHION DESIGN ASSISTANT DESIGNER**

**Associate in Arts/Career Certificate**

Students prepare for entry-level jobs in fashion design, production and manufacturing. This program also provides partial lower-division preparation for the baccalaureate degree in Fashion Design. This Career Certificate will prepare students for an entry-level position in the apparel design and manufacturing industry. This Associate Degree will prepare students for career advancement once a certificate has been earned. Field of concentration selection will also facilitate transfer in a related major. The Associate Degree requires only 18-18.5 units from the following courses identified with a (+). The Career Certificate requires 40-41 units as specified below. For more departmental information call (562) 938-4192 or 938-4454.

**ENTRY LEVEL CLASSES**

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>+FD 3 Intro to Careers in Design/Merchandising (F, SP)</td>
<td>2</td>
</tr>
<tr>
<td>FD 5 Intro Manufacturing for Design/Design (F, SP)</td>
<td>2</td>
</tr>
<tr>
<td>+FD 9 Clothing Selection (F)</td>
<td>3</td>
</tr>
<tr>
<td>+FD 36A Pattern Drafting I: Basic Block (F)</td>
<td>1.5</td>
</tr>
<tr>
<td>+FD 36B Pattern Drafting II: Pattern Manip. (F)</td>
<td>1.5</td>
</tr>
<tr>
<td>FD 37A Pattern Draping I: Basic Sloper (SP)</td>
<td>1.5</td>
</tr>
<tr>
<td>FD 37B Pattern Draping II: Sloper Manip. (SP)</td>
<td>1.5</td>
</tr>
<tr>
<td>FD 200 Fashion Prediction/Promo: Crit Viewing (SP)</td>
<td>1</td>
</tr>
<tr>
<td>+FD 214AB Quick Sketch Croquis Drawing</td>
<td>2.2</td>
</tr>
</tbody>
</table>
Consult guides available in Counseling Centers for specific general education and required grades.
INTERMEDIATE LEVEL CLASSES
FD 27AB Production Sewing (two semesters) 2:2
FD 36A Pattern Drafting I: Basic Block (F) 1.5
†FD 36B Pattern Drafting II: Pattern Manipulation (F) 1.5
†FD 70AD Work Experience Issues (one semester) (F, SP) 1
†FD 72AD OR 73AD Vocational Work Experience (one semester) (F, SP) 2-3

Select FOUR (4) units from this section:
FD 29AB Tailoring 2
FD 233AB Specialized Sewing Tech: Lingerie Const 0.5
FD 234AB Specialized Sewing Tech: Winter Sports 0.5
FD 235AB Specialized Sewing Tech: Quick Sew 0.5
FD 258AD Swimwear 1

Subtotal Units 14-15
TOTAL UNITS 22-23.5

SELECT ONE of the following:
FD 214AB Quick Sketch Croquis Drawing (one sem) 2
FD 215AB Fashion Sketching I (one semester) 2
Subtotal Units 17.5

ADVANCED LEVEL CLASSES
†FD 23 Fashion/merchandise Buying 3
†FD 70AD Work Experience Issues (one semester) (F, SP) 1
†FD 72AD OR 73AD Vocational Work Experience (one semester) (F, SP) 2-3
†FD 245AD Computer Applications in Fashion (one semester) (F, SP) 1.5

Select ONE of the following:
†IBUS 1 Introduction to International Business 3
IBUS 20 Export-Import Business Practices 3
*MKTG 42 Retailing Principles & Practices 3

Subtotal Units 12-13
TOTAL UNITS 41.5 - 44.5

RECOMMENDED but not required courses:
¶FD 24AB Beginning Sewing 1.5
FACS 50 Consumer Awareness 3
IBUS 52 International Marketing 3

FASHION MERCHANDISING
Career Certificate and/or Associate in Arts
Students prepare for careers in all phases of retailing and manufacturing in the growing California Fashion Industry. This program also provides lower-division preparation for the baccalaureate degree in Fashion Merchandising. This certificate will prepare students for an entry-level position in the apparel retailing, marketing and manufacturing industry. This Associate Degree will pre-pare students for career advancement once a certificate has been earned. Field of concentration selection will also facilitate transfer in a related major. The Associate Degree requires only 19 units from the following courses identified with a (+). For more departmental information call (562) 938-4336 or 938-4454.

ENTRY LEVEL CLASSES
REQUIRED COURSES UNITS
FACS 64 OR 364 Life Management (F, SP) 1-3
+*FD 3 Intro to Careers in Design/Merchandising (F, SP) 2
+FD 5 Intro Manufacturing for Design/Merch (F, SP) 2
+FD 9 Clothing Selection (F) 3
FD 211AB Textile Design: Beading 1
FD 213AB Textile Design: Hand Painting 1
FD 214AB Quick Sketch/Croquis 1
FD 236AB Specialized Sewing Tech: Couture Finish 0.5
FD 244AD Computer Patternmaking (offered Fall, 05) 1
*FD 245AD Computer Applications in Fashion 1.5

Subtotal Units 12-14

INTERMEDIATE LEVEL CLASSES
+FD 10 Textiles Fibers and Fabrics (F, SP) 3
+FD 22A Merchandising for a Profit I (F) 1.5
+FD 22B Merchandising for a Profit II (F) 1.5
FD 32 History of Fashion (SP) 3
FD 41AD Fashion Show Production (One sem) (SP) 2.5
*FD 245AD Computer Apps in Fashion (One semester) 1.5
MKTG 40 Salesmanship (F, SP) 3

Select ONE of the following:
FD 214AB Quick Sketch Croquis Drawing (one sem) 2
FD 215AB Fashion Sketching I (one semester) 2
Subtotal Units 17.5

RECOMMENDED but not required courses:
†FD 23 Fashion/merchandise Buying 3
†FD 70AD Work Experience Issues (one semester) (F, SP) 1
†FD 72AD OR 73AD Vocational Work Experience (one semester) (F, SP) 2-3
†FD 245AD Computer Applications in Fashion (one semester) (F, SP) 1.5

Select ONE of the following:
†IBUS 1 Introduction to International Business 3
IBUS 20 Export-Import Business Practices 3
*MKTG 42 Retailing Principles & Practices 3

Subtotal Units 12-13
TOTAL UNITS 41.5 - 44.5

RECOMMENDED but not required courses:
¶FD 24AB Beginning Sewing 1.5
FD 244AD Computer Patternmaking (offered Fall, 05) 1
FACS 50 Consumer Awareness 3
IBUS 52 International Marketing 3

FILM
Associate in Arts
Students learn an appreciation of film as a medium of mass communication and with experiences in film production. It prepares students for entry-level employment in the film industry and provides partial lower division preparation for transfer to a baccalaureate degree in this field. The associate degree prepares students for entry-level employment in the film industry. For more departmental information call (562) 938-4563.

REQUIRED COURSES UNITS
FILM 1 Introduction to Film (F, SP) 3
FILM 10AD Explorations in Film (1st & 2nd semester) (F, SP) 3
FILM 11AD Film Art and Artists (2nd semester) (SP) 3
†FILM 20AB Fundamentals of Film Production (F, SP) 2
FILM 60AD Special Projects in Film (F, SP) 1
*TART 1 Acting I-Introduction to Acting (F, SP, S) 3
OR
TART 32 Stage and Screen Writing (F, SP) 3

Select ONE of the following courses:
†FILM 21AB Intermediate Film Production (1st & 2nd semester) (SP) 3
FILM 35AD Film Production Workshop (1st semester) (INF) 4

TOTAL UNITS 19

FINE ARTS
Associate in Arts
Students are provided with an introductory education in the fine arts. It also partially fulfills some of the lower division core for the Liberal Studies Bachelor's Degree and preparation for the Multiple Subjects Teaching Credential. This Associate Degree prepares student for transfer to a four-year college. For more departmental information call (562) 938-4436.
REQUIRED COURSES
Select EIGHTEEN (18) units from FIVE of the EIGHT areas listed below:
ART, CART, DANCE, FILM, MUSIC, PHOT, R_TV, TART

FIRE SCIENCE
Career Certificate and/or Associate in Science
Students are educated and trained in the technical fields relating to fire and safety practices. This program also provides partial lower-division preparation for the baccalaureate degree in this field. This certificate will prepare students for entry to a fire academy and for an entry-level position in private and public fire-related occupations. This Associate Degree will prepare students for entry to a fire academy and for career advancement for those already employed in a fire-related industry. For more departmental information call (562) 938-4338.

CORE REQUIRED COURSES UNITS
FIRE 1 Fire Protection Organization (F, SP) 3
FIRE 2 Fire Prevention Technology (formerly FIRE 57) (F, SP) 3
FIRE 3 Fire Protection Equipment and Systems (formerly FIRE 4) (F, SP) 3
FIRE 4 Building Construction for Fire Prevention (F, SP) 3
FIRE 5 Fire Behavior & Combustion (F, SP) 3
Subtotal Units 15
Select NINE (9) units from the following courses:
FIRE 6A-B Fire Command 1A -1B (SP) 2:2
FIRE 7A-C Fire Prevention Officer 1A-1B-1C (S) 2:2:2
FIRE 10A-B Fire Instructor 1A-1B (F) 2:2
FIRE 16A-B Fire Investigator 1A-1B (F) 2:2
FIRE 26A Command 2A-Command Tactics at Major Fires 2
FIRE 26B Command 2B-Management of Major Hazardous Materials Incidents 2
FIRE 26C Command 2C-High Rise Tactics 2
FIRE 26D Command 2D-Planning for Large Scale Disaster 2
FIRE 26E Command 2E 2
FIRE 40 Fire Management 1 (SP) 2
FIRE 42A Fire Management 2A-Organizational Development and Human Relations 2
FIRE 42B Fire Management 2B-Fire Service Financial Management 2
FIRE 42D Fire Management 2D-Master Planning 2
FIRE 42E Fire Management 2E-Contemporary Issues and Concepts 2
FIRE 53 Fire Hydraulics (INF) 3
FIRE 54 Hazardous Materials 1 (F) 3
FIRE 57 Introduction to Fire Tactics and Strategy (formerly Fire 2) (F) 3
FIRE 58 Intro. to Fire Company Administration (SP) 3
FIRE 60 Fire Investigation 1 (SP) 3
FIRE 61 Rescue Practices (INF) 3
FIRE 62 Fire Apparatus and Equipment (F) 3
FIRE 64 Hazardous Materials 2 (SP) 3
FIRE 65 Fundamental of Fire Safety (INF) 3
FIRE 66 Introduction to Related Codes and Ordinances (formerly Fire 5) (INF) 3
Subtotal Units 15
TOTAL UNITS 24
Note: Any 200, 300 OR 400 band course in Fire Science can be applied as an elective to a degree or certificate.

FLORAL DESIGN
Associate in Arts/Career Certificate
Students prepare for employment as floral designers. The Career Certificate completer will also have the basic knowledge to become a salesperson, manager or owner of a floral shop. The certificate will help students prepare for AIFD certification. For more departmental information call (562) 938-4454 or 938-4336.

ENTRY LEVEL CLASSES
REQUIRED COURSES UNITS
ID 286A Introduction to Floral Design (Fall Flowers) 2
ID 286B Introduction to Floral Design (Spring Flowers) 2
MGMT 80 Small Business Entrepreneurship 3

Select FIVE (5) additional units from the following courses:
ART 31 Fundamentals of Art/Composition and Color 3
OR
MKTG 40 Salesmanship 3

Subtotal Units 12

INTERMEDIATE LEVEL CLASSES
ID 287A Intermediate Floral Design – Wedding 2
ID 287B Intermediate Floral Design – Sympathy 2
ID 287C Intermediate Floral Design – Banquet/Holiday 2
Subtotal Units 6

ADVANCED LEVEL CLASSES
ID 288 Advanced Floral Design 2
ID 289 Applied Floral Shop Operation 3
Subtotal Units 5
TOTAL UNITS 23

REQUIRED COMPETENCY: Students must complete the Long Beach Community College computer proficiency requirement.

FOOD & BEVERAGE MANAGEMENT
(restaurant & Catering)
Associate in Arts/Career Certificate
Students learn entry and mid-level skills in the day-to-day management of food and beverage in all types of

Consult guides available in Counseling Centers for specific general education and required grades.
restaurants, cafeterias, convention centers, hospitals, hotels, nightclubs, private clubs, schools, stadiums, theme parks and resorts. Students enhance their skills in food and beverage management, in areas such as: beverage services, bartender, banquet sales, operations, bussers, counter persons, dishwashers, hosts, maître d’, menu makers, guest services, purchasing, sales and marketing, stewards, human resources, table servers and wine stewards. With additional courses identified on a transfer curriculum guide for food and beverage management, students can prepare for a baccalaureate degree in this field. This certificate will prepare students for an entry-level position in a wide range of hospitality, restaurant and catering career opportunities. For information regarding hotel management programs, please refer to separate Hotel Management curriculum guide. For departmental information call (562) 938-4325 or 938-4332.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE NAME</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CULAR 20</td>
<td>Food Serv Sanit in Hotel/Ratr Mgmt (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>THRFB 17</td>
<td>Introduction to Food &amp; Beverage (INF)</td>
<td>3</td>
</tr>
<tr>
<td>THRFB 18</td>
<td>Introduction to Culinary Preparation (INF)</td>
<td>3</td>
</tr>
<tr>
<td>†THRFB 19</td>
<td>Food/Beverage Purchasing/Plan/Control (F)</td>
<td>3</td>
</tr>
<tr>
<td>†THRFB 27</td>
<td>Bar and Beverage Management (INF)</td>
<td>3</td>
</tr>
<tr>
<td>THRH 24</td>
<td>Hospitality Accounting (INF)</td>
<td>3</td>
</tr>
<tr>
<td>THRH 25</td>
<td>Hospitality Law (INF)</td>
<td>3</td>
</tr>
<tr>
<td>THRH 26</td>
<td>Hospitality Supervision (INF)</td>
<td>3</td>
</tr>
<tr>
<td>THRH 30</td>
<td>Hospitality Sales and Marketing (INF)</td>
<td>3</td>
</tr>
<tr>
<td>THRH 39</td>
<td>Hospitality Industry Computer Systems (INF)</td>
<td>3</td>
</tr>
<tr>
<td>F N 250 Nutrition for Culinary Arts</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

Complete a minimum of FOUR (4) units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE NAME</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>†THRH 271A</td>
<td>Work Experience (F, SP)</td>
<td>2</td>
</tr>
<tr>
<td>†THRH 272A</td>
<td>Work Experience (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>†THRH 273A</td>
<td>Work Experience (F, SP)</td>
<td>4</td>
</tr>
</tbody>
</table>

Subtotal Units: 36

IN ADDITION students majoring in Catering Management are required to take the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE NAME</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>†THRFB 32</td>
<td>Introduction to Catering Management (INF)</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS: 36-39

NOTE: This class is required for Catering Management option and recommended for Restaurant Management option.

RECOMMENDED but not required courses:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE NAME</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBIS 2</td>
<td>Advanced MS Office-Help Desk Emphasis (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>CBIS 40</td>
<td>MS Office Expert Level (F)</td>
<td>3</td>
</tr>
<tr>
<td>THRFB 32</td>
<td>Introduction to Catering Management(INF)</td>
<td>3</td>
</tr>
<tr>
<td>THRH 28</td>
<td>Convention Management and Meeting Planning (INF)</td>
<td>3</td>
</tr>
<tr>
<td>THRH 29</td>
<td>Facilities Management (INF)</td>
<td>3</td>
</tr>
<tr>
<td>THRH 33</td>
<td>Housekeeping and Security Management (INF)</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 80</td>
<td>Small Business Entrepreneurship (F, SP, S)</td>
<td>3</td>
</tr>
<tr>
<td>SP 10</td>
<td>Elements of Public Speaking (F, SP, S)</td>
<td>3</td>
</tr>
<tr>
<td>SP 25</td>
<td>Elements of Intercultural Communications (F, SP, S)</td>
<td>3</td>
</tr>
<tr>
<td>THR 210</td>
<td>Introduction to Travel/Tourism (F, SP)</td>
<td>3</td>
</tr>
</tbody>
</table>

FOREIGN LANGUAGES

Associate in Arts/Career Certificate

Program has two emphases: Foreign Languages-Proficiency emphasis with options in French, German and Spanish at intermediate or advanced level. Foreign Languages-Regional emphasis with options in European, Spanish American and Pacific Rim. Students following the Proficiency Emphasis develop a competency in at least one foreign language, providing an important entry-level skill for those aspiring to work in the international arena as well as preparing for baccalaureate work. Students following any of the Culture Emphasis (European, Spanish American or Pacific Rim) develop entry-level skills for work in the international arena, including the airline industry, international business, travel/tourism, communications, government and hotel/restaurant management. The Language Certificate (offered only in French, German and Spanish) verifies for a potential employer that the student can communicate (verbally and in writing) in a wide range of situations, for a variety of purposes at a designated level for effective communication in a business or related professional setting. This Associate Degree provides the same or greater level of competency as the certificate. The degree also offers an added dimension of cultural knowledge and understanding in region(s) where the language is spoken. The degree would benefit those wishing to enter a variety of industries or business settings that compete in an international market, as well as preparing for transfer to a four-year university in a foreign language program. For more departmental information call (562) 938-4331.

PROFICIENCY EMPHASIS

With Options in French, German, and Spanish at the Intermediate or Advanced Level

For students who are studying French, German or Spanish and who want to achieve a level of competency for baccalaureate work, and/or to combine their foreign languages with another skill.

Select 20 units from ¶French, ¶German or ¶Spanish courses listed below with a minimum of 15 units in ONE language:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE NAME</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>¶Elementary Language 1 (or 1A + 1B), 2 (or 2A + 2B) (F, SP, S)</td>
<td>5:5</td>
<td></td>
</tr>
<tr>
<td>¶Intermediate Language 3, 4 (F, SP, S) or Span 9, 10 (F, SP, S)</td>
<td>5:5</td>
<td></td>
</tr>
<tr>
<td>¶Advanced Language 25AD (French, German or Spanish) (F, SP) OR</td>
<td>3:3:3:3</td>
<td></td>
</tr>
<tr>
<td>Two semesters (4 units maximum) of Spoken French, German or Spanish (8AD) (F, SP, S)</td>
<td>2:2</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL UNITS: 20

CULTURE EMPHASIS

With Options in European, Spanish American and Pacific Rim

FOREIGN LANGUAGE/EUROPEAN AREA CULTURE

REQUIRED COURSES

Select 20 units from French, German or Spanish courses listed below with at least 15 units in ONE language.

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE NAME</th>
<th>UNITS</th>
</tr>
</thead>
</table>

77
In addition, students must pass a competency examination in French, German or Spanish, administered by the Foreign Language Department, including an oral proficiency part, additionally focusing on specialized areas, such as international business and tourism. The level of proficiency expected for the competency examination equals the intermediate mid to high level according to the guidelines established by the American Council of Teachers of Foreign Languages.

FOREIGN LANGUAGE/SPANISH AMERICAN CULTURE

REQUIRED COURSES

Select 10 units in one language from Japanese or Chinese courses listed below:

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary Japanese 1 (or 1A + 1B)</td>
<td>5:5</td>
</tr>
<tr>
<td>Intermediate Language 3, 4 (F, SP)</td>
<td>5:5</td>
</tr>
<tr>
<td>Advanced Language 25AD (French, German or Spanish)</td>
<td>3:3:3:3</td>
</tr>
<tr>
<td>Two semesters (4 units maximum) of Spoken French, German or Spanish (8AD) (F, SP)</td>
<td>2:2</td>
</tr>
<tr>
<td>Select SIX (6) units from:</td>
<td></td>
</tr>
<tr>
<td>IBUS 1 Introduction to International Business</td>
<td>3</td>
</tr>
<tr>
<td>THRH 16 Introduction to Hotel Management</td>
<td>3</td>
</tr>
<tr>
<td>THRT 210 Introduction to Travel &amp; Tourism</td>
<td>3</td>
</tr>
<tr>
<td>IBUS 52 International Marketing</td>
<td>3</td>
</tr>
<tr>
<td>Subtotal Units</td>
<td>20</td>
</tr>
</tbody>
</table>

Select SIX (6) units from:

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 9A History of China</td>
<td>3</td>
</tr>
<tr>
<td>HIST 9B History of Japan and Korea</td>
<td>3</td>
</tr>
<tr>
<td>Subtotal Units</td>
<td>6</td>
</tr>
</tbody>
</table>

In addition, students must pass a competency examination in Chinese or Japanese, administered by the Foreign Language Department, including an oral proficiency part, additionally focusing on specialized areas, such as international business and tourism. The level of proficiency expected for the competency examination equals the intermediate low level according to the guidelines established by the American Council of Teachers of Foreign Languages.

HORTICULTURE

Associate in Science/Career Certificate

This field of concentration is designed to furnish students with knowledge of the entry-level skills necessary to embark upon a career in the horticulture industry. It includes emphasis on practical applications leading to career advancement. Also, it provides a partial lower division preparation for transfer to a baccalaureate degree program in this field. This certificate will prepare students for an entry-level position in a variety of horticulture/landscape/nursery industry positions and will serve as a foundation for specialization. This Associate Degree will prepare students for career advancement once a certificate has been earned. Appropriate course selection will also facilitate transfer in a related major. For more departmental information call (562) 938-3092.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT 11A-D Plant Identification (F, SP)</td>
<td>3:3:3:3</td>
</tr>
<tr>
<td>HORT 15A OR 15B Basic Horticulture (F, SP)</td>
<td>2</td>
</tr>
<tr>
<td>Subtotal Units</td>
<td>14</td>
</tr>
</tbody>
</table>

Select SIX (6) units from the following courses:

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT 271AD Work Experience-Horticulture (F, SP)</td>
<td>2:2:2:2</td>
</tr>
<tr>
<td>HORT 272AD Work Experience-Horticulture (F, SP)</td>
<td>3:3:3:3</td>
</tr>
</tbody>
</table>

Consult guides available in Counseling Centers for specific general education and required grades.
Complete a minimum of THREE (3) units from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>THRH 271AD</td>
<td>Work Experience (F, SP)</td>
<td>2</td>
</tr>
<tr>
<td>THRH 272AD</td>
<td>Work Experience (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>THRH 273AD</td>
<td>Work Experience (F, SP)</td>
<td>4</td>
</tr>
</tbody>
</table>

TOTAL UNITS 37

RECOMMENDED but not required courses:

- THRFB 17 Intro to Food & Beverage Management 3
- THRFB 27 Bar & Beverage Management (INF) 3
- THRFB 32 Introduction to Catering Management(INF) 3
- CULAR 20 App Food Serv Sanit in Hotel/Rstr Mgmt 3
- THRH 29 Facilities Management (INF) 3
- THRH 31 Resort Operations (INF) 3
- CBIS 2 Advanced MS Office – Help Desk Emphasis (F, SP, S) 3
- CBIS 40 MS Office – Expert Level (F, SP, S) 3
- MGMT 80 Small Business Entrepreneurship (F, SP, S) 3
- SP 10 Elements of Public Speaking (F, SP, S) 3
- SP 25 Elements of Intercultural Communications (F, SP, S) 3
- THR 210 Introduction to Travel/Tourism (F, SP) 3

HUMAN SERVICES

Associate in Arts/Career Certificate

Students learn the skills and knowledge necessary to transfer to upper division programs in social work or human services and to be employed at the paraprofessional entry-level in social work and human services agencies. This certificate will prepare students for an entry-level position in the human services/social work field. This Associate Degree will prepare students for an entry-level position in the human services/social work field and for career advancement for those already employed in these occupations. For more departmental information call (562) 938-4961.

Complete TEN-FOURTEEN (10-14) units from any of the CORE courses below:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS 1</td>
<td>Introduction to Social Work (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>*HS 71AD</td>
<td>Work Experience-Human Services (F, SP)</td>
<td>2</td>
</tr>
<tr>
<td>**HS 72AD</td>
<td>Work Experience-Human Services (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>**HS 73AD</td>
<td>Work Experience-Human Services (F, SP)</td>
<td>4</td>
</tr>
<tr>
<td>HS 207</td>
<td>Development of Helping &amp; Listening Skills (F, SP)</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal Units 10-14

Complete an additional (10 to 14) units from any of the following courses to bring the total to 24 UNITS: (Emphasis on ONE GROUP is recommended)

GERONTOLOGY GROUP

- F & N 20 Nutrition & Life 3
- HS 26 Introduction To Gerontology (S) 3
- HS 45 Stress Management for the Helping Professional (F, SP) 3
- HS 228 Life Enhancement for Seniors 3
- HS 253 Activity/Recreation Leadership Training 3

CRIMINAL JUSTICE GROUP

- ADJUS 14 Juvenile Law and Procedures (F, SP) 3
- ADJUS 20 Introduction to Corrections (F, SP) 3
- HS 7 Introduction to Victimology (F, SP) 3
- HS 40A-B Introduction to Addictive Behaviors (F, SP) 3
- HS 41 Introduction to Chemical Dependency (F, SP) 3
- HS 46 Physiology & Pharmacology of Drugs (F, SP) 3
SOcio 11 Race and Ethnic Relations in the U.S. 3
SOcio12 OR ADJUS12 Crime & Delinquency (F, SP) 3

General Human Services Group

ECON 1A MACRO Economics Analysis 3
HS 15 Social Welfare: People with Disabilities 3
HS 40A-B Intro To Addictive Behaviors (F, SP) 3
HS 43 Case Management: Treatment & Aftercare (F, SP) 3
HS 45 Stress Mgmt for the Helping Professional(F, SP) 3
HS 47 Process & Individual Techniques (F, SP) 3
†HS 48 Group and Family Process 3
†HS 50 Law and Ethics (F, SP) 3
†HS 251 HIV: Cultural Competency in Treatment 4
†HS 252 Dual Diagnosis: Assessment and Treatment 3
PUBAD 1 Intro To Public Administration (F, SP) 3
SOcio 2 Modern Social Problems 3
SP 20 Elements of Communication 3

Family Services Group

ADJUS 253 Understanding Domestic Violence 3
CDECE 47 Human Development 3
FACS 50 Consumer Awareness 3
FACS 64 Life Management 3
HS 15 Social Welfare: People with Disabilities 3
HS 40A-B Intro To Addictive Behaviors (F, SP) 3
HS 47 Process & Individual Techniques (F, SP) 3
HS 48 Group and Family Process 3
SOcio 11 Race and Ethnic Relations in the U.S. 3
SOcio 40 Marriage & the Family 3
Subtotal Units 10-14
TOTAL UNITS 24

Completion Certificates

Activity/Recreation Leadership Training Certificate

Required Courses

HS 253 Activity/Recreation Leadership Training 3
Total Units 3

Chemical Dependency Certificate

Required Courses

HS 41 Introduction to Chemical Dependency 3
HS 43 Case Management 3
HS 46 Physiology & Pharmacology of Drugs 3
†HS 48 Group & Family Process 3
HS 50 Law & Ethics 3
Total Units 15
Additional Requirement: Must complete courses within 3 years.

Human Services:

Alcohol and Drug Studies

Associate in Arts/Career Certificates
(Pending Chancellor’s Office Approval)

Student learn the skills and knowledge necessary to transfer to upper division programs in social work or human services and be eligible to become employed at the paraprofessional entry level in social work or human services agencies. This career certificate will prepare students for an entry-level position in the human services/social work field and for career advancement for those already employed in these occupations. For more departmental information call (562) 938-4961.

AA Degree

Complete the Twelve (12) units from the Core courses below:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS 1 Introduction to Social Work</td>
<td>3</td>
</tr>
<tr>
<td>HS 46 Physiology &amp; Pharmacology of Drugs (SP)</td>
<td>3</td>
</tr>
<tr>
<td>HS 47 Process &amp; Individual Techniques (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>†HS 48 Group &amp; family Process (SP)</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal Units 12

Complete Six (6) units from any of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS 43 Case Management: Treatment &amp; Aftercare(F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>HS 45 Stress Management for the Helping Professional</td>
<td>3</td>
</tr>
<tr>
<td>†HS 251 HIV &amp; Cultural Competency in Treatment (F)</td>
<td>3</td>
</tr>
<tr>
<td>†HS 252 Dual Diagnosis: Assessment &amp; Treatment(Sp)</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal Units 6

Complete Six (6) units from any of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS 71AD Work Experience – Human Services (F, SP)</td>
<td>2</td>
</tr>
<tr>
<td>HS 72AD Work Experience – Human Services (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>HS 73AD Work Experience – Human Services (F, SP)</td>
<td>4</td>
</tr>
</tbody>
</table>

Subtotal Units 6

Total Units 24

Career Certificate

Complete Six (6) units from any of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS 1 Introduction to Social Work (F, SP, S)</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 1 Introduction to Psychology (F, SP, S)</td>
<td>3</td>
</tr>
<tr>
<td>CDECE 47 Human Development (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>SOCIO 1 Introduction to Sociology (F, SP, S)</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 14 Abnormal Psychology (F, SP)</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal Units 6

Complete the following courses listed below:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS 43 Case Management: Treatment &amp; Aftercare(F,SP)</td>
<td>3</td>
</tr>
<tr>
<td>HS 46 Physiology &amp; Pharmacology of Drugs (SP)</td>
<td>3</td>
</tr>
<tr>
<td>HS 47 Process &amp; Individual Techniques (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>†HS 48 Group and Family Process</td>
<td>3</td>
</tr>
<tr>
<td>HS 252 Dual Diagnosis: Assessment &amp; Treatment(Sp)</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal Units 15

Complete Six (6) units from any of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS 41 Introduction to Chemical Dependency (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>HS 45 Stress Management for the Helping Professional (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>HS 50 Law &amp; Ethics (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>†HS 251 HIV &amp; Cultural Competency in Treatment (F)</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal Units 6

Complete Six (6) units from any of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS 71AD Work Experience – Human Services (F, SP)</td>
<td>2</td>
</tr>
<tr>
<td>HS 72AD Work Experience – Human Services (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>HS 73AD Work Experience – Human Services (F, SP)</td>
<td>4</td>
</tr>
</tbody>
</table>

Subtotal Units 6

Total Units 34

Consult guides available in Counseling Centers for specific general education and required grades.
INTERIOR DESIGN
Associate in Arts/Career Certificate

Students prepare for employment in Interior Design, the Home Furnishings Industry and related fields. See the Interior Design: “Technical Skills Emphasis” guide for preparation in the area of drafting and computer aided design. For more departmental information call (562) 938-4454 or 938-4180.

For the ASSOCIATE in ARTS Degree in INTERIOR DESIGN complete the following 27 units

REQUIRED COURSES UNITS
ID 1 Fundamentals of Interior Design 3
ID 5 Interior Design Studio 1 2
ID 10 Beginning Drafting 3
ID 20 Interior Design Careers 2
ID 30 Applied Color & Design Theory 4
ID 50 Interior Materials/Products 4
ID 70 Space Planning 3
MKTG 40 Salesmanship 3
ARCHT 360M1 Basic AutoCAD for Architecture 1.5
ARCHT 360M2 Architectural Design – AutoCAD 1.5
TOTAL UNITS (For Associate of Arts degree) 27

For the PROGRAM CERTIFICATE in INTERIOR DESIGN, complete the above 27 units and select 18-20 units from the following courses to total 45-47 units

REQUIRED COURSES UNITS
ID 70AD Work Experience Issues 1
ID 71AD, 72AD or 73AD Work Experience 1, 2 or 3
ID 80 History of Interior & Furnishings 1 3
ID 90 History of Interior & Furnishings 2 3
ID 200 Interior Illustration (SP) 2
ID 210 Fundamentals of Lighting 3
ID 215 Interior Design Studio II 2
ID 230 Business & Professional Practices 3
Subtotal Units 18-20
TOTAL UNITS for Program Certificate 45-47

Recommended but not required:
ID 76 History of American Material Culture 2
†¶ID270A-B Exploring Interior Design(one semester) 2:2
ID 272 Decorating the Home 1

INTERIOR DESIGN:
Technical Skills Emphasis
Associate in Arts/Career Certificate

Students prepare for employment in the Home Furnishings Industry in the areas of drafting and computer aided design. For more departmental information call (562) 938-4180 or 938-4454.

REQUIRED COURSES UNITS
ARCHT 360M1 Basic AutoCAD for Architecture 1.5
ARCHT 360M2 Architectural Design–AutoCAD 1.5
DRAFT 204 3D Visualization/Animation 4
ID 1 Fundamentals of Interior Design (F/S) 3
ID 5 Interior Design Studio 1 (F/S) 2
ID 10 Beginning Drafting (F/S) 3
ID 20 Interior Design Careers (F) 2
ID 70 Space Planning (S) 3
ID 210 Fundamentals of Lighting (F/S) 3
ID 215 Interior Design Studio II 2
TOTAL UNITS 25

REGIONAL INTERIOR DESIGN PROGRAM
Long Beach City College has formed a partnership with four other community colleges to create a Regional Interior Design Program with a shared curriculum. Students have the opportunity to take classes on any of the five campuses and receive credit toward their certificate or degree. The participating colleges are LBCC, Orange Coast College, Saddleback College, Mt. San Antonio College and Fullerton College.

JOURNALISM
Newspaper/Magazine, Public Relations and Publication Specialist
Associate in Arts/Career Certificate

This field of concentration, with an emphasis in NEWSPAPERS/MAGAZINES, provides a basic program for students interested in careers requiring journalistic training, such as newspaper or Internet reporting, magazine or free-lance writing. The emphasis in PUBLIC RELATIONS provides a basic program for students interested in careers in any aspect of public relations and in writing and editing in-house or Internet publications. The PUBLICATION SPECIALIST emphasis provides a basic program for students interested in learning to produce a variety of publications including newsletters, brochures, websites, proposals and house magazines. The Career Certificate provides access to entry level employment in a variety of journalism related fields. These include newspapers, magazines, websites, newsletters and press relations offices. For more departmental information call (562) 938-4282.

DEGREE PROGRAM
Newspaper/Magazine; Public Relations; Publications

NEWSPAPER/MAGAZINE EMPHASIS
REQUIRED COURSES UNITS
JORN10 Introduction to Mass Communication (F,SP) 3
† JORN 20 Beginning Newswriting & Reporting (F, SP) # 3
JORN 25 Free Lance/Feature Writing (F) 3
JORN 35AD Photojournalism (1st semester) (F) 3
JORN 80AD Working on the Newspaper (1st and 2nd semester) (F, SP, S) 3:3
Subtotal Units 18

Select THREE(3) units from the following:
• JORN1A Introduction to Desktop Publication (F,SP) 3
JORN 6AB Making and Editing the Magazine (SP) 3
TOTAL UNITS 21

RECOMMENDED but not required courses:
• JORN 1B Introduction to Desktop Publishing (2nd semester) (F, SP) 3
JORN 5 Introduction to Public Relations (F) 3
JORN 35AD Photojournalism (2nd semester) (F) 3
JORN 71AD or 72AD or 73AD Work Experience 2:4
JORN 80AD Working on the Newspaper (3rd and 4th semester) (F, SP, S) 3:3
JORN 85AD Editor Training (1st and 2nd semester) (F, SP, S) 3:3

PUBLIC RELATIONS EMPHASIS
• JORN1A Introduction to Desktop Publication (F,SP) 3
JORN 5 Introduction to Public Relations (F,SP) 3
JORN10 Introduction to Mass Communication(F,SP) 3

Curriculum Guides
Curriculum Guides

Consult guides available in Counseling Centers for specific general education and required grades.

RECOMMENDED but not required courses: UNITS
JOURN 25 Free Lance/Feature Writing (F) # 3
JOURN 35AD Photojournalism (1st semester) (F) 3
JOURN 80AD Working on the Newspaper (2nd, 3rd and 4th semester) (F, SP, S) 3:3:3
JOURN 85AD Editor Training (1st and 2nd semester) (F, SP, S) 3:3
JOURN 71AD or 72AD or 73AD Work Experience (F, SP) 2 - 4
SP 10 Elements of Public Speaking 3
SP 60 Elements of Argumentation & Debate 3
MKTG 40 Salesmanship 3
MKTG 47 Essentials of Marketing 3

TOTAL UNITS 18

RECOMMENDED but not required courses: UNITS
JOURN 20 Beginning Newswriting & Reporting (F, SP) # 3
JOURN 6AB Making and Editing the Magazine (SP) 3
JOURN 25 Free Lance/Feature Writing (F) 3
JOURN 35AD Photojournalism (1st semester) (F) 3
JOURN 80AD Working on the Newspaper (1st and 2nd semester) (F, SP, S) 3:3
JOURN 71AD or 72AD or 73AD Work Experience (F, SP) 2 - 4
SP 10 Elements of Public Speaking 3
SP 60 Elements of Argumentation & Debate 3
MKTG 40 Salesmanship 3
MKTG 47 Essentials of Marketing 3

TOTAL UNITS 21

CERTIFICATE PROGRAM
Print, Public Relations, Publications
REQUIRED COURSES UNITS
JOURN10 Introduction to Mass Communication(F,SP) 3
JOURN20 Begin Newswriting & Reporting (F, SP) # 3
JOURN 25 Free Lance/Feature Writing (F) 3
JOURN 35AD Photojournalism (1st semester) (F) 3
JOURN 71AD or 72AD or 73AD Work Experience2 - 4
JOURN 80AD Working on the Newspaper (1st and 2nd semester) (F, SP, S) 3:3
JOURN85AD Editor Training (1st semester) (F, SP, S) 3:3
TOTAL UNITS 20-22

LEGAL SECRETARY
Career or Completion Certificate and/or Associate in Arts
Students prepare for an entry-level legal secretary position by learning to format legal documents, maintain accurate legal files, calendar court dates, and operate computer programs commonly used in law offices. This certificate prepares students for an entry-level position in a variety of law office settings and serves as a foundation for specialization. This Associate degree prepares students for career advancement once a certificate has been earned. For more departmental information call (562) 938-3033.

REQUIRED COURSES UNITS
•CAOTC 31A Microsoft Windows Operating System, Beginning (F, SP, S) 1
•CAOTC 45 Internet for Office and Personal Use (F, SP, S) 2
•CAOTC 265 Computer Transcription (F, SP) 2
CAOTO 214A, B Filing, Levels 1, 2 (F, SP, S) 1:1
CAOTO 216 Proofreading Skills (F, SP, S) 1
CAOTO 223 Legal Procedures-Litigation (F) 3
CAOTO 224 Legal Procedures (SP) 3
CAOTO260 Business Telephone Procedures (F, SP, S) 3
CAOTO 261 Business English (F, SP, S) 3
•CAOTT201 Intermediate Typing/Keyboarding (F, SP) 2

Subtotal Units 20
Select FOUR (4) units from one of the following groups:
•CAOTC 39A, B, C, D Microsoft Word for Office, Levels 1, 2, 3, 4 (F, SP, S) 1:1:1:1
•CAOTC 236A, B, C, D Word Processing-WordPerfect, Levels 1, 2, 3, 4 (F, SP) 1:1:1:1

Subtotal Units 4
REQUIRED COMPETENCY: Typing certificate of at least 50 words per minute for 5 minutes with 5 or fewer errors by the end of the program.
Select ONE (1) unit from the following:
•CAOTC 31B Microsoft Windows Operating System, Advanced (F, S, S) 1
•#CAOTC 39A, B, C, D Microsoft Word for Office, Levels 1, 2, 3, 4 (F, SP, S) 1
•CAOTC 41E, F, J Excel for Windows, Levels 1, 2, 3, 4 (F, SP) 1
•CAOTC 42A, B Desktop Publishing-Small Business, Levels 1, 2 (F, SP) 1
•CAOTC 47A, B Access for Office Applications, Levels 1, 2 (F, SP) 3
•CAOTC 215A Microsoft Outlook (F, SP) 2
•#CAOTC 236A, B, C, D Word Processing-WordPerfect, Levels 1, 2, 3, 4 (F, SP) 1
CAOTO 15 Business Communications (F, SP) 3
CAOTO 222 Job Search Skills (F, SP) 3
CAOTO 262 Professional Development (F, SP) 1
CAOTO 272AD Work Exp-Comp Ofc Tech (F, SP) 3
CAOTT209AB Speed/Accuracy Bldg for Typists(F,SP)1

Subtotal Units 1-3
TOTAL UNITS 28-30

COMPLETION CERTIFICATES
Basic Legal Office Procedures Certificate
REQUIRED COURSES UNITS
BOTH
CAOTC 39A Microsoft Word for Office, Beginning 1
CAOTC 39B Microsoft Word for Office, Intermediate 1
OR BOTH
CAOTC 236A Word Processing-WordPerfect, Begin. 1
CAOTC 236B Word Processing-WordPerfect, Interm. 1
CAOTC 265 Computer Transcription 2
CAOTO 223 Legal Procedures-Litigation 3
CAOTO 224 Legal Procedures 3
TOTAL UNITS 10

Basic Office Skills Certificate
REQUIRED COURSES UNITS
CAOTC 39A Microsoft Word for Office, Beginning 1
CAOTC 45 Internet for Office and Personal Use 2
CAOTO 214A Filing 1
CAOTO 260 Business Telephone Procedures 1

**BOTH**
CAOTT 200A Beginning Typing/Keyboarding 1
CAOTT 200B Beginning Typing/Keyboarding B 1

**OR**
CAOTT 200 Beginning Typing/Keyboarding 3

**TOTAL UNITS** 7-8

**REQUIRED COMPETENCY:** Typing certificate of at least 25 words per minute for 5 minutes with 5 or fewer errors completed within the previous 12 months.

### Corel WordPerfect Certificate

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAOTC 236A</td>
<td>Word Processing-WordPerfect, Begin</td>
<td>1</td>
</tr>
<tr>
<td>CAOTC 236B</td>
<td>Word Processing-WordPerfect, Inter</td>
<td>1</td>
</tr>
<tr>
<td>CAOTC 236C</td>
<td>Word Processing-WordPerfect, Adv</td>
<td>1</td>
</tr>
<tr>
<td>CAOTC 236D</td>
<td>Word Processing, WordPerfect, Expert</td>
<td>1</td>
</tr>
</tbody>
</table>

**TOTAL UNITS** 4

**REQUIRED COMPETENCY:** Typing certificate of at least 25 words per minute for 5 minutes with 5 or fewer errors completed within the previous 12 months.

### Microsoft Word Certificate

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAOTC 39A</td>
<td>Microsoft Word for the Office, Begin</td>
<td>1</td>
</tr>
<tr>
<td>CAOTC 39B</td>
<td>Microsoft Word for the Office, Inter</td>
<td>1</td>
</tr>
<tr>
<td>CAOTC 39C</td>
<td>Microsoft Word for the Office, Adv</td>
<td>1</td>
</tr>
<tr>
<td>CAOTC 39D</td>
<td>Microsoft Word for the Office, Expert</td>
<td>1</td>
</tr>
</tbody>
</table>

**TOTAL UNITS** 4

**REQUIRED COMPETENCY:** Typing certificate of at least 35 words per minute for 5 minutes with 5 or fewer errors completed within the previous 12 months. Instructor verification of 80 percent or better accuracy on Word Core and Expert practice exams or Microsoft Office Specialist certification.

### Liberal Arts

This field of concentration provides a broad general education to students. It also partially fulfills the general education-breadth patterns for CSU, UC or private universities if attention is given to their specific requirements. This program similarly prepares students pursuing the Liberal Studies baccalaureate degree and the Multiple Subjects Teaching Credential.

**REQUIRED COURSES**

**Complete EIGHTEEN (18) units as specified below:**
I. **+ONE** course selected from either the ENGLISH COMPOSITION or the COMMUNICATION & ANALYTICAL THINKING section of the Associate Degree Graduation Requirements. This is IN ADDITION to the courses used to meet the general education requirement.

II. **+ONE** course selected from the NATURAL SCIENCES section of the Associate Degree Graduation Requirements. This is IN ADDITION to the course used to meet the general education requirement.

III. **+ONE** course selected from the HUMANITIES section of the Associate Degree Graduation Requirements. This is IN ADDITION to the course used to meet the general education requirement.

IV. **+ONE** course selected from the SOCIAL SCIENCES section of the Associate Degree Graduation Requirements. This is IN ADDITION to the course used to meet the general education requirement.

V. At least **two courses (minimum of 6 units total)** from the above areas and/or the proficiency requirement areas (all units may be from the same area). These are IN ADDITION to the courses used to meet general education requirements.

**TOTAL UNITS** 18

+One (1) unit courses not permitted.

### Machine Operator Manufacturing Technology

**Career Certificate and/or Associate in Science**

Students prepare for entry-level jobs as machine operators in the aerospace or comparable manufacturing industry. Machine operators plan the sequence of machining and layout operations. They use sketches, drawings and sample parts to produce required parts. Level 1 meets the competencies set forth by the Southern California Aerospace Industry Education Council. Level 1 competencies are required for Level 2 classes. For more departmental information call (562) 938-3073 or 938-3054.

#### LEVEL 1 - REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MACT 50A</td>
<td>Machine Tool Operation and Practices</td>
<td>3</td>
</tr>
<tr>
<td>MACT 50B</td>
<td>Machine Tool Operation and Practices</td>
<td>3</td>
</tr>
<tr>
<td>COMIS 1A</td>
<td>Using the IBM Microcomputer</td>
<td>1</td>
</tr>
<tr>
<td>CPAS 1</td>
<td>Using the MAC as a Tool for Learning</td>
<td>1</td>
</tr>
<tr>
<td>DRAFT 203A</td>
<td>Mechanical Drawing</td>
<td>3</td>
</tr>
<tr>
<td>DRAFT 51A</td>
<td>Industrial Drafting I</td>
<td>3</td>
</tr>
<tr>
<td>ELTC 225</td>
<td>Algebra &amp; Trigonometry for Technicians</td>
<td>3:4</td>
</tr>
</tbody>
</table>

A more advanced or transferable math course. (Trigonometry is recommended.)

**Complete one (1) unit from the following:**

- WELD 461AD Welding (Acetylene Gas) 1
- WELD 462AD Welding (Carbon Arc) 1
- WELD 463AD Welding (Gas Metal Arc) 1
- WELD 465AD Welding (Oxygen Gas) 1

**Subtotal Units** 14-15

#### LEVEL 2 - REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MACT 202</td>
<td>Machine Shop 2</td>
<td>10</td>
</tr>
<tr>
<td>MACT 203</td>
<td>Machine Shop 3</td>
<td>10</td>
</tr>
<tr>
<td>MACT 204</td>
<td>Machine Shop 4</td>
<td>10</td>
</tr>
</tbody>
</table>

**Subtotal Units** 30

**TOTAL UNITS** 44-45

**NOTE:** If 300 numbered versions of classes exist, they may be used toward the total units required.

**RECOMMENDED but not required Courses:**

- DRAFT 60 Geometric Dimensioning & Tolerancing 3
- TEC 60 Computer Aided Design and Drafting (CADD) 3

### Machine Tool Technology

**Career Certificate and/or Associate in Science**

Students prepare for entry-level jobs as machinists in the machine tool area. For more departmental information call (562)938-3073 or 938-3054.
**Curriculum Guides**

**Consult guides available in Counseling Centers for specific general education and required grades.**

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### REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MACHINE SHOP 1</td>
<td>10</td>
</tr>
<tr>
<td>MACHINE SHOP 2</td>
<td>10</td>
</tr>
<tr>
<td>MACHINE SHOP 3</td>
<td>10</td>
</tr>
<tr>
<td>MACHINE SHOP 4</td>
<td>10</td>
</tr>
<tr>
<td>MACH 250 CNC Manual Programming</td>
<td>5</td>
</tr>
</tbody>
</table>

**TOTAL UNITS: 45**

### RECOMMENDED but not required:

- WELD 400AD Welding (General) 2

---

### MARKETING

**Career Certificate and/or Associate in Arts**

The certificate and degree programs prepare students for a wide range of entry and mid-level positions in marketing. Students can enhance their skills in strategic and tactical market planning by studying the internal and external forces that affect all organizations. With additional courses identified on a transfer curriculum guide for Business Administration, students can prepare for a baccalaureate degree in this field. For more departmental information call (562) 938-4332 or 938-4941.

### REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG 40 Salesmanship</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 41 Advertising</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 42 Retailing</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 47 Essentials</td>
<td>3</td>
</tr>
<tr>
<td>IBUS 52 International</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal Units: 12**

Select **TWO** from the following:

- IBUS 1 Introduction to International Business 3
- MGMT 49A Introduction to Management 3
- MGMT 49B Introduction to Management 3
- MGMT 80 Small Business Entrepreneurship 3
- MKTG 273AD Work Experience 3

**Subtotal Units: 6-7**

Select **TWO** from the following:

- IBUS 12 Computer Programming 3
- ENGR 54 Computer Methods 3

**Subtotal Units: 3**

**TOTAL UNITS: 24-27**

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### MECHANICAL MAINTENANCE TECHNOLOGY

**Career Certificate/Associate in Science**

This program gives students the comprehensive skills to maintain, diagnose and repair dockside ground mechanical and electrical equipment related to any heavy industry (i.e. transportation, shipping and rail or refinery industry.) For more departmental information call (562) 938-3053 or 938-3055.

### REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIESL 293AD General Engine</td>
<td>4</td>
</tr>
<tr>
<td>DIESL 391A Hydraulics</td>
<td>3</td>
</tr>
<tr>
<td>DIESL 492 Air &amp; Brakes</td>
<td>3</td>
</tr>
<tr>
<td>ELECT 202 Electrical Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>*ELECT 204 Fundamentals of DC Electricity</td>
<td>3</td>
</tr>
<tr>
<td>*ELECT 310A Laboratory Practices (DC)</td>
<td>1</td>
</tr>
<tr>
<td>° Must enroll in ELECT 204 and ELECT 310A concurrently.</td>
<td></td>
</tr>
<tr>
<td>*ELECT 209 Fundamentals of Motors/Generators</td>
<td>3</td>
</tr>
<tr>
<td>° Must enroll in ELECT 209 and ELECT 310B concurrently.</td>
<td></td>
</tr>
<tr>
<td>° AC R 450A Transportation</td>
<td>5</td>
</tr>
<tr>
<td>° AC R 540B Advanced Transport Refrigeration</td>
<td>5</td>
</tr>
<tr>
<td>FORK 801 Forklift Safety &amp; Operation</td>
<td>1</td>
</tr>
<tr>
<td>WELD 400AD General Welding</td>
<td>2</td>
</tr>
<tr>
<td>WELD 410AD (Arc)</td>
<td>2</td>
</tr>
<tr>
<td>WELD 480AD Welding (Inert Gas - MIG &amp; TIG)</td>
<td>2</td>
</tr>
</tbody>
</table>

**Subtotal Units: 38**

Select a minimum of **THREE (3) Units from the following:**

- ° ELECT 212 Fundamentals of AC Electricity

**TOTAL UNITS: 39-43**
MEDICAL ASSISTING PROGRAM

Administrative Certificate/Clinical Certificate
Career or Completion Certificate and/or Associate in
Arts or Science

The Medical Assistant Program is designed to educate the student for immediate employment providing assistance to the physician in caring for patients in the medical office or clinic. The wide range of clinical and business duties provides an interesting career for one who enjoys working with people. The Medical Assisting Program is approved by the Long Beach Medical Association. The program is designed to be completed in one academic year and includes either the administrative or clinical assisting courses or a combination of both. This Certificate will prepare students for an entry-level position in a variety of ambulatory settings. Each certificate is the foundation for specialized clinical practice. This Associate Degree will prepare students for career advancement once a certificate has been earned. For more departmental information call (562) 938-4166.

ADMINISTRATIVE CERTIFICATE

An Administrative Medical Assistant assists the physician in handling the business aspects of the medical office or clinic. The ranges of administrative duties include reception, handling telephone calls, scheduling, filing, bookkeeping, transcribing and insurance billing.

REQUIRED COURSES UNITS

FIRST SEMESTER
+*BIO 60 Human Biology 1 4
+AH 60 Medical Terminology 3
†¶MA 270 Introduction to Medical Assisting 3
+Administrative Option - See Options 3

SECOND SEMESTER
+AH 276 Health Care Law 1
@†MA 284 Medical Assisting Specialized Practicum 2
@†MA 288 Practicum Seminar 1
+MA 290 Medical Insurance Billing 3
+Administrative Option - See Options 3

TOTAL UNITS 23

ADMINISTRATIVE OPTIONS

CHOOSE ONE OF THE FOLLOWING OPTIONS

OPTION ONE:
+ACCTG 200A Introduction to Accounting 3
**Computer Class Any class which satisfies computer proficiency for graduation. For updated listing see general course pattern guide. 1
**CAOTC 39A,B Microsoft Word for Office, Lvl 1-21 1

OPTION TWO
**CAOTC 47A Access for Office Applications, Beg. 3
**CAOTC 47B Access for Office Applications, Inter. 3

OPTION THREE
+ACCTG 200A Introduction to Accounting 3
+ AH 206A Medical Transcription 3

CLINICAL CERTIFICATE

A Clinical Medical Assistant assists the physician in caring for the patient in the medical office or clinic. The range of clinical duties include assisting with the physical exam, specialty exams and minor surgery; sterilization; taking a health history; laboratory procedures; diagnostic tests; pharmacology; venipuncture; giving injections and handling emergency situations.

FIRST SEMESTER

REQUIRED COURSES UNITS
•+Computer Class Any class which satisfies computer proficiency for graduation. For updated listing see general course pattern guide. 1
+*BIO 60 Human Biology 1 4
+AH 60 Medical Terminology 3
†¶MA 270 Introduction to Medical Assisting 3
†MA 280 Health Care Clinical Procedures 3

SECOND SEMESTER
+AH 276 Health Care Law 1
†MA 282 Advanced Health Care Clinical Procedures 3
@†MA 284A or B Medical Assisting Specialized Practicum 2
@†MA 288 Practicum Seminar 1
+MA 290 Medical Insurance Billing 3

TOTAL UNITS 24

COMBINED CERTIFICATE PROGRAM

FIRST SEMESTER
+*BIO 60 Human Biology 1 4
+AH 60 Medical Terminology 3
†¶MA 270 Introduction to Medical Assisting 3
†MA 280 Health Care Clinical Procedures 3
+Administrative Option-See Options 3

SECOND SEMESTER
+AH 276 Health Care Law 1
†MA 282 Advanced Health Care Clinical Procedures 3
@†MA 286 Clinical Practicum 4
@†MA 288 Practicum Seminar 1
+MA 290 Medical Insurance Billing 3
+Administrative Option-See Options 3

TOTAL UNITS 31

ADMINISTRATIVE OPTIONS

CHOOSE ONE OF THE FOLLOWING OPTIONS

OPTION ONE:
+ACCTG 200A Introduction to Accounting 3
**Computer Class Any class which satisfies computer proficiency for graduation. For updated listing see general course pattern guide. 1

OPTION TWO
**CAOTC 47A Access for Office Applications, Beg. 3
**CAOTC 47B Access for Office Applications, Inter. 3

OPTION THREE
+ACCTG 200A Introduction to Accounting 3

### RECOMMENDED COURSES FOR

#### CLINICAL/COMBINED CERTIFICATE
- AH 210 Math for Meds 1
- AH 220 Phlebotomy 1
- LEARN 11 Learning and Academic Strategies 2

### COMPLETION CERTIFICATES

#### Emergency Medical Technician Certificate

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>†EMT 251 Emergency Medical Technician</td>
<td>3</td>
</tr>
<tr>
<td>†EMT 251L Emergency Medical Technician Laboratory</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>TOTAL UNITS</strong></td>
<td><strong>4.5</strong></td>
</tr>
</tbody>
</table>

#### Health Unit Coordinator Certificate

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AH 60 Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>†AH 280 Health Unit Secretary</td>
<td>2</td>
</tr>
<tr>
<td>†AH 280L Health Unit Secretary Laboratory</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL UNITS</strong></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>

#### Medical Insurance Billing Certificate

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AH 60 Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>MA 290 Medical Insurance Billing</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL UNITS</strong></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>

#### Phlebotomy Certificate

(Must be enrolled in nursing and/or health technologies program or licensure as a health care practitioner)

<table>
<thead>
<tr>
<th>REQUIRED COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AH 220 Phlebotomy</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL UNITS</strong></td>
<td><strong>1</strong></td>
</tr>
</tbody>
</table>

+These courses may be taken before admission to the program.

@ C.P.R. Certification is required

### MEDICAL TRANSCRIPTION

#### Career Certificate and/or Associate in Arts

Students prepare for an entry-level medical transcription position emphasizing transcription of a wide variety of medical communications from machine dictation; terminology encountered in various medical specialties; and essential language arts skills of proofreading, editing, punctuation, spelling, and vocabulary. This certificate prepares students for an entry-level position in a variety of office settings as well as self-employment and serves as a foundation for specialization. This Associate degree prepares students for career advancement once a certificate has been earned. For more department information call (562) 938-3033.

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AH 60 Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>AH 206A Beginning Medical Transcription (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>AH 206B Advanced Medical Transcription (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>†*BIO 60 Human Biology</td>
<td>4</td>
</tr>
<tr>
<td>†CAOTC 265 Computer Transcription (F, SP)</td>
<td>2</td>
</tr>
<tr>
<td>CAOTO 216 Proofreading Skills (F, SP)</td>
<td>1</td>
</tr>
<tr>
<td>CAOTO 261 Business English (F, SP, S)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Subtotal Units</strong></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>

Select FOUR (4) units from one of the following groups:

- CAOTC 39A-D Microsoft Word for Office, Levels 1-4 (F, SP, S) 1:1:1:1
- CAOTC 236A-D Word Processing–WordPerfect (Levels 1-4) (F, SP) 1:1:1:1

| Subtotal Units | **4** |

Select ONE of the following courses:

- CAOTT 201 Intermediate Typing/Keyboarding (F, SP) 2
- CAOTT 202 Advanced Typing/Keyboarding (F, SP) 2
- CAOTT 209AB Speed/Accuracy Building for Typists 1

| **Subtotal Units** | **0-2** |

**REQUIRED COMPETENCY:** Typing certificate of at least 60 words per minute for 5 minutes with 5 or fewer errors by the end of the program.

CAOTT 201, 202, and/or 209AB may be waived by earning the typing certificate.

Select THREE (3) units from the following:

- CAOTC 31A-B Microsoft Windows Operating System (Beginning, Advanced) (F, SP, S) 1:1
- CAOTC 34 Intro to Computers & Applications (F, SP) 3
- CAOTC 35 Microsoft Office (F, SP) 3
- #CAOTC 39A-D Microsoft Word for Office Levels 1-4, (F, SP) 1:1:1:1
- #CAOTC 236A-D Word Processing–WordPerfect (Levels 1–4) (F, SP) 1:1:1:1
- CAOTO 222 Job Search Skills (F, SP) 3
- CAOTO 262 Professional Development (F, SP, S) 1

| Subtotal Units | **3** |

| **TOTAL UNITS** | **26-28** |

#### Basic Word Processing Certificate

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL FOUR CAOTC 39A Microsoft Word for Office, Beginning</td>
<td>1</td>
</tr>
<tr>
<td>ALL FOUR CAOTC 39B Microsoft Word for Office, Intermediate</td>
<td>1</td>
</tr>
<tr>
<td>ALL FOUR CAOTC 39C Microsoft Word for Office, Advanced</td>
<td>1</td>
</tr>
<tr>
<td>ALL FOUR CAOTC 39D Microsoft Word for Office, Expert</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>OR ALL FOUR</strong></th>
<th><strong>1</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>CAOTC 236A Word Processing–WordPerfect, Beg</td>
<td>1</td>
</tr>
<tr>
<td>CAOTC 236B Word Processing–WordPerfect, Intern</td>
<td>1</td>
</tr>
<tr>
<td>CAOTC 236C Word Processing–WordPerfect, Adv</td>
<td>1</td>
</tr>
<tr>
<td>CAOTC 236D Word Processing–WordPerfect, Expert</td>
<td>1</td>
</tr>
<tr>
<td>CAOTC 265 Computer Transcription</td>
<td>2</td>
</tr>
<tr>
<td>CAOTO 216 Proofreading Skills</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL UNITS</strong></td>
<td><strong>7</strong></td>
</tr>
</tbody>
</table>

**REQUIRED COMPETENCY:** Typing certificate of at least 35 words per minute for 5 minutes with 5 or fewer errors completed within the previous 12 months.

#### COREL WordPerfect Certificate

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAOTC 236A Word Processing–WordPerfect, Beg</td>
<td>1</td>
</tr>
<tr>
<td>CAOTC 236B Word Processing–WordPerfect, Intern</td>
<td>1</td>
</tr>
<tr>
<td>CAOTC 236C Word Processing–WordPerfect, Adv</td>
<td>1</td>
</tr>
<tr>
<td>CAOTC 236D Word Processing–WordPerfect, Expert</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL UNITS</strong></td>
<td><strong>4</strong></td>
</tr>
</tbody>
</table>

**REQUIRED COMPETENCY:** Typing certificate of at least 25 words per minute for 5 minutes with 5 or fewer errors completed within the previous 12 months.

### Microsoft Word Certificate

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAOTC 39A Microsoft Word for Office, Beginning</td>
<td>1</td>
</tr>
</tbody>
</table>

Consult guides available in Counseling Centers for specific general education and required grades.
CAOTC 39B Microsoft Word for Office, Intermediate 1
CAOTC 39C Microsoft Word for Office, Advanced 1
CAOTC 39D Microsoft Word for Office, Expert 1

**TOTAL UNITS:** 4

**REQUIRED COMPETENCY:** Typing certificate of at least 35 words per minute for 5 minutes with 5 or fewer errors completed within the previous 12 months. Instructor verification of 80 percent or better accuracy on Word Core and Expert practice exams or Microsoft Office Specialist certification.

### MECHANDISING

**Associate in Arts/Career Certificate**

Students learn entry and mid-level skills in planning and implementing the promotion function of a business. Students enhance their skills in merchandising. With additional courses identified on a transfer curriculum guide for Business Administration students can prepare for a baccalaureate degree in this field. This certificate and degree program will prepare students for a variety of entry level sales and fashion merchandising positions. For more department information call (562) 938-4332 or 938-4661.

**REQUIRED COURSES**

- CBIS 6 Introduction to Information Systems 4
- FD 10 Textile Fibers and Fabrics 3
- FD 20 Introduction to Fashion Merchandising 3
- †FD 22A Merchandising for Profit I 1.5
- †FD 22B Merchandising for Profit II 1.5
- †FD 23 Fashion/Merchandising Buying 3
- MGMT 80 Small Business Entrepreneurship (F, SP, S) 3
- MKTG 40 Small Business Entrepreneurship (F, SP) 3
- MKTG 41 Advertising (F, SP) 3
- MKTG 47 Essentials of Marketing (F, SP) 3
- †+MKTG 273AD Work Experience (One semester required) (F, SP) 3

**Subtotal Units** 32

Select **ONE** of the following courses:

¶ACCTG 200A Introduction to Accounting 3
ACCTG 1A Principles of Accounting 4

**TOTAL UNITS:** 35-36

**RECOMMENDED but not required courses:**

- ENGL or SP English or Speech 3 - 6
- ID 208AB Elementary Display & Visual Promotion 3:3
- MKTG 42 Retailing Principles and Practices 3
- PSYCH Psychology 3

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**MUSIC**

**Associate in Arts**

This field of concentration is designed as a transfer program for music students who plan on completing a B.M. or B.A. of Music at a four-year institution. This Associate Degree will prepare students for transfer to a four-year college or university, develop their skills to perform in the professional world or continue with lifelong learning pursuits. Career opportunities related to this course of study include but are not limited to: Music Educator (Elementary-Classroom Music, Instrumental/Choral Performance; Middle School/ Junior High-General Music, Instrumental/Choral Performance; High School-General Music, Piano/Guitar, Music Theory/History, Instrumental/Choral Performance; College/ University-Theory, History, Performance, Musicology, Composition, Research), Music Performer, Composer/Arranger, Orchestra Management, Instrument Making/Repair, Researcher, Film/Television Consultant, Music Editor, Music Critic/Writer. For more departmental information call (562) 938-4309.

**First Semester**

**REQUIRED COURSES**

¶MUSIC 1 Music Theory 1 3
MUSIC 5AD Musicianship 1 2
MUSIC 7AB Elementary Voice (1st semester) 2
MUSIC 51A-B Beginning Piano (1st semester) 2
MUSIC92AD OR 17AD Applied Music (1st semester) 1
**Performance Organization** 1

**Semester Total** 11

**Second Semester**

†MUSIC 2 Music Theory 2 3
†MUSIC 9AD Musicianship 2 2
MUSIC 51A-B Beginning Piano (2nd semester) 2
MUSIC92AD OR 17AD Applied Music (2nd semester) 1
**Performance Organization** 1

**Semester Total** 9

**Third Semester**

MUSIC 40A Music Appreciation (SP) 3
†MUSIC92AD OR 17AD Applied Music(3rd semester) 1
**Performance Organization** 1

**Semester Total** 10

**TOTAL UNITS:** 35

**COMPLETION CERTIFICATES**

**Applied Music Instructor Certificate**

**REQUIRED COURSES**

MUSIC 1 Music Theory 1 3
MUSIC 5AD Musicianship 1 2
MUSIC 7AB Elementary Voice(1st semester) 2
MUSIC 91AD Special Studies 2
MUSIC 92AD Applied Vocal and Instrumental Music 1:1

Select **ONE** of the following classes:

MUSIC 40 Appreciation of Music 3
MUSIC 30A Music History/Antiquity to 1800 (SP) 3
MUSIC 30B Music History and Literature 3

**TOTAL UNITS:** 12

---

**COMMERCIAL MUSIC**

**Composer/Arranger**

**Associate in Arts/Career Certificate**

Students prepare to compete in the world of commercial music production in the specific area of arranging and work in the high-tech studio environment. This certificate will prepare students for an entry-level position in a variety of music performance, composition...
and recording opportunities, i.e., production arranger, live performance composer/arranger, film/video music scoring, jingle writer, songwriter, string/wind arranger. This Associate Degree will prepare students for career advancement once a certificate has been earned. Appropriate course selection will also facilitate transfer to a four-year college or university music composition/technology program. For more departmental information call (562) 938-4309.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 71AD Introduction to Music Technology</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 75A–B The Music Business</td>
<td>1:1</td>
</tr>
<tr>
<td>MUSIC 86AD Record Production (Fundamentals)</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 93AD Record Production (Using MIDI)</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 94 Beginning recording Techniques</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 98AD Synth/Drum Mach/Sequencer Program</td>
<td>2</td>
</tr>
</tbody>
</table>

Subtotal Units 12

REQUIRED COURSES FOR SPECIALITY

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 50AD Performance Showcase/Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC60AD ProTools (Digital Audio Recording/Edit)</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 72AD Com Improvisation/Arranging/Scoring</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 81AD Commercial Keyboard</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 83AD Film/Video Music/Scoring</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 84AD Commercial Songwriting</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 90AD Commercial Theory</td>
<td>2</td>
</tr>
</tbody>
</table>

Subtotal Units 20

ELECTIVES (Select SIX (6) units from the following):

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 59AD Digital Recording &amp; Sampling Tech.</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 62AD/63AD Guitar/Bass (Beg./Int.)</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 72AD Com Improvisation/Arranging/Scoring</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 80AD “City” Jazz Big Band</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 87AD Vocal Jazz Trios, Quintets, Octets</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 94 Beginning Recording Techniques</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 96AD Advanced Recording Techniques</td>
<td>2</td>
</tr>
</tbody>
</table>

Subtotal Units 6

TOTAL UNITS 38

COMMERCIAL MUSIC

Professional Instrumentalist
Associate in Arts/Career Certificate

Students prepare for live instrumental and studio performance and interactions with state-of-the-art equipment, i.e., work as a commercial professional musician in all live and recording venues (small groups, big bands studio, casuals, TV and movies). This certificate will prepare students for an entry-level position in a variety of music performance and recording opportunities. This Associate Degree will prepare students for career advancement once a certificate has been earned. Appropriate course selection will also facilitate transfer to a four-year college or university music performance program. For more departmental information call (562) 938-4309.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 71AD Introduction to Music Technology</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 75A–B The Music Business</td>
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</tr>
<tr>
<td>MUSIC 86AD Record Production (Fundamentals)</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 93AD Record Production (Using MIDI)</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 94 Beginning recording Techniques</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 98AD Synth/Drum Mach/Sequencer Program</td>
<td>2</td>
</tr>
</tbody>
</table>

Subtotal Units 12

REQUIRED COURSES FOR SPECIALITY

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 50AD Performance Showcase/Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 72AD Com Improvisation/Arranging/Scoring</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 81AD Commercial Keyboard</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 83AD Film/Video Music Scoring</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 84AD Commercial Songwriting</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 90AD Commercial Theory</td>
<td>2</td>
</tr>
</tbody>
</table>

Subtotal Units 20

ELECTIVES (Select SIX (6) units from the following):

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 59AD Digital Recording &amp; Sampling Tech.</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 62AD/63AD Guitar/Bass (Beg./Int.)</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 80AD “City” Jazz Big Band</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 87AD Vocal Jazz Trios, Quintets, Octets</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 94 Beginning Recording Techniques</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 96AD Advanced Recording Techniques</td>
<td>2</td>
</tr>
</tbody>
</table>

Subtotal Units 6

TOTAL UNITS 38

Consult guides available in Counseling Centers for specific general education and required grades.
COMMERCIAL MUSIC
Professional Vocalist
Associate in Arts/Career Certificate

Students prepare for vocal performance in recording and live performance situations (clubs, churches, theaters, film and television). This certificate will prepare students for an entry-level position in a variety of commercial music, professional vocalist opportunities. This Associate Degree will prepare students for career advancement and will also facilitate transfer to a four-year college or university music performance program. For more departmental information call (562) 938-4309.

REQUIRED CORE COURSES
MUSIC 71AD Introduction to Music Technology 2
MUSIC 75AB The Music Business 1:1
MUSIC 86AD Record Production (Fundamentals) 2
MUSIC 93AD Record Production (Using MIDI) 2
MUSIC 94 Beginning Recording Techniques 2
MUSIC 98AD Synth/Drum Mach/Sequencer Program 2
Subtotal Units 12

REQUIRED COURSES FOR SPECIALITY
MUSIC 7AB Elementary Voice 2
MUSIC 74AD Commercial Solo Voice 2
#MUSIC 78AD Studio Singers
OR
MUSIC 44AD The Evening Jazz Choir 1:1
MUSIC 81AD Commercial Keyboard 2
MUSIC 84AD Commercial Songwriting 2
#MUSIC 90AD Commercial Theory 2
MUSIC 91AD Special Studies 2
Subtotal Units 20

ELECTIVES-Select SIX (6) units from the following:
MUSIC 7AB Elementary Voice 2
#MUSIC 42AD Professional Vocal/Solo Group 1
MUSIC 59AD Digital Recording & Sampling Tech 2
#MUSIC 71AD Introduction to Music Technology 2
#MUSIC 78AD Studio Singers
OR
MUSIC 44AD The Evening Jazz Choir 1
#MUSIC 81AD Commercial Keyboard 2
#MUSIC 84AD Commercial Songwriting 2
#MUSIC 86AD Record Production (Fundamentals) 2
MUSIC 87AD Vocal Jazz Trios, Quintets, Octettes 1
MUSIC 88AD Small Studio Lab 1
#MUSIC 90AD Commercial Theory 2
#MUSIC 93AD Record Production (Using MIDI) 2
#MUSIC 95 Intermediate Recording Techniques 2
#MUSIC 96AD Advanced Recording Techniques 2
MUSIC 98AD Synth/Drum Mach/Sequencer Program 2
Subtotal Units 6
TOTAL UNITS 38

COMMERCIAL MUSIC
Record Producer
Associate in Arts/Career Certificate

Students prepare for pre-production and post-production techniques in the studio environment using state-of-the-art equipment. This certificate will prepare students for entry-level positions as a record producer in fields such as: recording studio, mastering, Foley, music video, television, film, theater and multi-media. This Associate Degree will prepare students for career advancement once a certificate has been earned. Appropriate course selection will also facilitate transfer to a four-year college or university music performance program. For more departmental information call (562) 938-4309.

REQUIRED CORE COURSES
MUSIC 71AD Introduction to Music Technology 2
MUSIC 75AB The Music Business 1:1
#MUSIC 86AD Record Production (Fundamentals) 2
#MUSIC 93AD Record Production (Using MIDI) 2
MUSIC 94 Beginning Recording Techniques 2
MUSIC 98AD Synth/Drum Mach/Sequencer Program 2
Subtotal Units 12

REQUIRED COURSES FOR SPECIALITY
MUSIC 61AD Music Mastering 1
#MUSIC 65AD Advanced-Pro Recording Techniques 2
#MUSIC 66AD Studio Mixdown Techniques 2
MUSIC 68 Basic Audio Theory 2
MUSIC 69AD Analysis of Music Video 2
#MUSIC 95 Intermediate Recording Techniques 2
#MUSIC 96AD Advanced Recording Techniques 2
MUSIC 271AD Work Experience – Music 2
Subtotal Units 19

ELECTIVES - Select FIVE (5) units from the following:
MUSIC 60AD ProTools (Digital Audio Recording/Edit) 2
MUSIC 61AD Music Mastering 1
#MUSIC 65AD Advanced-Pro Recording Tech 2
#MUSIC 66AD Studio Mixdown Techniques 2
MUSIC 69AD Analysis of Music Video 2
#MUSIC 82AD Sound Reinforcement 2
MUSIC 83AD Film/Video Music/Scoring 1
MUSIC 84AD Commercial Songwriting 2
#MUSIC 86AD Record Production (Fundamentals) 2
MUSIC 88AD Small Studio Lab 1
#MUSIC 93AD Record Production (Using MIDI) 2
#MUSIC 96AD Advanced Recording Techniques 2
MUSIC 97AD Tools of the Trade 2
MUSIC 98AD Synth/Drum Mach/Sequencer Program 2
MUSIC 272AD Work Experience 3
MUSIC 273AD Work Experience 4
Subtotal Units 5
TOTAL UNITS 36

COMMERCIAL MUSIC
Recording Engineer
Associate in Arts/Career Certificate

Students prepare for music production in the studio environment using state-of-the-art equipment. This certificate will prepare students for an entry-level position as an audio engineer in fields such as: recording...
COMMERCIAL MUSIC

Songwriter
Associate in Arts/Career Certificate

Students prepare to compete in the world of commercial music production specifically for areas of songwriting, composition and work in the high-tech studio environment. This certificate will prepare students for an entry-level position in a variety of music performance, composition and recording opportunities, i.e., staff songwriter, jingle writer, movie music, vocal arranger, producer, STAR. This Associate Degree will prepare students for career advancement once a certificate has been earned. Appropriate course selection will also facilitate transfer to a four-year college or university music composition/technology program. For more departmental information call (562) 938-4309.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 71AD</td>
<td>Introduction to Music Technology</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 75A-B</td>
<td>The Music Business</td>
<td>1:1</td>
</tr>
<tr>
<td>MUSIC 86AD</td>
<td>Advanced Recording (Fundamentals)</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 93AD</td>
<td>Advanced Recording (Using MIDI)</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 94</td>
<td>Beginning Recording Techniques</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 98AD</td>
<td>Synth/Drum Mach/Sequencer Program</td>
<td>2</td>
</tr>
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</table>

Subtotal Units 12

REQUIRED COURSES FOR SPECIALITY

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 98AD</td>
<td>Synth/Drum Mach/Sequencer Program</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 94</td>
<td>Beginning Recording Techniques</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 93AD</td>
<td>Advanced Recording (Using MIDI)</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 75A-B</td>
<td>The Music Business</td>
<td>1:1</td>
</tr>
<tr>
<td>MUSIC 86AD</td>
<td>Advanced Recording (Fundamentals)</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 88AD</td>
<td>Small Studio Lab</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 89AD</td>
<td>Advanced Recording Techniques</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 75A-B</td>
<td>The Music Business</td>
<td>1:1</td>
</tr>
</tbody>
</table>

Subtotal Units 12

TOTAL UNITS 38

ELECTIVES - Select SIX (6) units from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 90AD</td>
<td>Commercial Recording</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 91AD</td>
<td>Commercial Recording</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 92AD</td>
<td>Commercial Recording</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 93AD</td>
<td>Advanced Recording (Using MIDI)</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 94</td>
<td>Beginning Recording Techniques</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 95</td>
<td>Intermediate Recording Techniques</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 96AD</td>
<td>Advanced Recording Techniques</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 98AD</td>
<td>Synth/Drum Mach/Sequencer Program</td>
<td>2</td>
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</tbody>
</table>

Subtotal Units 6

TOTAL UNITS 40

NUMERICAL CONTROL
TECHNICIAN

MANUFACTURING TECHNOLOGY

Career Certificate and/or Associate in Science

See Department Head for current information (562) 938-3078.

NURSING: ASSOCIATE DEGREE
(RN) PROGRAM

Career Certificate and/or Associate in Art or Science

The program is designed to be completed in two years (after completion of pre-requisites) and qualifies the student to take the NCLEX-RN licensing examination given by the State of California Board of Registered Nursing. The program satisfies the requirements for an Associate degree and/or a Career Certificate. The graduate is qualified for immediate employment in acute care hospitals and many other health care facilities. This Associate Degree and Certificate prepares students for an entry-level position in a variety of health care settings following successful completion of the NCLEX-RN. The ADN also serves as a foundation for specialization. Graduates of the Associate Degree Nursing Program are consult guides available in Counseling Centers for specific general education and required grades.
also eligible to transfer into the upper division nursing courses in ADN to bachelor’s degree nursing programs and ADN to masters degree nursing programs. Effective Fall 2004, new applicants to the A.D Nursing Programs (RN and LVN) will be held to new program requirements. New requisites: ANAT 1, PHYS 1, BIO 2 (Micro), and ENGL 1/105/ESL 34. Students already on the waiting list, may continue to follow the requirements as listed. Please call 562-938-4166 for details.

REQUIRED COURSES

PREREQUISITES (Required Prior to Enrollment in Program)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>*BIO 60 Human Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 60L Human Biology Lab</td>
<td>1</td>
</tr>
<tr>
<td>CDECE 47 Human Development</td>
<td>3</td>
</tr>
<tr>
<td>†ENGL 105 Fundamentals of Writing</td>
<td>3-4</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>ENGL 1 Reading and Composition</td>
<td>3-4</td>
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<tr>
<td>Subtotal Units</td>
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FIRST SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>†ADN 11A Introduction to Nursing (F, SP)</td>
<td>2.5</td>
</tr>
<tr>
<td>†ADN 11AL Introduction to Nursing Lab (F, SP)</td>
<td>1.5</td>
</tr>
<tr>
<td>†ADN 11B Health Deviations 1 (F, SP)</td>
<td>2.5</td>
</tr>
<tr>
<td>†ADN 11BL Health Deviations 1 Laboratory (F, SP)</td>
<td>1.5</td>
</tr>
<tr>
<td>ADN 610 Nursing Skills Laboratory</td>
<td>0</td>
</tr>
<tr>
<td>†BIO 62 Human Biology 2</td>
<td>3</td>
</tr>
<tr>
<td>*PSYCH 1 Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>SOCIO 1 Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>Subtotal Units</td>
<td>14</td>
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SECOND SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>†ADN 12A Health Deviations 2 (F, SP)</td>
<td>2.5</td>
</tr>
<tr>
<td>†ADN 12AL Health Deviations 2 Laboratory (F, SP)</td>
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</tr>
<tr>
<td>†ADN 12B Health Deviations 3 (F, SP)</td>
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<tr>
<td>†ADN 12BL Health Deviations 3 Laboratory (F, SP)</td>
<td>1.5</td>
</tr>
<tr>
<td>ADN 610 Nursing Skills Laboratory</td>
<td>0</td>
</tr>
<tr>
<td>†BIO 61 Human Biology 3</td>
<td>3</td>
</tr>
<tr>
<td>*PSYCH 1 Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>SOCIO 1 Introduction to Sociology (Whichever not already taken above)</td>
<td>3</td>
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<tr>
<td>Subtotal Units</td>
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THIRD SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>†ADN 21A Women’s Health (F, SP)</td>
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<tr>
<td>†ADN 21AL Women’s Health Laboratory (F, SP)</td>
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<tr>
<td>†ADN 21B Mental Health (F, SP)</td>
<td>2.5</td>
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<tr>
<td>†ADN 21BL Mental Health Laboratory (F, SP)</td>
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</tr>
<tr>
<td>†ADN 31A Trends in Nursing “A” (F, SP)</td>
<td>1</td>
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<tr>
<td>ADN 610 Nursing Skills Laboratory</td>
<td>0</td>
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<tr>
<td>*SP 10, 20 OR 30 General Ed. Requirement</td>
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<tr>
<td>Subtotal Units</td>
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FOURTH SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>†ADN 22A Advanced Nursing 1 (F, SP)</td>
<td>2.5</td>
</tr>
<tr>
<td>†ADN 22AL Advanced Nursing 1 Laboratory (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>†ADN 22B Advanced Nursing 2 (F, SP)</td>
<td>2.5</td>
</tr>
<tr>
<td>†ADN 22BL Advanced Nursing 2 Laboratory (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>†ADN 31B Trends in Nursing “B” (F, SP)</td>
<td>1</td>
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<tr>
<td>ADN 610 Nursing Skills Laboratory</td>
<td>0</td>
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<tr>
<td>*A course from the Humanities Gen. Ed. Requirement</td>
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<tr>
<td>Subtotal Units</td>
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<td>TOTAL UNITS</td>
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RECOMMENDED but not required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>ADN 200AD, 201AD Nursing Skills Adjunct Lab</td>
<td>0.5</td>
</tr>
<tr>
<td>†ADN 212AD Clinical Practicum I</td>
<td>2</td>
</tr>
<tr>
<td>†ADN 221AD Clinical Practicum II</td>
<td>2</td>
</tr>
<tr>
<td>†ADN 222AD Clinical Practicum III</td>
<td>2</td>
</tr>
<tr>
<td>ADN 286 Nursing Applications of Pharmacology</td>
<td>3</td>
</tr>
<tr>
<td>ADN 810 Preparation for Nursing</td>
<td>0.5</td>
</tr>
<tr>
<td>AH 60 Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>†AH 221AD Health Promotion Practicum</td>
<td>3</td>
</tr>
<tr>
<td>†AH 222Intravenous Therapy</td>
<td>1</td>
</tr>
<tr>
<td>†AH 225 Basic Arrhythmia Recognition</td>
<td>0.5</td>
</tr>
<tr>
<td>PEPP 6AD Introduction to Principles of Adapted PE</td>
<td>2</td>
</tr>
</tbody>
</table>

NURSING: LVN to RN

Career Ladder Program

Career Certificate and/or Associate in Arts or Science

Long Beach City College is fully accredited by the Western Association of Schools and Colleges. The nursing program is accredited by the National League for Nursing Accrediting Commission, 61 Broadway, 33rd Floor, New York, NY, 10006, (212) 363-5555 and the State of California Board of Registered Nursing. The Career Ladder Program (Licensed Vocational Nurse to Registered Nurse Program) is designed to be completed in two and a half semesters. Two advanced placement programs are offered: Associate Degree program and a Certificate program (30-unit option). This Associate Degree and Certificate prepare students for an entry-level position in a variety of health care settings following successful completion of the NCLEX-RN. The ADN also serves as a foundation for specialization. Persons who complete either program are qualified to take the registered nurse national licensing exam. However, persons who complete only the certificate program are not graduates of an accredited ADN program and may not qualify for license by endorsement in other states. For additional information call (562) 938-4166.

RESTRICTIONS ON LICENSURE:

Persons with substance abuse problems or with conviction of crimes substantially related to the practice of nursing may not be granted a license by the Board of Registered Nursing. Fingerprint are part of the application for licensure. For further information see BRN Policy on Denial of Licensure.

ASSOCIATE DEGREE OF NURSING PROGRAM

LVN to RN Career Ladder Degree Program

Graduates of the LVN to RN Career Ladder Degree Program are eligible to transfer into the upper division nursing courses in ADN to bachelor’s degree nursing programs and ADN to master’s degree nursing programs. A suggested fulltime sample sequence of courses for the program is listed below. All ADN courses are sequential.

PREREQUISITES COURSES FOR THE PROGRAM

1. Complete the following courses with a "C" or better:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>*BIO 60 Human Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 60L Human Biology 1 Lab</td>
<td>1</td>
</tr>
<tr>
<td>†BIO 61 Human Biology 2</td>
<td>3</td>
</tr>
<tr>
<td>†BIO 62 Human Biology 3</td>
<td>3</td>
</tr>
<tr>
<td>CDECE 47 Human Development</td>
<td>3</td>
</tr>
<tr>
<td>*PSYCH 1 Introduction to Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>
Consult guides available in Counseling Centers for specific general education and required grades.
NURSING: VOCATIONAL
Career or Completion Certificate and/or Associate in Arts or Science

Completion of the Vocational Nursing Program qualifies the student to take the national licensing examination for vocational nurses (NCLEX-PN). The Licensed Vocational Nurse is prepared for employment in ambulatory care facilities, skilled nursing facilities, physician's offices, acute care hospitals, convalescent care facilities and the home. The Licensed Vocational Nurse is qualified to apply to the Long Beach City College Associate Degree Nursing Program for the Career Ladder LVN-RN Program.

Complete the following PREREQUISITE courses with a minimum grade of “C” or better:

**UNITS**
* BIO 60 Human Biology 1 4
* VN 298A Transition to Vocational Nursing 3
* VOCN 285 Transition to Vocational Nursing Lab 1
* VOCN 286 Nursing Applications of Pharmacology 3

**Nursing Assistant Program**

5.0

Complete the following required courses with a minimum grade of “C” or better:

**UNITS**
† VOCN 288C Common Mental Health Deviations 1 3
† VN 298B ST Common Health Deviations 1 3.5
† VOCN 287BL Common Health Deviations 1 Lab 3
† VN 298C ST Maternal/Infant Nursing 1.5
† VOCN 289AL Maternal/Infant Nursing Lab 2
† VN 298E ST Nursing Care of Children 1.5
† VOCN 290A Roles and Responsibilities 1 1
† VN 298G ST Nursing Care of the Chronically Ill 2.5
† VOCN 289CL Leadership in Long Term Care 2
† VOCN 290B Roles and Responsibilities 2 1

**TOTAL COLLEGE UNITS** 53

RECOMMENDED but not required:

VOCN 206AD Nursing Skills Practice Lab 0.5
VOCN 207AD Nursing Skills Practice Lab 0.5

**COMPLETION CERTIFICATES**

Nursing Assistant Certificate

**UNITS**
† NA 210A Nursing Assistant (F, SP, S) 6
NA 810A Orientation for Nurse Assistant 1.5

**TOTAL UNITS** 7.5

Home Health Aide Certificate

**UNITS**
† NA 210B Home Health Aide 2

**TOTAL UNITS** 2

OFFICE ASSISTANT
Career or Completion Certificate and/or Associate in Arts

Students prepare for an entry-level office assistant position by focusing on basic office support functions, such as answering phones, greeting visitors, processing mail, and using computers to produce accurate documents. This certificate prepares students for an entry-level position in a variety of office settings and serves as a foundation for specialization. This Associate degree prepares students for career advancement once a certificate has been earned. For more departmental information call (562) 938-3033.

**REQUIRED COURSES**

**UNITS**
• CAOTC 31A Microsoft Windows Operating System, Beginning (F, SP, S) 1
• CAOTC 35 Microsoft Office (F, SP) 3
• CAOTC 41E Excel for Windows-Beginning (F, SP, S) 1
• CAOTC 45 Internet for Office and Personal Use 2
• CAOTO 15 Business Communications (F, SP) 3
• CAOTO 30 Business Calculating Machines (F, SP, S) 2
• CAOTO 214A B Filing, Levels 1, 2 (F, SP, S) 1:1
• CAOTO 216 Proofreading Skills (F, SP, S) 1
• CAOTO 222 Job Search Skills (F, SP) 3
• CAOTO 260 Business Telephone Procedures (F, SP, S) 1
• CAOTO 261 Business English (F, SP, S) 3
• CAOTO 262 Professional Development (F, SP, S) 1
• CAOTO 263 Customer Service (F, SP, S) 1
• CAOTT 201 Intermediate Typing/Keyboarding (F, SP, S) 2

**Subtotal Units** 26

Select a minimum of TWO (2) units from the following:

• #CAOTC 39A, B, C, D Microsoft Word for Office, Levels 1, 2, 3, 4 (F, SP, S) 1:1:1:1
• CAOTO 215A Microsoft Outlook (F, SP) 2

**Subtotal Units** 2

**ELECTIVES:**

Select any THREE (3) units from the following courses

• CAOTC 31B Microsoft Windows Operating System, Advanced (F, SP, S) 1
• CAOTC 34 Intro to Computers & Applications (F, SP) 3
• #CAOTC 39A, B, C, D Microsoft Word for Office, Levels 1, 2, 3, 4 (F, SP, S) 1:1:1:1
• CAOTO 42A, B Desktop Publishing - Small Business, Levels 1, 2 (F, SP) 1:1
• CAOTO 47A, B Access for Office Applications, Levels 1, 2 (F, SP) 3
• CAOTO 215B Electronic Records Management(F, SP) 2
• CAOTO 215C Lotus Notes (F, SP) 3
• CAOTC 220 Hand-Held Electronic Organizers (F, SP) 1
• CAOTC 236A, B, C, D Word Processing - WordPerfect, Levels 1, 2, 3, 4 (F, SP) 1:1:1:1
• CAOTO 240AB Microsoft Office Exam Prep-Word (F, SP) 0.5:0.5
• CAOTC 246 Financial Applications (F, SP) 3
• CAOTC 250A, B, C Data Entry - Levels 1, 2, 3, 4 (F, SP) 2:3:3
• CAOTC 265 Computer Transcription (F, SP) 2
• CAOTO 264 Call Centers (F, SP, S) 1
• CAOTO 265 Customer Conflict Management (F, SP, S) 1
• CAOTO 272AD Work Experience Issues-Comp Ofc Tech (F, SP) 3
• CAOTT 209AB Speed/Accuracy Bldg for Typists 1:1

**Subtotal Units** 3

**TOTAL UNITS** 30-31

#Cannot be used again if counted above under required courses.
Curriculum Guides

COMPLETION CERTIFICATES

Basic Computing and Internet Literacy Certificate

REQUIRED COURSES | UNITS
--- | ---
CAOTC 34 Introduction to Computers & Applications | 3
CAOTC 35 Microsoft Office | 3
CAOTC 45 Internet for Office and Personal Use | 2

OR

CBIS 2 Advanced MS Office - Help Desk Emphasis | 3
CBIS 6 Introduction to Information Systems | 4
CBIS 206A Navigating the Internet | 1

TOTAL UNITS | 8

ADDITIONAL REQUIREMENTS: 2.5 minimum GPA in courses for this certificate. Completion of certificate courses within three semesters.

Basic Microsoft Office Certificate

REQUIRED COURSES | UNITS
--- | ---
CAOTC 35 Microsoft Office | 3

TOTAL UNITS | 3

REQUIRED COMPETENCY: Instructor verification of 80 percent or better accuracy on Word, Excel, Access, and PowerPoint Core practice exams or Microsoft Office Specialist certification.

Basic Office Skills Certificate

REQUIRED COURSES | UNITS
--- | ---
CAOTC 39A Microsoft Word for Office, Beginning | 1
CAOTC 45 Internet for Office and Personal Use | 2
CAOTO 214A Filing | 1
CAOTO 260 Business Telephone Procedures | 1

BOTH

CAOTT 200A Beginning Typing/Keyboarding | 1
CAOTT 200B Beginning Typing/Keyboarding B | 1

OR

CAOTT 200 Beginning Typing/Keyboarding | 3

TOTAL UNITS | 7-8

REQUIRED COMPETENCY: Typing certificate of at least 25 words per minute for 5 minutes with 5 or fewer errors completed within the previous 12 months.

Basic Office Computer Skills Certificate

REQUIRED COURSES | UNITS
--- | ---
CAOTC 31A Microsoft Windows Operating System | 1
CAOTC 34 Introduction to Computers & Applications | 3
CAOTC 45 Internet for Office and Personal Use | 2

ONE OF THE FOLLOWING:

CAOTT 200 Beginning Typing/Keyboarding | 3
CAOTT 200A Beginning Typing/Keyboarding | 1
CAOTT 233 Computer Keyboarding | 1

TOTAL UNITS | 7-9

REQUIRED COMPETENCY: Typing certificate of at least 25 words per minute for 5 minutes with 5 or fewer errors completed within the previous 12 months.

Basic Word Processing Certificate

REQUIRED COURSES | UNITS
--- | ---
ALL FOUR
CAOTC 39A Microsoft Word for Office, Beginning | 1
CAOTC 39B Microsoft Word for Office, Intermediate | 1
CAOTC 39C Microsoft Word for Office, Advanced | 1
CAOTC 39D Microsoft Word for Office, Expert | 1

OR ALL FOUR
CAOTC 236A Word Processing-WordPerfect, Beg | 1
CAOTC 236B Word Processing-WordPerfect, Interm | 1
CAOTC 236C Word Processing-WordPerfect, Adv | 1
CAOTC 236D Word Processing-WordPerfect, Expert | 1
CAOTC 265 Computer Transcription | 2
CAOTO 216 Proofreading Skills | 1

TOTAL UNITS | 7

REQUIRED COMPETENCY: Typing certificate of at least 35 words per minute for 5 minutes with 5 or fewer errors completed within the previous 12 months.

COREL WordPerfect Certificate

REQUIRED COURSES | UNITS
--- | ---
CAOTC 236A Word Processing-WordPerfect, Beg | 1
CAOTC 236B Word Processing-WordPerfect, Interm | 1
CAOTO 236C Word Processing-WordPerfect, Adv | 1
CAOTC 236D Word Processing, WordPerfect, Expert | 1

TOTAL UNITS | 4

REQUIRED COMPETENCY: Typing certificate of at least 25 words per minute for 5 minutes with 5 or fewer errors completed within the previous 12 months.

Microsoft Excel Certificate

REQUIRED COURSES | UNITS
--- | ---
CAOTC 41E Excel for Windows-Beginning | 1
CAOTC 41F Excel for Windows-Intermediate | 1
CAOTC 41J Excel for Windows-Advanced | 1

TOTAL UNITS | 3

REQUIRED COMPETENCY: Instructor verification of 80 percent or better accuracy on Excel Core and Expert practice exams or Microsoft Office Specialist certification.

Microsoft Word Certificate

REQUIRED COURSES | UNITS
--- | ---
CAOTC 39A Microsoft Word for the Office, Beginning | 1
CAOTC 39B Microsoft Word for the Office, Intermediate | 1
CAOTO 39C Microsoft Word for the Office, Advanced | 1
CAOTO 39D Microsoft Word for the Office, Expert | 1

TOTAL UNITS | 4

REQUIRED COMPETENCY: Typing certificate of at least 35 words per minute for 5 minutes with 5 or fewer errors completed within the previous 12 months. Instructor verification of 80 percent or better accuracy on Word Core and Expert practice exams or Microsoft Office Specialist certification.

PHOTOGRAPHY

COMMERCIAL

Career Certificate and/or Associate in Science

Students learn entry-level skills necessary to embark upon a career in the photography industry. It includes emphasis on practical applications leading to career advancement. This certificate will prepare students for an entry-level position in the field of commercial photography. This Associate Degree will prepare students for career advancement once a certificate has been earned. Appropriate course selection will also facilitate transfer to a four-year college or university. For more departmental information call (562) 938-4319.

Consult guides available in Counseling Centers for specific general education and required grades.
### REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 31 Fundamentals of Art/Composition &amp; Color (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 31AB Basic Photography-Black &amp; White (1st Semester) (F, SP, S)</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 32AD Basic Photography–Color (1st Semester) (F, SP, S)</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 33AD Photography Studio Lighting (1st Semester) (F, SP, S)</td>
<td>4</td>
</tr>
<tr>
<td>PHOT 34AD Advanced Photography (1st Semester) (F, SP, S)</td>
<td>4</td>
</tr>
<tr>
<td>PHOT 35AD Photojournalism (1st Semester) (SP)</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 37AD Portrait Photography (1st Semester) (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 38 Marketing Professional Photo Skills (INF)</td>
<td>2</td>
</tr>
<tr>
<td>JOURN 80AD Working on the Newspaper (2 semesters) (F, SP, S)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal Units** 31

Select **THREE (3)** units from the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOT 71AD Work Experience-Photography (SP)</td>
<td>2</td>
</tr>
<tr>
<td>PHOT 72AD Work Experience-Photography (SP)</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 73AD Work Experience-Photography (SP)</td>
<td>4</td>
</tr>
</tbody>
</table>

**Subtotal Units** 3

Select **SIX (6)** units from the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOURN 6AD Making and Editing the Magazine (SP)</td>
<td>3</td>
</tr>
<tr>
<td>JOURN 71AD, 72AD, 73AD Work Experience</td>
<td>2,3,4</td>
</tr>
<tr>
<td>PHOT 71AD, 72AD, 73AD Work Experience</td>
<td>2,3,4</td>
</tr>
<tr>
<td>PHOT 35AD Photojournalism</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal Units** 9

**TOTAL UNITS** 40

---

### PHOTOJOURNALISM Career Certificate

Students learn the entry-level skills necessary to embark upon a career in the news and documentary photography field. It includes emphasis in practical applications leading to career advancement.

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>†ENGL 1 or ENGL 1H Reading &amp; Composition</td>
<td>3</td>
</tr>
<tr>
<td>†ENGL 105 Fundamentals of Writing</td>
<td>4</td>
</tr>
<tr>
<td>†PHOT 31AB Basic Photo-Black &amp; White</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 32A Basic Photo-Color</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 35AD Photojournalism (1 semester)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal Units** 18-19

Select **NINE (9)** units from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOURN 6AD Making and Editing the Magazine (SP)</td>
<td>3</td>
</tr>
<tr>
<td>JOURN 71AD, 72AD, 73AD Work Experience</td>
<td>2,3,4</td>
</tr>
<tr>
<td>PHOT 71AD, 72AD, 73AD Work Experience</td>
<td>2,3,4</td>
</tr>
<tr>
<td>JOURN 80AD Working on the Newspaper (F, SP, S)</td>
<td>3</td>
</tr>
<tr>
<td>JOURN 85AD Editor Training (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 35AD Photojournalism</td>
<td>3</td>
</tr>
<tr>
<td>†PHOT 39 Documentary Photography</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal Units** 9

**TOTAL UNITS** 27-28

---

### PHYSICAL EDUCATION/RECREATION

**Associate in Arts**

This field of concentration is designed to provide students with the knowledge, skill and experience to continue their education leading toward a Bachelor's degree in this major. Activities are designed to provide learning for students in the physical, cognitive, affective and recreational areas. For more departmental information call (562) 938-4378.

Complete **EIGHTEEN (18)** units as specified from either the **TEACHING EMPHASIS** or the **NON-TEACHING EMPHASIS**:

**TEACHING EMPHASIS**

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEPP 1 Introduction to Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>PEPP 7 Introduction to Community Recreation</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal Units** 2-3

**AND Select 15-16 units to bring total units to 18 from at least FOUR of the Following Categories:**

**Professional Preparation Category**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEPP 8AD Aerobic Circuit Training</td>
<td>2.5</td>
</tr>
<tr>
<td>PEPP 83AD, 84AD Fitness &amp; Wellness I &amp; II (F, SP)</td>
<td>2</td>
</tr>
<tr>
<td>PEPP 5 Sports Appreciation (F)</td>
<td>3</td>
</tr>
<tr>
<td>PEPP 10 Prevention &amp; Care of Athletic Injuries (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>*PEPP 15 Sports Officiating (F)</td>
<td>3</td>
</tr>
<tr>
<td>*PEPP 17 Sports Officiating (SP)</td>
<td>3</td>
</tr>
<tr>
<td>PEPP 19AD Theory of Football (F)</td>
<td>2</td>
</tr>
<tr>
<td>PEPP 23 First Aid &amp; Safety Education</td>
<td>3</td>
</tr>
</tbody>
</table>

**Aquatics Category**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>*PEG55AD Life Guard/Water Safety Training (F,SP,S)</td>
<td>4</td>
</tr>
<tr>
<td>*PEG 75AD or PEG76AD Swimming (F, SP, S)</td>
<td>0.5:1</td>
</tr>
<tr>
<td>*PEPF 3AD or 4ADWater Aerobics and Training</td>
<td>0.5:1</td>
</tr>
<tr>
<td>PEPF 41AD or 42AD Swimming Fitness</td>
<td>0.5:1</td>
</tr>
<tr>
<td>*PEPF 47AD or 48AD Swim Fitness/Polo (F, SP)</td>
<td>0.5:1</td>
</tr>
<tr>
<td>*PEPF 41 Aquatics (Coed) (F, SP)</td>
<td>2</td>
</tr>
</tbody>
</table>

**Individual & Dual Activities Category**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>†PEPF 2AD Monitoring and Developing Sports Skills (S)</td>
<td>1</td>
</tr>
</tbody>
</table>
Curriculum Guides

*PEPP 13 OR PEFP 5 AD OR PEFP 6AD Dance Aerobics (F, SP, S) 1, 0.5, 1
*PEPP 29 OR PEG 87AD OR PEG 88AD Cross Country OR Track & Field (Men) (F) OR 1, 0.5, 1
*PEIA 19AD OR PEIA 19M1 Cross Country, Track & Field (Men) (SP) 3
*PEG19AD OR PEG20AD Bowling (Coed)(F, SP)0.5, 1
*PEG 9AD OR PEG 10AD Badminton (Coed) (F, SP) 0.5, 1
*PEPP 51 OR PEG 31AD OR PEG 32AD Golf (Coed/Women) (F, SP) 1, 0.5, 1
*PEIA9AD OR PEIA9M1 Golf (Coed/Men)(SP) OR 3
*PEIA31AD OR PEIA31M1 Golf (Coed/Women)(F) 3
*PEPP 53 OR PEG 83AD OR PEG 84AD Tennis (Coed) (F, SP, S) 1, 0.5, 1
*PEG 58AD Intramural Activities (F, S) 1
*PEPP 65 OR PEIA 43AD OR PEIA 43M1 Track & Field (Women) (SP) 1, 3
*PEIA 47AD OR PEG 87AD Track & Field (Women) (F, SP) 0.5, 1
*PEIA29AD OR PEG29M1 Cross Country (Women) 3
*PEG 59AD OR PEG 60AD Racquetball (Coed) (F, SP) 0.5, 1

**Fitness and Combatives Category†**
*PEG 65AD OR 66AD Self Defense (F, SP) 0.5, 1
*PEPP 2AD Monitoring and Developing Sport Skills (S) 1
*PEPF 3AD OR 4AD Water Aerobics and Training0.5, 1
*PEPF 5AD OR 6AD Dance Aerobics 0.5, 1
PEPF 8AD Aerobic Circuit Training 2.5
PEPF 10 Stretch and Relaxation 1
*PEPF 21AD OR 22AD Physical Fitness (F, SP, S)0.5, 1
*PEPF 41AD OR 42AD Swim Fitness (F, SP) 0.5, 1
*PEPF 47AD OR 48AD Swim Fitness/Polo (F, SP)0.5, 1
*PEPF 53AD OR 54AD Weight Training (F, SP, S)0.5, 1
*PEPF 81AD Fitness & Wellness Center (F, SP, S) 1
PEPF 83AD OR 84AD Fitness & Wellness I, II 2, 2

**Team Sports†**
*PEPF 2AD Monitoring and Developing Sport Skills (S) 1
*PEPP 25 Baseball (Men) (F, SP) OR 1
PEG11AD OR PEG12AD Baseball (Men)(F)(S) 0.5, 1
OR PEIA 1AD OR PEIA 1M1 Baseball (Men) (SP)3
*PEPP 27 Basketball (Men) (F) OR 1
PEG 13AD OR PEG 14AD OR PEIA 3AD OR PEIA 31M1 Basketball (Men) (F, SP) 0.5, 1, 3
*PEPP 31 Football (Men) (SP) OR 1
PEG58AD OR PEG86AD Football(Men)(SP) 0.5, 1
OR PEIA 7AD OR PEIA 7M1 Football (Men) (F) 3
*PEPP 35 Soccer (Men) (SP) OR 1
PEG69AD OR PEG70AD Soccer (Men)(F)0.5, 1
OR PEIA 13AD OR PEIA 13M1 Soccer (Men) (F) 3
*PEPP37 OR PEIA21AD Volleyball (Men) (SP)OR 1.3
PEG 89AD OR PEG 90AD Volleyball (Men) (F, SP, S) 0.5, 1
*PEPP 55 Basketball (Women) (F) OR 1
PEG 13AD Basketball (Women) (F, S) OR 0.5
PEG 14AD OR PEIA 27AD OR PEIA 27M1 Basketball (Women) (F, SP) 1, 3
*PEPF 58AD Intramural Activities (F, SP) 1

*PEPP 61 OR PEIA 35AD OR PEIA 35M1 Soccer (Women) (F) OR 1, 3
PEG 69AD OR PEG 70AD Soccer (Women) (F, SP) 0.5, 1
*PEPP63 OR PEIA37AD Softball (Women)(SP) OR 1.3
PEG73AD OR PEG74AD Softball(Women)(F,SP)0.5, 1
PEG 67 Volleyball (Women) (SP) OR 1
PEG 89AD OR PEG 90AD Volleyball (Women) (F, SP) OR 0.5, 1
PEIA 45AD OR PEIA45M1 Volleyball (Women)(F)3

Any of:
*PEIA 23AD, 23M1, 29AD, 31AD, 47AD 3
*PEIA 5AD, 5M1, 9AD, 15AD, 17AD, 19AD, 39AD, 41AD, 43AD 3

**Outdoor Studies†**
*PEOS 5AD Backpacking (F) 1
*PEOS 55AD OR PEOS 56AD Nordic Skiing (SP)0.5, 1

Subtotal Units 15-16
TOTAL UNITS 18

**NON-TEACHING EMPHASIS**

Select EIGHTEEN (18) units from at least FOUR categories:

**Courses for the following categories are the same as listed under the TEACHING EMPHASIS:**
AQUATICS, INDIVIDUAL & DUAL ACTIVITIES, FITNESS & COMBATIVES, OUTDOOR STUDIES, PROFESSIONAL PREPARATION, TEAM SPORTS and, as a category, PEPP 1 & PEPP 7.

TOTAL UNITS 18

**PHYSICAL SCIENCES**

Associate in Arts or Science

Students are provided an introduction to the lower division course preparation for transfer to a baccalaureate degree in various physical science majors. This Associate Degree will prepare students for an entry-level position as environmental technician. Appropriate course selection will also facilitate transfer in a related major. For more departmental information call (562) 938-4444.

**REQUIRED COURSES**

**UNITS**

Complete TWELVE-THIRTEEN (12 - 13) units from the following courses°:
ASTR, CHEM, ENVRS 1, PGEOG 1, GEOL, PHYS

Subtotal Units 12-13

Complete the following course:
COMIS 1A or CPAS 1 Using the IBM Microcomputer 1

Subtotal Units 1

Complete FIVE-SIX (5-6) units from any Mathematics course which has a prerequisite of Intermediate Algebra or higher MATH

Subtotal Units 5-6

TOTAL UNITS 18-20

NOTE: Courses are offered each semester excluding the following: CHEM 12A and 12B which is offered on an alternating semester basis. PHYS 3C and CHEM 3A are offered once a year.

Consult guides available in Counseling Centers for specific general education and required grades.
RADIO/TELEVISION

BROADCAST NEWS

Career Certificate and/or Associate in Arts

Students prepare for writing, editing and producing radio or television news and news feature programs. This certificate will prepare students for an entry-level position or skills for advancement in the fast growing field of Broadcast News and related information distribution elements of various industries. The Associate Degree will prepare students for career advancement in this field. Appropriate course selection will also facilitate transfer to a four-year college or university in communications, broadcast or journalism. For more departmental information call (562) 938-4309 or 938-4564.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>R_TV1 Introduction to Broadcasting (F, SP, S)</td>
<td>3</td>
</tr>
<tr>
<td>R_TV3 Using MAC Comp/Entertainment Indus (F, SP)</td>
<td>2</td>
</tr>
<tr>
<td>R_TV13AD Television Production (F, SP)</td>
<td>2</td>
</tr>
</tbody>
</table>

Subtotal Units 10

REQUIRED COURSES FOR SPECIALITY

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>R_TV13AD Television Production (F, SP)</td>
<td>2</td>
</tr>
<tr>
<td>R_TV14AD Electronic Field Production (F, SP)</td>
<td>2</td>
</tr>
<tr>
<td>R_TV25AD/35AD Radio/Television Activity (F, SP) (2 semesters required)</td>
<td>2:2</td>
</tr>
<tr>
<td>R_TV30AD Broadcast News Writing (INF)</td>
<td>1:5:1:5</td>
</tr>
<tr>
<td>R_TV36AD Broadcast News Production (F, SP)</td>
<td>3:3</td>
</tr>
<tr>
<td>R_TV40AD Performance Before a Camera (S)</td>
<td>2</td>
</tr>
<tr>
<td>R_TV71/73 AD Work Experience (F, SP)</td>
<td>1</td>
</tr>
</tbody>
</table>

Subtotal Units 26

Select SIX (6) units from the following:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>R_TV2 Introduction to Careers in Radio &amp; Television (F)</td>
<td>2</td>
</tr>
<tr>
<td>R_TV4 Writing and Production Planning (INF)</td>
<td>3</td>
</tr>
<tr>
<td>R_TV6 Critical Television Viewing (F)</td>
<td>3</td>
</tr>
<tr>
<td>R_TV12 Television Lighting (INF)</td>
<td>2</td>
</tr>
<tr>
<td>R_TV15AC Advanced Television Production (INF)</td>
<td>2</td>
</tr>
<tr>
<td>R_TV17AD Special Projects in Radio/Television (INF)</td>
<td>1</td>
</tr>
<tr>
<td>R_TV21 Radio Production (S)</td>
<td>3</td>
</tr>
<tr>
<td>R_TV34AD Music Video Production</td>
<td>2:2</td>
</tr>
<tr>
<td>R_TV36AD Broadcast News Production (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>R_TV37 Radio/Television Management and Sales (F)</td>
<td>3</td>
</tr>
<tr>
<td>R_TV71/73 AD Work Experience (F, SP)</td>
<td>2:3</td>
</tr>
</tbody>
</table>

Other courses for area of specialization may be approved

Subtotal Units 6

TOTAL UNITS 42

RADIO/TELEVISION

MULTIMEDIA PRODUCTION

Career Certificate

Students prepare to compete in the world of Multimedia Production in a specific area of computer based design or production and editing in the communication, information and/or entertainment industries. This certificate will prepare students for an entry-level position and/or skills for advancement in a variety of production opportunities including live, broadcast and recorded venues. For more departmental information call (562) 938-4309 or 938-4564.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>R_TV1 Introduction to Broadcasting (F, SP, S)</td>
<td>3</td>
</tr>
<tr>
<td>R_TV3 Using MAC Computer Entertainment Industry (F, SP)</td>
<td>2</td>
</tr>
<tr>
<td>R_TV8 Introduction to Media Production (F)</td>
<td>3</td>
</tr>
<tr>
<td>R_TV13 Video Production (F, SP)</td>
<td>2</td>
</tr>
</tbody>
</table>

Subtotal Units 10

REQUIRED COURSES FOR SPECIALITY

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART41 Introduction to Computer Graphics (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC 59AD Digital Recording and Sampling Tech</td>
<td>2</td>
</tr>
</tbody>
</table>

Subtotal Units 5

Select TEN (10) units from the following:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART43AD Computer Graphics for the Internet (F,SP)</td>
<td>3</td>
</tr>
<tr>
<td>ART47AD Computer Art and Design for Multimedia 3</td>
<td></td>
</tr>
<tr>
<td>MUSIC 94 Beginning Recording Techniques</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 98AD Synth/Drum/Sequencer Programming</td>
<td>2</td>
</tr>
<tr>
<td>PHOT 43AD Digital Photography (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>R_TV2 Careers in Radio, Television &amp; Multimedia(F)</td>
<td>2</td>
</tr>
<tr>
<td>R_TV4 Writing and Production Planning (INF)</td>
<td>3</td>
</tr>
<tr>
<td>R_TV14 Electronic Field Production &amp; Editing (F,SP)</td>
<td>2</td>
</tr>
<tr>
<td>R_TV21 Audio Production (S)</td>
<td>3</td>
</tr>
<tr>
<td>R_TV71 or 73AD Work Experience (F, SP)</td>
<td>2:4</td>
</tr>
</tbody>
</table>

Other courses for area of specialization may be approved by the M/R_TV department chair.

Subtotal Units 10

TOTAL UNITS 25

RADIO/TELEVISION

PERFORMANCE

Career Certificate and/or Associate in Arts

Students prepare for performing in radio and television programs either independently or as part of a cast. This certificate will prepare students for an entry-level position and/or skills for advancement in a variety of performance opportunities including live, broadcast and recorded venues. The Associate Degree will prepare students for career advancement in this field. Appropriate course selection will also facilitate transfer to a four-year college or university in a broadcast, film or performance program. For more departmental information call (562) 938-4309 or 938-4564.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>COURSE</th>
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<tbody>
<tr>
<td>R_TV1 Introduction to Broadcasting (F, SP, S)</td>
<td>3</td>
</tr>
<tr>
<td>R_TV3 Using MAC Comp Entertainment Indus(F, SP)</td>
<td>2</td>
</tr>
<tr>
<td>R_TV8 Introduction to Media Production (F)</td>
<td>3</td>
</tr>
<tr>
<td>R_TV13 Television Production (F, SP)</td>
<td>2</td>
</tr>
</tbody>
</table>

Subtotal Units 10

REQUIRED COURSES FOR SPECIALITY

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>R_TV25AD/35AD Radio/Television Activity (F, SP) (2 semesters required)</td>
<td>2:2</td>
</tr>
<tr>
<td>R_TV30AD Broadcast News Writing (INF)</td>
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</tr>
<tr>
<td>R_TV36AD Broadcast News Production (F, SP)</td>
<td>3:3</td>
</tr>
<tr>
<td>R_TV40AD Performance Before a Camera (S)</td>
<td>2</td>
</tr>
<tr>
<td>R_TV71/73 AD Work Experience (F, SP)</td>
<td>1</td>
</tr>
<tr>
<td>Other courses for area of specialization may be approved</td>
<td></td>
</tr>
</tbody>
</table>

Subtotal Units 6

TOTAL UNITS 42

Curriculum Guides

97
REAL ESTATE
Associate in Arts/Career Certificate
This field of concentration fulfills the course requirements students need to complete prior to taking the State Real Estate Examination for the Salesman and Brokers license. Real Estate Principles is the only class required before taking the State Salesman Examination. It also provides the required and elective classes for a Brokers license. With additional courses identified on a transfer curriculum guide for Business Administration, students can prepare for a baccalaureate degree with an option in this field. The Real Estate Career Certificate Program prepares the student for direct entry to the field of real estate brokerage, appraisal or other support services. For more departmental information call (562) 938-4328.

REQUIRED COURSES UNITS
REAL 78 Real Estate Economics (F, SP) 3
REAL 80 Real Estate Principles (F, SP, S) 3
REAL 81A Real Estate Practices (SP) 3
REAL 83A Legal Aspects of Real Estate (SP) 3
REAL 85 Real Estate Appraisal (F, SP) 3
REAL 87 Real Estate Finance (F) 3
Subtotal Units 18

Select NINE (9) units from any of the following courses:
MKTG 40 Salesmanship (F, SP) 3
REAL 84 California Mortgage Brokering & Banking (S) 3
†REAL 86 Advanced Real Estate Appraisal (F, SP) 3
REAL 89 Real Estate Exchange 3
REAL 92A Escrows and Land Titles (F) 3
†REAL 92B Escrows and Land Titles (F) 3
REAL 93 Real Estate Investments 3
REAL 253 Property Management (SP) 3
REAL 254 Industrial/Commercial Real Estate Work Experience - REAL 2-12
Subtotal Units 9
TOTAL UNITS 27

RETAIL MANAGEMENT
Associate in Arts/Career Certificate
Students learn entry-level skills that deal with both the planning and implementing of sales and managing the ongoing operations in retail businesses. Students enhance their skills in retail management. For more departmental information call (562) 938-4332 or 938-4661.

REQUIRED COURSES UNITS
CAOTO 15 Business Communications 3
COMIS 1A Using the IBM Microcomputer 1
OR
CPAS 1 Using the MAC as a Tool for Learning 1
GBUS 5 Introduction to Business (F, SP, S) 3
MGMT 49A Introduction to Management (F, SP, S) 3
MGMT 49B Human Resources Management (F, SP) 3
MGMT 80 Small Business Entrepreneurship (F, SP, S) 3
†MGMT 273AD Work Experience (F, SP) 4
MKTG 40 Salesmanship (F, SP) 3
MKTG 47 Essentials of Marketing (F, SP) 3
Subtotal Units 26
Select one of the following courses:

\[\text{ACCTG 200A Introduction to Accounting (F, SP, S) 3}\]

OR

\[\text{ACCTG 1A Principles of Accounting (F, SP, S) 4}\]

Subtotal Units \hspace{1cm} 3-4

TOTAL UNITS \hspace{1cm} 29-30

RECOMMENDED courses but not required:

\[\text{• CBIS 6 Introduction to Information Systems (F,SP,S) 4}\]
\[\text{LAW 18A,B Business Law (F, SP) 3:3}\]
\[\text{MGMT 60 Management and Organizational Behavior (F, SP) 3}\]
\[\text{MKTG 41 Advertising (F, SP) 3}\]
\[\text{SP 25 Elements of Intercultural Communication (F,SP)3}\]

RETAIL MANAGEMENT FOOD INDUSTRY EMPHASIS

Career Certificate

Students prepare for management positions including store manager, assistant manager, grocery manager and senior supervisor within the retail food industry. Satisfactory completion of this program fulfills the requirements of the Western Association of Food Chains. For more departmental information call (562) 938-4332.

REQUIRED COURSES \hspace{1cm} UNITS

\[\text{ACCTG 1A Principles of Accounting (F, SP, S) 4}\]
\[\text{• CAOTO 35 Microsoft Office (F, SP, S) 3}\]
\[\text{†ENGL 1 Reading and Composition (F, SP, S) 3}\]
\[\text{GBIS 251 Business Mathematics (F) 3}\]
\[\text{MGMT 49A Intro to Management (F, SP, S) 3}\]
\[\text{MGMT 58 Leadership and Supervision (F, SP) 3}\]
\[\text{MKTG 42 Retailing Principles and Practices (INF) 3}\]
\[\text{MKTG 47 Essentials of Marketing (F, SP) 3}\]
\[\text{SP 20 Elements of Interpersonal Communication (F, SP, S) 3}\]

Subtotal Units \hspace{1cm} 31

RETAIL MERCHANDISING MANAGEMENT

Associate in Arts/Career Certificate

Students learn entry-level skills that deal with both the planning and implementing of sales and managing the ongoing operations in retail businesses. Students enhance their skills in retail merchandising management. For more departmental information call (562) 938-4332 or 938-4661.

REQUIRED COURSES \hspace{1cm} UNITS

\[\text{• CBIS 6 Introduction to Information Systems 4}\]
\[\text{MKTG 40 Salesmanship (F, SP) 3}\]
\[\text{MKTG 41 Advertising (F, SP) 3}\]
\[\text{MKTG 47 Essentials of Marketing (F, SP) 3}\]
\[\text{†MGMT 49B Human Resources Management (F, SP) 3}\]
\[\text{FD 20 Introduction to Fashion Merchandising 3}\]
\[\text{†FD 22A Merchandising for Profit I 1.5}\]
\[\text{†FD 22B Merchandising for Profit II 1.5}\]
\[\text{FD 220C Fashion/Merchandise Buying 3}\]
\[\text{†+ MGMT 273AD Work Experience (One semester) (F, SP) 4}\]

Subtotal Units \hspace{1cm} 32

Select ONE of the following courses:

\[\text{ACCTG 1A Principles of Accounting (F, SP, S) 4}\]

Select ONE of the following courses:

\[\text{ACCTG 200A Introduction to Accounting (F, SP, S) 3}\]

Subtotal Units \hspace{1cm} 3-4

TOTAL UNITS \hspace{1cm} 35-36

RECOMMENDED courses but not required:

\[\text{LAW 18A-B Business Law (F, SP, S) 3:3}\]
\[\text{MKTG 42 Retailing Principles & Practices (INF) 3}\]
\[\text{MGMT 60 Management & Organizational Behavior (F, SP) 3}\]
\[\text{MGMT 80 Small Business Entrepreneurship (F,SP,S) 3}\]
\[\text{SP OR ENGL Speech OR English 3-6}\]

SHEET METAL

Associate in Science/Career Certificate

See Department Head for current information. (562) 938-3051.

SOCIAL SCIENCES

Associate in Arts

This field of concentration provides the student with a general education in the principles, concepts and methodologies of various disciplines (Anthropology, Economics, Geography, Philosophy, Psychology and Sociology). In addition, courses in these areas may partially satisfy general education and major requirements for a baccalaureate degree. This Associate Degree will prepare students for career advancement and will also facilitate transfer in a related major. For more departmental information call (562) 938-4477.

REQUIRED COURSES \hspace{1cm} UNITS

Complete NINE (9) units in HISTORY and POLITICAL SCIENCE courses numbered 1-99. Choose at least ONE course from the History department and ONE course from the Political Science department.

Subtotal Units \hspace{1cm} 9

IN ADDITION, complete NINE (9) units in courses numbered 1-99 from the following departments. This must include at least SIX (6) units in ONE of the departments:

ANTHR (except ANTHR 1)
ECON
GEOG (except PGEOG 1)
PHIL
PSYCH
PUBAD
SOCIO
SOCSC 1/HUMAN 1
SOCSC 7/HUMAN 7

Subtotal Units \hspace{1cm} 9

TOTAL UNITS \hspace{1cm} 18

SPEECH COMMUNICATION

Associate in Arts

Students are provided with a general education in the principles, concepts and methodologies of interpersonal/intercultural/group/leadership communication and informative/persuasive/argumentative interpretive speaking. For more departmental information call (562) 938-4437.
### REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP 10</td>
<td>Elements of Public Speaking (F, SP, S)</td>
<td>3</td>
</tr>
<tr>
<td>SP 20</td>
<td>Elements of Interpersonal Comm (F, SP, S)</td>
<td>3</td>
</tr>
<tr>
<td>SP 25</td>
<td>Elements of Intercultural Comm (F, SP, S)</td>
<td>3</td>
</tr>
<tr>
<td>SP 30</td>
<td>Elements of Group Communication (F, SP, S)</td>
<td>3</td>
</tr>
<tr>
<td>SP 60</td>
<td>Elements of Argumentation &amp; Debate (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>SP 99AD</td>
<td>Special Projects in Speech (F, SP)</td>
<td>1</td>
</tr>
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</table>

Subtotal Units: 16

Select a minimum of THREE (3) units from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP 31</td>
<td>Elements of Leadership Communication (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>SP 50</td>
<td>Elements of Oral Interpretation (F, SP)</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal Units: 3

**TOTAL UNITS:** 19

### RECOMMENDED courses but not required:

- ANTHR 2 Cultural Anthropology 3
- MGMT 49A Intro to Management 3
- MGMT 49B Human Resources Management 3
- PSYCH 1 Introductory Psychology 3
- PSYCH 11 Social Psychology 3
- R/TV 40AD On-Camera Performance 2
- SOCIO 1 Introduction to Sociology 3
- SOCIO 2 Modern Social Problems 3
- TART 1 Acting 1-Introduction to Acting 3

### THEATRE

#### ACTING, TECHNICAL & GENERAL

Associate in Arts

This field of concentration is designed to provide students with an overall appreciation of theatre arts as well as an emphasis in acting and technical theatre. The A.A./Transfer programs prepare for an Associate degree and/or transfer to universities and conservatories. These courses prepare for auditions and in many cases may be acceptable as transferable units. Students are advised to consult the Transfer Curriculum Guide or official publications for the specific requirements of the intended transfer institution. For more departmental information call (562) 938-4563.

#### GENERAL EMPHASIS - A.A. DEGREE/TRANSFER

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TART 1</td>
<td>Acting-1 Introduction to Acting (F, SP, S)</td>
<td>3</td>
</tr>
<tr>
<td>TART 25</td>
<td>Introduction to Theatre (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>TART 51AD</td>
<td>Theatre Forum (F, SP) 0.5:0.5:0.5:0.5</td>
<td>2</td>
</tr>
<tr>
<td>TART 39AD</td>
<td>Theatre Practicum (F, SP)</td>
<td>1</td>
</tr>
</tbody>
</table>

Subtotal Units: 9

Select a minimum of TWO (2) units from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TART 49AD</td>
<td>Rehearsal and Performance (F, SP)</td>
<td>1:1:1:1</td>
</tr>
<tr>
<td>TART 50AD</td>
<td>Major Production Performance (F, SP)</td>
<td>2:2</td>
</tr>
<tr>
<td>TART 60AD</td>
<td>Special Projects in Theatre Arts</td>
<td>1:1:1:1</td>
</tr>
<tr>
<td>TART 75AD</td>
<td>Summer Repertory Theatre: Performance</td>
<td>1:1</td>
</tr>
<tr>
<td>TART 76AD</td>
<td>Summer Repertory Theatre: Production (S)</td>
<td>1:1</td>
</tr>
</tbody>
</table>

Subtotal Units: 2

Select a minimum of FOUR (4) units from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TART 40AD</td>
<td>Stage Scenery (F, SP)</td>
<td>2</td>
</tr>
<tr>
<td>TART 42AD</td>
<td>Stage Lighting (F, SP)</td>
<td>2</td>
</tr>
<tr>
<td>TART 43AD</td>
<td>Costume Crafts (F, SP)</td>
<td>2</td>
</tr>
<tr>
<td>TART 55AD</td>
<td>Stage Make-up (F, SP)</td>
<td>2</td>
</tr>
</tbody>
</table>

Subtotal Units: 2

Select a minimum of FOUR (4) units from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>TART 30</td>
<td>Introduction to Dramatic Literature (F)</td>
<td>3</td>
</tr>
<tr>
<td>TART 32</td>
<td>Stage and Screen Writing (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>TART 47</td>
<td>Theatre Management (SP)</td>
<td>3</td>
</tr>
<tr>
<td>FILM 1</td>
<td>Introduction to Film (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>DANCE 3AD</td>
<td>Musical Theatre Dance (F, SP)</td>
<td>1</td>
</tr>
</tbody>
</table>

Subtotal Units: 4

**TOTAL UNITS:** 19

#### ACTING EMPHASIS - A.A. DEGREE/TRANSFER

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TART 1</td>
<td>Acting-1 Introduction to Acting (F, SP, S)</td>
<td>3</td>
</tr>
<tr>
<td>TART 1B</td>
<td>Acting 1-Movement (F) OR</td>
<td>2</td>
</tr>
<tr>
<td>TART 1C</td>
<td>Acting 1-Voice (F, SP) OR</td>
<td>2</td>
</tr>
<tr>
<td>TART 1D</td>
<td>Acting-Improvisation (INF)</td>
<td>2</td>
</tr>
<tr>
<td>TART 2</td>
<td>Acting 2-Technique and Characterization (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>TART 3A-B</td>
<td>Acting 3-Scene Study (SP)</td>
<td>3</td>
</tr>
<tr>
<td>TART 25</td>
<td>Introduction to Theatre (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>TART 30</td>
<td>Introduction to Dramatic Literature (F)</td>
<td>3</td>
</tr>
<tr>
<td>TART 51AD</td>
<td>Theatre Forum (F, SP) 0.5:0.5:0.5:0.5</td>
<td>1:1</td>
</tr>
<tr>
<td>TART 39AD</td>
<td>Theatre Practicum (F, SP)</td>
<td>1</td>
</tr>
<tr>
<td>TART 40AD</td>
<td>Stage Scenery (F, SP)</td>
<td>2</td>
</tr>
<tr>
<td>TART 42AD</td>
<td>Stage Lighting (F, SP)</td>
<td>2</td>
</tr>
<tr>
<td>TART 43AD</td>
<td>Costume Crafts (F, SP)</td>
<td>2</td>
</tr>
<tr>
<td>TART 47</td>
<td>Theatre Management (SP)</td>
<td>3</td>
</tr>
<tr>
<td>TART 55AD</td>
<td>Stage Make-up (F, SP)</td>
<td>2</td>
</tr>
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Subtotal Units: 22

Select a minimum of FOUR (4) units from the following:

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TART 47</td>
<td>Theatre Management (SP)</td>
<td>3</td>
</tr>
<tr>
<td>TART 49AD</td>
<td>Rehearsal and Performance (F, SP)</td>
<td>1:1:1:1</td>
</tr>
<tr>
<td>TART 50AD</td>
<td>Major Production Performance (F, SP)</td>
<td>2:2</td>
</tr>
<tr>
<td>TART 75AD</td>
<td>Summer Repertory Theatre: Performance</td>
<td>1:1</td>
</tr>
<tr>
<td>TART 76AD</td>
<td>Summer Repertory Theatre: Production (S)</td>
<td>1:1</td>
</tr>
</tbody>
</table>

Subtotal Units: 4

**TOTAL UNITS:** 26

#### TECHNICAL EMPHASIS - A.A. DEGREE/TRANSFER

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TART 25</td>
<td>Introduction to Theatre (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>TART 40AD</td>
<td>Stage Scenery (F, SP)</td>
<td>2</td>
</tr>
<tr>
<td>TART 42AD</td>
<td>Stage Lighting (F, SP)</td>
<td>2</td>
</tr>
<tr>
<td>TART 43AD</td>
<td>Costume Crafts (F, SP)</td>
<td>2</td>
</tr>
<tr>
<td>TART 47</td>
<td>Theatre Management (SP)</td>
<td>3</td>
</tr>
<tr>
<td>TART 51AD</td>
<td>Theatre Forum (F, SP) 0.5:0.5:0.5:0.5</td>
<td>2</td>
</tr>
<tr>
<td>TART 55AD</td>
<td>Stage Make-up (F, SP)</td>
<td>2</td>
</tr>
</tbody>
</table>

Subtotal Units: 22

Select a minimum of FOUR (4) units from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TART 30</td>
<td>Introduction to Dramatic Literature (F)</td>
<td>3</td>
</tr>
</tbody>
</table>

Consult guides available in Counseling Centers for specific general education and required grades.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>TART 44AB</td>
<td>Costume Design (F, SP)</td>
<td>2</td>
</tr>
<tr>
<td>TART 49AD</td>
<td>Rehearsal and Performance</td>
<td>1:1:1</td>
</tr>
<tr>
<td>TART 56AD</td>
<td>Advanced Stage Make-Up (F, SP)</td>
<td>2</td>
</tr>
<tr>
<td>†TART 60AD</td>
<td>Special Projects in Theatre Arts (F, SP)</td>
<td>1:1:1</td>
</tr>
<tr>
<td>TART 76AD</td>
<td>Summer Repertory Theatre: Production (S)</td>
<td>1:1</td>
</tr>
<tr>
<td><strong>Subtotal Units</strong></td>
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<td><strong>4</strong></td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL UNITS</strong></td>
<td><strong>26</strong></td>
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</tbody>
</table>

**COMPLETION CERTIFICATES**

**Vocational Media - Film Acting Certificate**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TART 1 or ANY COMPARABLE LEVEL Acting 1 course</td>
<td>Intro to Acting</td>
<td>3</td>
</tr>
<tr>
<td>TART 201</td>
<td>Show Business Careers – How to Start</td>
<td>1.5</td>
</tr>
<tr>
<td>TART 204</td>
<td>Marketing Yourself for Show Business</td>
<td>1.5</td>
</tr>
<tr>
<td>TART 206A</td>
<td>Audition and Interview Skills - Begin</td>
<td>1.5</td>
</tr>
<tr>
<td>TART 206B</td>
<td>Audition and Interview Skills - Adv</td>
<td>1.5</td>
</tr>
<tr>
<td>TART 212A</td>
<td>Acting in Film - Beginning</td>
<td>1.5</td>
</tr>
<tr>
<td>TART 212B</td>
<td>Acting in Film - Advanced</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Subtotal Units</strong></td>
<td></td>
<td><strong>12</strong></td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL UNITS</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

**Vocational Media - Commercials Certificate**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TART 1 or ANY COMPARABLE LEVEL Acting 1 course</td>
<td>Intro to Acting</td>
<td>3</td>
</tr>
<tr>
<td>TART 201</td>
<td>Show Business Careers – How to Start</td>
<td>1.5</td>
</tr>
<tr>
<td>TART 204</td>
<td>Marketing Yourself for Show Business</td>
<td>1.5</td>
</tr>
<tr>
<td>TART 206A</td>
<td>Audition and Interview Skills - Begin</td>
<td>1.5</td>
</tr>
<tr>
<td>TART 206B</td>
<td>Audition and Interview Skills - Adv</td>
<td>1.5</td>
</tr>
<tr>
<td>TART 208A</td>
<td>Breaking into Commercials - Begin</td>
<td>1.5</td>
</tr>
<tr>
<td>TART 208B</td>
<td>Breaking into Commercials - Adv</td>
<td>1.5</td>
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<tr>
<td><strong>Subtotal Units</strong></td>
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<td><strong>12</strong></td>
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<tr>
<td></td>
<td><strong>TOTAL UNITS</strong></td>
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**Vocational Media – Voice-Over Certificate**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TART 1 or ANY COMPARABLE LEVEL Acting 1 course</td>
<td>Intro to Acting</td>
<td>3</td>
</tr>
<tr>
<td>TART 201</td>
<td>Show Business Careers – How to Start</td>
<td>1.5</td>
</tr>
<tr>
<td>TART 204</td>
<td>Marketing Yourself for Show Business</td>
<td>1.5</td>
</tr>
<tr>
<td>TART 206A</td>
<td>Audition and Interview Skills - Begin</td>
<td>1.5</td>
</tr>
<tr>
<td>TART 206B</td>
<td>Audition and Interview Skills - Adv</td>
<td>1.5</td>
</tr>
<tr>
<td>TART 210A</td>
<td>Voice-Over Techniques - Beginning</td>
<td>1.5</td>
</tr>
<tr>
<td>TART 210B</td>
<td>Voice-Over Techniques - Advanced</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Subtotal Units</strong></td>
<td></td>
<td><strong>12</strong></td>
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<tr>
<td></td>
<td><strong>TOTAL UNITS</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

**TOOL DESIGNER**

**MANUFACTURING TECHNOLOGY**

**Associate in Science/Career Certificate**

Students prepare for entry-level positions as tool designers in the aerospace or comparable manufacturing industry. Tool designers generate conceptual designs for tools in conformance with defined current tooling engineering standards and practices. Tool designers plan the sequence of operations necessary to layout, fabricate and assemble cost effective tooling. For more departmental information call (562) 938-3157 or 938-3092.

**LEVEL 1 - REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>‡MACHT 50A</td>
<td>Machine Tool Operation and Practices</td>
<td>3</td>
</tr>
<tr>
<td>‡MACHT 50B</td>
<td>Machine Tool Operation and Practices</td>
<td>3</td>
</tr>
<tr>
<td>DRAFT 201</td>
<td>Introduction to Drafting</td>
<td>4</td>
</tr>
<tr>
<td>OR</td>
<td>DRAFT 51A Industrial Drafting</td>
<td>3</td>
</tr>
<tr>
<td>OR</td>
<td>†ELTC 225 Algebra &amp; Trigonometry for Technicians</td>
<td>3-4</td>
</tr>
<tr>
<td>OR</td>
<td>†A more advanced or transferable math course.</td>
<td></td>
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<tr>
<td></td>
<td>(Trigonometry is recommended.)</td>
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<tr>
<td><strong>Subtotal Units</strong></td>
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**LEVEL 2 - REQUIRED COURSES**

<table>
<thead>
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<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>†DRAFT 51B</td>
<td>Industrial Drafting II</td>
<td>3</td>
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<tr>
<td>OR</td>
<td>†ARCHT 60 Architectural Design</td>
<td>8</td>
</tr>
<tr>
<td>OR</td>
<td>†DRAFT 60 Geometric Dimensioning &amp; Tolerancing</td>
<td>3</td>
</tr>
<tr>
<td>OR</td>
<td>†TEC 60 Computer Aided Design &amp; Drafting (CADD)</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal Units</strong></td>
<td></td>
<td><strong>14-15</strong></td>
</tr>
</tbody>
</table>

**TOTAL UNITS**

<table>
<thead>
<tr>
<th>Level</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>43-46</td>
</tr>
</tbody>
</table>

**TRAVEL INDUSTRY**

**Associate in Arts/Career Completion Certificate**

This Career Certificate will prepare students for an entry-level position in a wide variety of travel/tourism career opportunities. The Travel Industry Certificate prepares students for entry-level positions who specifically want to seek employment in tourism fields such as: Airlines, Car Rentals, Hotels, Motorcoach, Rail, Theme Parks, Tour Operators, Travel Agencies, Visitor & Convention Bureaus and other related companies. With additional courses students can prepare for a Bachelor’s Degree in this field. See counseling staff for admission requirements at a university. For more departmental information call (562) 938-4325 or 938-4332.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>THRT 210</td>
<td>Introduction to Travel Industry (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>THRT 212</td>
<td>Travel Career Employment (F)</td>
<td>3</td>
</tr>
<tr>
<td>THRT 214</td>
<td>Travel Marketing and Sales Techniques (F)</td>
<td>3</td>
</tr>
<tr>
<td>THRT 215</td>
<td>Travel Operations and Risk Mgmt. (SP)</td>
<td>3</td>
</tr>
<tr>
<td>THRT 216B-D</td>
<td>Travel Destinations (Two Semesters) (F, SP)</td>
<td>3:3</td>
</tr>
<tr>
<td>THRT 218</td>
<td>Transportation and Tours (F)</td>
<td>3</td>
</tr>
<tr>
<td>THRT 219</td>
<td>Cruise Specialization (F)</td>
<td>3</td>
</tr>
<tr>
<td>THRT 222A-C</td>
<td>Travel Agency Computer Operations (One semester) (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>THRT 224</td>
<td>Meeting and Special Event Planning (INF)</td>
<td>3</td>
</tr>
<tr>
<td>THRT 230</td>
<td>Travel Industry Fares and Ticketing (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>THRT 234</td>
<td>Tour Management and Escorting (F)</td>
<td>3</td>
</tr>
<tr>
<td>THRT 240</td>
<td>Travel Industry Proficiency Preparation (F)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Complete a minimum of THREE (3) units from the following:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>†THRT 271AD</td>
<td>Travel/Tourism Work Exper. (F, SP)</td>
<td>2</td>
</tr>
<tr>
<td>†THRT 272AD</td>
<td>Travel/Tourism Work Exper. (F, SP)</td>
<td>3</td>
</tr>
<tr>
<td>†THRT 273AD</td>
<td>Travel/Tourism Work Exper. (F, SP)</td>
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<tr>
<td><strong>Subtotal Units</strong></td>
<td></td>
<td><strong>43</strong></td>
</tr>
</tbody>
</table>

**Select ONE of the following:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>*CAOTT 200</td>
<td>Begin Typing/Keyboarding (F, SP, S)</td>
<td>3</td>
</tr>
<tr>
<td>*CAOTT 201</td>
<td>Intermediate Typing/Keyboarding (F,SP)</td>
<td></td>
</tr>
<tr>
<td>*CAOTT 200A</td>
<td>Typing/Keyboarding A,B,C (F, SP S) OR</td>
<td>1:1:1</td>
</tr>
<tr>
<td>A typing proficiency test of 35 words per minute</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Subtotal Units**

<table>
<thead>
<tr>
<th>Level</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>43-46</td>
</tr>
</tbody>
</table>


RECOMMENDED but not required courses:

- CAOTC 39AB Microsoft Word for Office (Beginning, Advanced) (F, SP, S) 1:1
- CAOTC 41E/F Excel for Windows (Beginning, Advanced) (F, SP, S) 1:1
- CBIS 206A Navigating the Internet (F, SP, S) 1
- Foreign Language 1-2 (First year level equivalency) 5:5
- GBUS 251 Business Mathematics (F) 3
- GEOG 40 World Regional Geography (F, SP, S) 3
- THRH 28 Convention Management and Meeting Planning (INF) 3
- LAW 18A Business Law (F, SP, S) 3
- MGMT 80 Small Business Entrepreneurship (F, SP, S) 3
- SP 10 Elements of Public Speaking (F, SP, S) 3
- THRT 226 Travel Industry Bookkeeping & Report (INF) 3
- THRT 228 Corporate Travel Management (INF) 3

COMPLETION CERTIFICATES

Air Reservation Specialist Certificate

REQUIRED COURSES

- THRT 214 Travel Marketing and Sales Techniques (F) 3
- THRT 222A-C Travel Industry Computer System (F, SP) 3
- THRT 230 Travel Industry OAG, Fares & Ticket (F, SP) 3

TOTAL UNITS 9

Cruise Specialist Certificate

REQUIRED COURSES

- THRT 214 Travel Marketing and Sales Techniques (F) 3
- THRT 216B-D Geographic Locations and Tourist Destinations (F, SP) (two courses required) 3:3
- THRT 219 Cruise Ship Specialization and Techniques 3

TOTAL UNITS 12

Travel Destinations Certificate

REQUIRED COURSES

- THRT 214 Travel Marketing and Sales Techniques (F) 3
- THRT 216B Travel Destinations-North, Central and South America (F, SP) 3
- THRT 216C Travel Destinations-Europe and Africa (F, SP) 3
- THRT 216D Travel Destinations-Pacific, Asia and Middle East (F, SP) 3

TOTAL UNITS 12

Travel Industry Management Specialist Certificate

REQUIRED COURSES

- THRT 214 Travel Marketing and Sales Techniques (F) 3
- THRT 215 Travel Operations and Risk Management (SP) 3
- THRT 216B-D Travel Destinations (One semester) (F, SP) 3
- THRT 218 Transportation and Tours (F) 3
- THRT 234 Tour Management and Escorting (F) 3

TOTAL UNITS 15

WELDING TECHNOLOGY

(Preparatory Program)

Associate in Science/Career Certificate

Students prepare for entry-level welding positions in aerospace, piping industry and construction. The Long Beach City College Welding program is articulated with the Long Beach Unified School District ROP Welding program. Students who complete LBUSD ROP Welding may receive advanced placement. For more departmental information call (562) 938-3074 or 938-3054.

Select ONE of the following Options:

Option #1

Complete 40 units from the following courses:

- UNITS
- WELD 212 Arc Welding and Fabrication 9
- WELD 213 Advanced Arc Welding 9
- WELD 214 Inert Gas Welding 9
- WELD 222 Structural Arc Welding 6
- WELD 221 Arc Welding Structural Certification 4
- WELD 230 Fundamentals of Inert Gas Welding (Heliarc, MIG) 4
- WELD 231 Prep for Inert Gas Welding Certification 6
- SHMET 220AD Surface Development and Fabrication 5
- MACHT 50A Machine Tool Operation and Practices 3

TOTAL UNITS 40

WORD PROCESSING

Career or Completion Certificate and/or Associate in Arts

Students prepare for an entry-level word processing position with training in rapid, accurate keyboarding; document formatting; word processing and other computer software; and decision making regarding business communications. This certificate prepares students for an entry-level position in a variety of office settings and serves as a foundation for specialization. The suggested sequence of courses is designed to build employment skills quickly. This Associate degree prepares students for career advancement once a certificate has been earned. For more departmental information call (562) 938-3033.

REQUIRED COURSES

- UNITS
  - CAOTC 31A, B Microsoft Windows Operating System, Levels 1, 2 (F, SP, S) 1:1
  - CAOTC 34 Intro to Computers & Applications (F, SP) 3
  - CAOTC 41E Excel for Windows-Beginning (F, SP, S) 1
  - CAOTC 44D PowerPoint for Windows, Beginning (F, SP, S) 1
  - CAOTC 45 Internet for Office and Personal Use (F, SP, S) 2
  - CAOTO 15 Business Communications (F, SP) 3
  - CAOTO 216 Proofreading Skills (F, SP, S) 1
  - CAOTO 261 Business English (F, SP, S) 3
  - CAOTT 201 Intermediate Typing/Keyboarding (F, SP, S) 2

Subtotal Units 18

Select any FOUR (4) units from one of the following groups:

- CAOTC 39A, B, C, D Microsoft Word for Office, Levels 1, 2, 3, 4 (F, SP, S) 1:1:1:1

Consult guides available in Counseling Centers for specific general education and required grades.
• CAOTC 236A, B, C, D Word Processing-WordPerfect, Levels 1, 2, 3, 4 (F, SP) 1:1:1:1

Subtotal Units 4

**REQUIRED COMPETENCY:** Typing certificate of at least 50 words per minute for 5 minutes with 5 or fewer errors by the end of the program.

Select *FIVE (5)* units from the following:

• #CAOTC 39A, B, C, D Microsoft Word for Office, Levels 1, 2, 3, 4 (F, SP, S) 1:1:1:1
• CAOTC 41F, J Excel for Windows, Levels 2, 3 (F, SP, S) 1:1
• CAOTC 44E PowerPoint for Windows, Advanced (F, SP, S) 1
• CAOTC 47A, B Access for Office Applications, Levels 1, 2 (F, SP) 3:3
• #CAOTC 236A, B, C, D Word Processing-WordPerfect, Levels 1, 2, 3, 4 (F, SP) 1:1:1:1
• CAOTC 240AB Microsoft Office Exam Prep-Word (F, SP) 0.5

CAOTO 222 Job Search Skills (F, SP) 3
CAOTO 262 Professional Development (F, SP, S) 1
CAOTC 272AD Work Experience Issues-Comp Ofc Tech (F, SP) 3:3
CAOTT 209AB Speed/Accuracy Bldg for Typists (F, SP) 1:1

Subtotal Units 5
TOTAL UNITS 27

**COMPLETION CERTIFICATES**

**Basic Business Communications Certificate**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAOTC39A Microsoft Word for the Office, Beginning</td>
<td>1</td>
</tr>
<tr>
<td>CAOTC 44D PowerPoint for Windows</td>
<td>1</td>
</tr>
<tr>
<td>CAOTO 15 Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>CAOTO 261 Business English</td>
<td>3</td>
</tr>
<tr>
<td>CAOTO 262 Professional Development</td>
<td>1</td>
</tr>
</tbody>
</table>

TOTAL UNITS 9

**Basic Office Computer Skills Certificate**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAOTC 31A Microsoft Windows Operating System, Beginning</td>
<td>1</td>
</tr>
<tr>
<td>CAOTC 34 Introduction to Computers &amp; Applications</td>
<td>3</td>
</tr>
<tr>
<td>CAOTC 45 Telecommunications and the Internet</td>
<td>2</td>
</tr>
</tbody>
</table>

**ONE OF THE FOLLOWING:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAOTT 200 Beginning Typing/Keyboarding</td>
<td>3</td>
</tr>
<tr>
<td>CAOTT 200A Beginning Typing/Keyboarding</td>
<td>1</td>
</tr>
<tr>
<td>CAOTT 233 Computer Keyboarding</td>
<td>1</td>
</tr>
</tbody>
</table>

TOTAL UNITS 7-9

**REQUIRED COMPETENCY:** Typewriting Certificate of 25 wpm for five minutes with no more than five errors completed within the previous twelve months.

**Basic Word Processing Certificate**

**REQUIRED COURSES**

ALL FOUR

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAOTC 39A Microsoft Word for the Office, Beg.</td>
<td>1</td>
</tr>
<tr>
<td>CAOTC 39B Microsoft Word for the Office, Interim</td>
<td>1</td>
</tr>
<tr>
<td>CAOTC 39C Microsoft Word for the Office, Advanced</td>
<td>1</td>
</tr>
<tr>
<td>CAOTC 39D Microsoft Word for the Office, Expert</td>
<td>1</td>
</tr>
</tbody>
</table>

OR ALL FOUR

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAOTC 236A Word Processing-WordPerfect, Beg</td>
<td>1</td>
</tr>
<tr>
<td>CAOTC 236B Word Processing-WordPerfect, Interim</td>
<td>1</td>
</tr>
<tr>
<td>CAOTC 236C Word Processing-WordPerfect, Adv</td>
<td>1</td>
</tr>
<tr>
<td>CAOTC 236D Word Processing-WordPerfect, Expert</td>
<td>1</td>
</tr>
<tr>
<td>CAOTO 216 Proofreading Skills</td>
<td>1</td>
</tr>
<tr>
<td>CAOTC 265 Computer Transcription</td>
<td>2</td>
</tr>
</tbody>
</table>

**TOTAL UNITS** 7

**REQUIRED COMPETENCY:** Typing certificate of 35 wpm for five minutes with five or fewer errors completed within the previous twelve months.

**COREL WordPerfect Certificate**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAOTC 236A Word Processing-WordPerfect, Beg</td>
<td>1</td>
</tr>
<tr>
<td>CAOTC 236B Word Processing-WordPerfect, Interim</td>
<td>1</td>
</tr>
<tr>
<td>CAOTC 236C Word Processing-WordPerfect, Adv</td>
<td>1</td>
</tr>
<tr>
<td>CAOTC 236D Word Processing-WordPerfect, Expert</td>
<td>1</td>
</tr>
</tbody>
</table>

**TOTAL UNITS** 4

**REQUIRED COMPETENCY:** Typing certificate of 25 wpm for five minutes with five or fewer errors completed within the previous twelve months.

**Microsoft Excel Certificate**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAOTC 41E Excel for Windows-Beginning</td>
<td>1</td>
</tr>
<tr>
<td>CAOTC 41F Excel for Windows-Intermediate</td>
<td>1</td>
</tr>
<tr>
<td>CAOTC 41J Excel for Windows-Advanced</td>
<td>1</td>
</tr>
</tbody>
</table>

**TOTAL UNITS** 3

**REQUIRED COMPETENCY:** Instructor verification of 80% or better accuracy on Excel Core and Expert practice exams or Microsoft Office Specialist certification

**Microsoft Word Certificate**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAOTC 39A Microsoft Word for the Office, Beg</td>
<td>1</td>
</tr>
<tr>
<td>CAOTC 39B Microsoft Word for the Office, Interim</td>
<td>1</td>
</tr>
<tr>
<td>CAOTC 39C Microsoft Word for the Office, Adv</td>
<td>1</td>
</tr>
<tr>
<td>CAOTC 39D Microsoft Word for the Office, Expert</td>
<td>1</td>
</tr>
</tbody>
</table>

**TOTAL UNITS** 4

**REQUIRED COMPETENCIES:** Typing certificate of 35 wpm for five minutes with five or fewer errors completed within the previous twelve months. Instructor verification of 80 percent or better accuracy on Word Core and Expert practice exams or Microsoft Office Specialist certification.
Course Numbering System

Course numbers relate to the design of the class and applicability to degree and transfer programs.

1-599 Applicable to associate degree
1-99 Transferable for at least elective credit to any college having similar courses in its lower division curriculum.
100-199 Courses not intended for transfer but meeting a limited number of requirements for the AA/AS degrees.
200-299 Occupational courses intended to prepare students for immediate job entry.
300-399 Short term or short unit courses which parallel other 1-400 level courses.
400-499 Continuing education courses in occupational fields.
500-599 Vocational courses for apprentices.
600-699 Self-enrichment or basic skills courses which do not carry credit and for which no grade is awarded.
800-899 Courses in basic skills which have credit value that is not applicable to transfer or an associate degree.

Check with the catalog or a counselor if you have questions about course credit applicability.

Skills and performance courses in which enrollment may be repeated are designated with a fixed course number followed by letters indicating the number of times the course may be taken for credit. The following letters, when not separated by a hyphen, authorize enrollments as follows: AB = 2 semesters, AC = 3 semesters, AD = 4 semesters.

Courses which extend for more than one semester in length and in which each semester of the class contains different content have a fixed course number and a single letter indicating the specific semester of the course.

In some instances, a three-digit course number in the schedule of classes or on the transcript is not listed under the same course number in the catalog. In such cases, the course has been listed in the catalog with the first digit changed. For example, DRAFT205A in the catalog may be listed as 305A in the schedule of classes.

Some courses are modular courses. Such courses carry an additional designation: M1, M2, M3, M4, etc. Example: WELD 211M1, Introduction to Welding, is the first module of a class section listed in the schedule of classes for the primary course, WELD 211 (Introduction to Welding) as listed in this catalog.

California Articulation Number (CAN)

Some courses are identified with the California Articulation Number (CAN). This identifies some of the transferable, lower division, introductory (preparatory) courses commonly taught within each academic discipline on California college campuses.

Lists of courses from campuses who have qualified to participate in the CAN system are available in the Counseling offices. The system assures students that CAN courses on one participating campus will be accepted "in lieu of" the comparable CAN course on another participating campus. For example: CAN ECON 2 on one campus will be accepted for CAN ECON 2 on another participating campus. Each campus retains its own numbering system.

Course Prerequisites, Corequisites and Recommended Preparation

Prerequisites, corequisites and recommended preparation advice are listed with some courses in this catalog and the schedule of classes.

A PREREQUISITE is a course or assessment that must be completed before enrolling in the course or complete concurrently if that is permitted. Satisfactory completion of an assessment requires successful completion of the assessment process. Satisfactory completion of a prerequisite course requires a grade of CR, “C” or better.

If you have completed the prerequisite at another college or in high school, you must bring a copy of your official transcript to the Admissions and Records Office and ask for an equivalency evaluation before registering. You may challenge the prerequisite if you think you have knowledge and the ability to succeed in the course, particularly if you are drawing upon your work experience and wish to take a vocational course.

A COREQUISITE is a course in which you must be enrolled at the same time as the companion course. This is often the case in science classes which include a lab. Sometimes, you may be allowed to complete the corequisite course in a prior semester.

A RECOMMENDED PREPARATION statement is advice which the faculty want to give you.

Challenging Course Requisites and Limitations

Challenging course requisites and/or limitations requires written documentation that explains the alternative course work, background and/or abilities that adequately prepare you for the course. You may obtain a Requisite Challenge form from the Admissions and Records Office. Reasons for challenging requisites or limitations must include one or more of the following:

1. A requisite course is not reasonably available over a period of several semesters;
2. You believe the requisite or limitation was established in violation of a regulation or District-approved process for establishing requisites and limitations;
3. You believe the requisite or limitation is discriminatory or being applied in a discriminatory manner; or

4. You have the documented knowledge or ability to succeed in the course.

File your Requisite Challenge form with the School Office or department head responsible for the course you want to enter. If space is available in the class at the time you file your challenge, you may register for the challenged course and the District will resolve your challenge in a timely manner. If your challenge is denied, you will be dropped from the challenged class. If no space is available in the challenged class at the time you file, the District will resolve your challenge prior to the beginning of registration for the next term. You may register in the challenged class during your normal registration period if your challenge is approved.

Curriculum Offerings

The college reserves the right to determine which of the courses listed in the catalog are to be offered in each semester. Changes in curriculum or course content may occur after the printing of this catalog.

Student Alert: Understanding Transfer Course Descriptions

The phrase at the bottom of the course descriptions offered under "Courses of Instruction" must be read with care. Students should be aware of this key phrase, Transferable to CSU/UC, see a counselor for limitations. A course can transfer to the CSU or UC system as an elective part of a major and/or as general education credit. Since general education courses can be certified by LBCC when completed, students should consult pages 33-36 to see if the course is on the appropriate general education pattern. If the course is not found on the general education pattern, the course may be counted as part of the major or as an elective by the institution receiving the transfer student. It is the student's responsibility to select courses that meet his/her educational goals. The best advice for interpreting this phrase, therefore, is to see a counselor.

Selected Topics Courses

The descriptor “Selected Topics” applies college-wide and is issued as a curricular placeholder identified by a standard number (98, 298 or 898) and by the general heading Selected Topics (ST). These courses provide an opportunity for curriculum experimentation and innovation.

While the Selected Topics course option offers a department curricular opportunities, it also has some limitations, particularly for students.

Credits are degree applicable (ST 98, 298) as elective credits only.

Credits are transferable (ST 98) as elective credits only.

Selected Topics courses cannot be placed on a program’s curriculum guide.

Selected Topics courses cannot be used as a pre- or corequisite for another course.

Selected Topics courses cannot apply to a certificate or degree requirement.

For courses numbered 898, the units of credit may be used for workload purposes but may not be applied to any certificate or degree.

FD 298, ST Computer Patternmaking 1.0
R_TV 298AC, ST Non-Linear Editing Techniques 2.0
VN 298A, ST Transition to Vocational Nursing 3.0
VN 298B, ST Common Health Deviations 1 3.5
VN 298C, ST Common Health Deviations 2 3.5
VN 298D, ST Maternal Infant Nursing 1.5
VN 298E, ST Nursing Care of Children 1.5
VN 298F, ST Common Health Deviations 3 3.5
VN 298G, ST Nursing Care of the Chronically Ill 2.5
CURRICULUM OFFERINGS

The courses described in this catalog may not be offered every term or every year. If a course is not offered every term you will see a note at the end of the catalog descriptions to tell you when the course is usually offered. Check the Schedule of Classes for our current term offerings.

ACCOUNTING (ACCTG)

ACCTG 1A (Part of CAN BUS SEQUENCE A) 4.0 units
Principles of Accounting
5.0 hours lecture
Recommended Preparation: ACCTG200A or one year of bookkeeping.
Grading: letter grade
Presents the analyzing, recording and summarizing procedures used in preparing balance sheets, income statements, cash flows and consolidated reports for sole proprietorships, partnerships and corporations.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ACCTG 1B (Part of CAN BUS SEQUENCE A) 4.0 units
Principles of Accounting
5.0 hours lecture
Prerequisite: ACCTG 1A
Grading: letter grade
Accounting theory and practice for departmental, manufacturing and cost accounting; interpretation of financial statements; budgets; tax decisions; international considerations and ethics.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ACCTG 18 3.0 units
Credit and Financial Statement Analysis
3.0 hours lecture
Grading: letter grade
Presents the characteristics of financial statements and accounting techniques for analysis of financial statements in reviewing for lending/credit appraisal. Emphasizes obtaining and checking credit information, real estate credit and financial statement analysis using ratios, industry averages and trend analysis. Both consumer and commercial (business) credit are studied.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ACCTG 200A 3.0 units
Introduction to Accounting
3.0 hours lecture
Grading: letter grade
Provides a general understanding of accounting principles for a service enterprise using the “cash” and “accrual” methods.

ACCTG 205 3.0 units
Fundamentals of Tax
3.0 hours lecture
Grading: letter grade
Preparation of federal and state income tax returns for individuals. Emphasizes the practical use of tax forms and supporting schedules. Reflects changes in the Internal Revenue Code.

ACCTG 228 2.0 units
Computerized Gen Ledger Account Systems
2.0 hours lecture , 1.0 hour laboratory
Prerequisite: ACCTG 1A or 200A
Grading: letter grade
Provides experience using and comparing existing commercial general ledger accounting programs.

ACCTG 229 3.0 units
Spreadsheet Accounting
3.0 hours lecture , 1.0 hour laboratory
Prerequisite: ACCTG 200A or 1A or 201A-B and CBIS 2 or CAOTC 35 or 41E
Grading: letter grade or credit/no credit
Learn to automate many of the routine manual functions studied in the intro accounting course. In addition, learn to develop other practical financial templates and techniques that will be used to assist in common business decisions. Utilize the Microsoft Excel spreadsheet program.

ACCTG 230 1.0 unit
Quickbooks Accounting
1.5 hours lecture , 0.5 hour laboratory
Recommended Preparation: General familiarity and use of a PC.
Grading: letter grade or credit/no credit
Intro to basic small business accounting concepts and to a complete accounting software system. Provides hands-on exposure to the major features of the Quickbooks accounting software accompanied by instruction in the accounting concepts being employed.

ADMINISTRATION OF JUSTICE (ADJUS)

ADJUS 2 (CAN AJ 2) 3.0 units
Introduction, Administration of Justice
3.0 hours lecture
Grading: letter grade
Topics of discussion: the history and philosophy of the justice system as it evolved throughout the world; in-depth study of the American system and the various sub-systems; roles and role expectations of criminal justice agents in their interrelationships in society; concepts of crime causations, punishments and rehabilitation; ethics, education and training for professionalism in the justice system.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ADJUS 3 3.0 units
Introduction to Criminal Procedures
3.0 hours lecture
Grading: letter grade
Covers legal processes from pre-arrest through trial, sentencing and correctional procedures; review the history of case and common law, conceptual interpretations of law as reflected in court decisions, case law methodology and case research as the decisions impact upon the procedures of the justice system.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ADJUS 4 (CAN AJ 4) 3.0 units
Criminal Law
3.0 hours lecture
Grading: letter grade
Covers historical development, philosophy of law and constitutional provisions; definitions, classification of crimes and their applications to the system of administration of justice; legal research, review of case
law, methodology and concepts of law as a social force. Explores crimes against persons, property and the state as a social, religious and historical ideology. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ADJUS 5** 3.0 units
Community and Human Relations
3.0 hours lecture
Grading: letter grade
Discusses the relationship between criminal justice agents and the community, casual and symptomatic aspects of community understanding. Mistrust and lack of understanding, behavioral causes and ways to develop and maintain amicable relationships are covered. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ADJUS 6** 3.0 units
Introduction to Evidence
3.0 hours lecture
Grading: letter grade
Covers origin, development, philosophy and constitutional basis of evidence, constitutional and procedural considerations affecting arrest, search and seizure, kinds and degrees of evidence and rules governing admissibility, judicial decisions interpreting individual rights and case studies viewed from a conceptual level. Transfer Status: Transferable to CSU, see counselor for limitations.

**ADJUS 8** 3.0 units
Introduction to Investigation
3.0 hours lecture
Grading: letter grade
Covers fundamentals of investigation, techniques of crime scene search and recording, collection and preservation of physical evidence, modus operandi processes, sources of information, interview and interrogation and follow-up investigation. Transfer Status: Transferable to CSU, see counselor for limitations.

**ADJUS 10** 3.0 units
Writing for Criminal Justice
3.0 hours lecture
Grading: letter grade
Technique of communicating facts, information and ideas effectively in a simple, clear and logical manner in the various types of criminal justice system reports, letters, memoranda, directives and administrative reports. Emphasizes the criminal justice terminology, use of English and organization of information, note taking and report writing and presentation of testimony in court. Transfer Status: Transferable to CSU, see counselor for limitations.

**ADJUS 12** 3.0 units
Crime and Delinquency
3.0 hours lecture
Grading: letter grade
An intro to major types of criminal behavior, characteristics of offenders, factors which contribute to crime and delinquency. The criminal justice process: the human process of law enforcement, the courts, probation, parole and institutions, changes in crime control and treatment processes and the role of society are discussed. Not open for credit to students who have completed SOCIO12. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ADJUS 14** 3.0 units
Juvenile Law and Procedures
3.0 hours lecture
Grading: letter grade
The techniques of handling juvenile offenders and victims, prevention and repression of delinquency, diagnosis and referral, organization of community resources, juvenile law and court procedures are discussed. Transfer Status: Transferable to CSU, see counselor for limitations.

**ADJUS 16** 3.0 units
Vice, Narcotics and Organized Crime
3.0 hours lecture
Grading: letter grade
The interrelation of organized crime to the community, the impact of covert criminal activities upon the social structure, symptoms of organized crime activity, i.e., vice, narcotics and white collar crime, political influences in the legal system and management of crime control units are covered. Transfer Status: Transferable to CSU, see counselor for limitations.

**ADJUS 17** 3.0 units
Computer Use in Criminal Justice
2.0 hours lecture, 3.0 hours laboratory
Grading: letter grade
Intro to system strategies and computer techniques used in criminal justice agencies. Includes computer procedures, terminology and program applications that produce crime support data, database applications found in criminal justice operations, records, identification, CAD (computer assisted dispatch systems), statistics and investigations. Transfer Status: Transferable to CSU, see counselor for limitations.

**ADJUS 18** 3.0 units
Police Field Operations
3.0 hours lecture
Grading: letter grade
The history and development of patrol philosophy, planning for field activities to include the functions of patrol, traffic and other preliminary investigative duties of the field officer are discussed. Emphasizes techniques for planning patrol activities, handling complaints and requests for services, mechanics of field interviews, searches and arrests, the handling of traffic related problems, civil and domestic disturbances and other community crime incidents. Transfer Status: Transferable to CSU, see counselor for limitations.

**ADJUS 19** 3.0 units
Fingerprint Classif & Identification
3.0 hours lecture
Grading: letter grade
Emphasizes the basics of fingerprinting, pattern interpretation, classification, sequencing and file searching based on the Henry Numerically Coded Formula and National Crime Information Center systems. Develop, photograph and lift fingerprints, prepare court displays and expert testimony.
Courses of Instruction

Transfer Status: Transferable to CSU, see counselor for limitations.

**ADJUS 20** 3.0 units
Introduction to Corrections
3.0 hours lecture
Grading: letter grade
A survey of the correctional science field. Historical development; current theory and practice; explanations of criminal behavior; the functions and objectives of the criminal justice system concerned with the institutional, probation and parole processes as they modify the offender’s behavior and career opportunities are discussed.
Transfer Status: Transferable to CSU, see counselor for limitations.

**ADJUS 22** 3.0 units
Institutional Correction
3.0 hours lecture
Grading: letter grade
Covers the historical overview of correctional development in institutions and the community, methods of prisoner classification, functional treatments, the basics of inmate research, institutional programming and functions, post-institutional treatment and corrections as a career.
Transfer Status: Transferable to CSU, see counselor for limitations.

**ADJUS 24** 3.0 units
Introduction to Private Security
3.0 hours lecture
Grading: letter grade
Covers fundamentals of private security, laws governing certification and the authority of private police, assessing cost effectiveness in the security of the home, industry and government contract services, the basic procedures and techniques of physical security for documents, property and facilities including the principles of theft control and preliminary investigation.
Transfer Status: Transferable to CSU, see counselor for limitations.

**ADJUS 25** 3.0 units
Intro to Private Security Investigation
3.0 hours lecture
Grading: letter grade
Introduces the techniques and processes used in the private security sector, security investigation ethics and requirements, legal and technical aspects of investigations, information systems and techniques for specialized investigations.
Transfer Status: Transferable to CSU, see counselor for limitations.

**ADJUS 30** 3.0 units
Risk Management/Assets Protection 1
3.0 hours lecture
Grading: letter grade
A review of new technology, techniques and statutes in the management of losses for the protection of private and public agencies. Recap loss control techniques using insurance as a secondary form of protection and insurance controls such as bonding, workers compensation and OSHA regulations.
Transfer Status: Transferable to CSU, see counselor for limitations.

**ADJUS 32** 3.0 units
Risk Management/Assets Protection 2
3.0 hours lecture
Grading: letter grade
The development and implementation of management policies and procedures in managing losses for private and public agencies. The problems of employee fraud and dishonesty, contingency planning for decreasing industrial accidents, the use of auditing in crime detection and the use of human actions in accident problems concerning losses are discussed.
Transfer Status: Transferable to CSU, see counselor for limitations.

**ADJUS 40** 3.0 units
Street Gangs and Law Enforcement
3.0 hours lecture
Grading: letter grade
Provides an overview of the street gang issue: history, gang dynamics, criminal activities, identification of specific gang characteristics, cultural differences between gangs, narcotics and gang philosophy. Emphasizes law enforcement involvement, intervention, prosecution and intelligence.
Transfer Status: Transferable to CSU, see counselor for limitations.

**ADJUS 45** 3.0 units
Drug Abuse and Law Enforcement
3.0 hours lecture
Grading: letter grade
Creates an awareness of the types of drugs, addiction, history of drug use, crime connection and general symptoms of drug usage. For those pursuing a career in law enforcement. Emphasizes identification of drug classifications and investigation of drug trafficking.
Transfer Status: Transferable to CSU, see counselor for limitations.

**ADJUS 61AD** 1.0 unit
Defensive Tactics
0.7 hour lecture, 1.3 hours laboratory
Grading: letter grade
Teaches protection against persons with dangerous and deadly weapons, demonstration and drill in a limited number of holds and come-alongs, restraint of prisoners and the mentally ill, fundamental use of the baton, disarming methods and transportation of prisoners. For students whose objective is a career in law enforcement.
Transfer Status: Transferable to CSU, see counselor for limitations.

**ADJUS 62AB** 1.0 unit
Firearms
3.0 hours laboratory
Grading: letter grade
Provides a background on the legal and moral aspects of the use of firearms; develops competence and proper safety procedures and familiarizes students with special weapons, chemical agents and protective devices used in law enforcement.
Transfer Status: Transferable to CSU, see counselor for limitations.

**ADJUS 201** 0.5 unit
Civilian Employee Orientation
0.9 hour lecture
Grading: letter grade or credit/no credit
Courses of Instruction

Designed to orient civilians employed by law enforcement agencies to the policies and procedures of police organizations. Covers the various divisions within police departments and the roles employers have in the success of the organization.

**ADJUS 210** 2.0 units
**Police Services Assistant Training**
4.4 hours lecture
Grading: credit/no credit
Provides the basic training necessary for the civilian position of police services assistant for local law enforcement agencies. Includes report writing, court procedures and testimony, radio codes and procedures, interview techniques, accident investigation and other skills necessary for this career. Emphasizes career preparation.

**ADJUS 231** 2.0 units
**Jail Operations — Level 1**
6.0 hours lecture, 0.7 hour laboratory
Grading: credit/no credit
Teaches basic jail operations for in-service and pre-service students preparing for employment in jails and prisons. Stresses all phases of jail operations, including legal aspects and stress management.

**ADJUS 242** 2.0 units
**Arrest and Firearms**
4.4 hours lecture
Grading: credit/no credit
Covers the laws, policies and procedures used by peace officers in making arrests and in handling firearms. Meets the requirements of Section 832 of the Penal Code. Certified by the California Commission on Peace Officer Standards and Training. Designed for those employed in security with peace officer status.

**ADJUS 250** 16.0 units
**Basic Law Enforcement Training**
34.6 hours lecture, 18.7 hours laboratory
Grading: credit/no credit
Includes: basic in-service training in cooperation with the Long Beach Police Academy covering the fundamentals of law enforcement, administration of justice, criminal law, evidence, investigations, patrol procedures, traffic control, juvenile law and procedures, defensive tactics, firearms, first aid and police-community relations. Meets the requirements of the California Commission on Peace Officers Standards and Training. Designed for the basic certificate.

**ADJUS 253** 3.0 units
**Understanding Domestic Violence**
3.0 hours lecture
Grading: letter grade
Offers insights into the causes, behaviors and problems associated with domestic violence. Addresses the who, what and why of this behavior. Covers the subject from the law enforcement perspective. Designed for those interested in or working in the fields of criminal justice or helping services.

**ADJUS 255** 3.0 units
**Introduction to Forensics**
3.0 hours lecture
Grading: letter grade
This course is an introduction to multiple contemporary scientific methodologies utilized in the development of criminal case investigations. This class is appropriate to administration of justice majors, and others with a specific interest in forensic methods.

**ADJUS 269** 3.0 units
**Pre-Employment Preparation for Law Enforcement**
3.0 hours lecture
Grading: credit/no credit
Provides criminal justice career information to pre-service students. Emphasizes the preparation of students to satisfactorily complete law enforcement pre-employment testing, including written exams, oral boards and physical agility requirements.

**ADJUS 271AD** 2.0 units
**Work Experience — Admin of Justice**
1.0 hour lecture, 8.3 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: credit/no credit
An extension of vocational learning experiences through employment in work experience directly related to the occupational goal or career for which the student college program is designed. One unit of credit shall be granted for every 75 hours per semester the student is employed.

**ADJUS 272AD** 3.0 units
**Work Experience — Admin of Justice**
1.0 hour lecture, 8.3 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: credit/no credit
An extension of vocational learning experiences through employment in work experience directly related to the occupational goal or career for which the student college program is designed. One unit of credit shall be granted for every 75 hours per semester the student is employed.

**ADJUS 273AD** 4.0 units
**Work Experience — Admin of Justice**
1.0 hour lecture, 12.5 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: credit/no credit
An extension of vocational learning experiences through employment in work experience directly related to the occupational goal or career for which the student college program is designed. One unit of credit shall be granted for every 75 hours per semester the student is employed.

**ADJUS 408** 1.5 units
**Plainclothes Operation**
1.4 hours lecture, 0.8 hour laboratory
Grading: credit/no credit
This is an in-service course designed for detectives with less than two years experience. The course covers surveillance, equipment, weapon techniques, search warrant preparation/service and officer-involved shootings.

**ADJUS 410** 1.5 units
**Single Officer Car Course**
1.1 hours lecture, 1.1 hours laboratory
Grading: credit/no credit
Designed to prepare peace officers to work in a one-person car. One-person searches, stops, use of force and other officer survival topics will be studied. Designed for professionals in the criminal justice system.
Courses of Instruction

ADJUS 415 2.0 units
Community Police Academy
2.7 hours lecture
Grading: credit/no credit
Designed for members of the community who wish to learn more about the local municipal police department. Includes an overview of the duties, responsibilities and personnel of the various units within the department. Includes site visits and hands-on experience with many of the activities of the department.

ADJUS 420 4.0 units
Police Field Operations: Motor Trng II
2.2 hours lecture, 6.6 hours laboratory
Grading: credit/no credit
Teaches motor officer candidates the skill points of traffic law enforcement on a police motorcycle. Covers patrol tactics, traffic problems and techniques of motorcycle riding. Designed for professionals in police agencies.

ADJUS 425 0.5 unit
Radar Operator
0.6 hour lecture
Grading: credit/no credit
Prepares a police officer to conduct radar operations and stops in traffic situations. Includes the history of radar use, basic principles of radar, legal considerations and court presentations. Designed for police professionals.

ADJUS 445 0.5 unit
Advanced Law Enforcement Training
0.6 hour lecture
Prerequisite: ADJUS 250
Grading: credit/no credit
Advanced education and training for experienced police officers in the current philosophy, policies and procedures of modern law enforcement agencies. Meets the requirements of the Commission on Peace Officers Standards and Training. Reflects changes in Penal Code and local law enforcement policy.

ADJUS 446 6.0 units
Management Development
6.0 hours lecture
Grading: credit/no credit
Intro to the principles of management and techniques of leadership in a modern law enforcement agency. Designed for experienced police officers with the rank of lieutenant or above.

ADJUS 450 2.0 units
Basic Police Training: Lateral Entry
2.7 hours lecture, 1.6 hours laboratory
Grading: credit/no credit
An update of basic police training, to include data of local interest such as policies, procedures and laws for this area. Not applicable toward degree if nine units have already been given for basic training.

ADJUS 456 1.5 units
Law Enforcement Team Building
1.5 hours lecture
Grading: credit/no credit
An intro to the principles and practices of team building in a modern urban law enforcement agency.

ADJUS 457 3.0 units
Law Enforcement Instructor Development
3.3 hours lecture
Grading: letter grade or credit/no credit
Prepares a person to teach principles of learning, an intro to communication, task analysis, instructional objectives, lesson plans, testing and evaluation of the student. Develop skills through oral reporting and structuring of course outlines.

ADJUS 463 0.5 unit
Basic MP-5 Submachine Gun
1.3 hours laboratory
Grading: credit/no credit
This course is designed to teach the necessary components for understanding the full use of the MP-5 sub-machinegun. It presents firearms safety and legal issues, history, development, assembly/disassembly, function, maintenance, proper stance, reload, malfunction and drug & armor drills, modes of fire, moving targets, firing on the move and live fire qualifications.

ADJUS 464 0.5 unit
Motor Officer Recertification
0.3 hour lecture, 2.0 hours laboratory
Grading: credit/no credit
This course is designed for recertification of police motor officers. It includes practicals and on-going traffic officer training. The course meets the California Commission on Peace Officers Standards and Training guidelines for recertification.

AIR CONDITIONING AND REFRIGERATION (AC_R)

AC_R 211 10.0 units
Air Condition/Refrigeration Fundamentals
5.0 hours lecture, 15.0 hours laboratory
Grading: letter grade or credit/no credit
The beginning course of a four-semester program for persons wishing to become technicians in domestic and/or commercial air conditioning and refrigeration. Includes shop safety practices, terminology, pressure/temperature relationships, heat transfer, analysis of components and complete systems, employee and employer relationships and selected field trips.

AC_R 212 10.0 units
Electrical Theory/Component Applications
5.0 hours lecture, 15.0 hours laboratory
Grading: letter grade or credit/no credit
Covers electrical systems found in heating, refrigeration and air conditioning installations and equipment. Includes the interpretation of schematic wiring diagrams, electrical components and applications.

AC_R 213 10.0 units
Psychrometrics Duct & Load Calculations
5.0 hours lecture, 15.0 hours laboratory
Prerequisite: AC_R 211 or 212
Grading: letter grade or credit/no credit
Covers the operation and installation or use of different types of components and equipment, piping, psychrometrics, heating and cooling loads, duct sizing and layout.

AC_R 214 10.0 units
Troubleshoot Total Comfort Systems
5.0 hours lecture, 15.0 hours laboratory
Prerequisite: AC_R 213
Grading: letter grade or credit/no credit
Courses of Instruction

Covers troubleshooting of both electrical and mechanical equipment, electrical and pneumatic controls, start up, operation and service.

**AC_R 220** 3.0 units

**Refrigeration Fundamentals**
2.5 hours lecture, 1.5 hours laboratory
Prerequisite: AC_R 220
Grading: letter grade or credit/no credit
This course is a basic study of vapor compression refrigeration cycle and system components. It includes shop safety practices, terminology, pressure/temperature relations, and heat transfer. System dehydration, recovery techniques, charging of refrigerants will also be covered. The material in this course will reflect the current Environmental Protection Agency (EPA) requirements of Section 608 of the Clean Air Act of 1990.

**AC_R 223** 3.0 units

**Gas Heating Fundamentals**
2.5 hours lecture, 1.5 hours laboratory
Recommended Preparation: AC/R 220
Grading: letter grade or credit/no credit
This course will cover the theory, operation and application of natural gas heating systems used in residential and commercial heating installations including the properties of fuel gases, gas combustion, furnace construction pilot proving devices and troubleshooting systems.

**AC_R 226** 2.0 units

**Air Properties and Measurement**
2.0 hours lecture
Prerequisite: AC_R 220
Grading: letter grade or credit/no credit
This course investigates the air side operating theory and application of comfort cooling systems. This course will include the psychometrics to include the measurement and air distribution through duct design and component identification.

**AC_R 229** 3.0 units

**Heat Pumps**
2.5 hours lecture, 1.5 hours laboratory
Grading: letter grade or credit/no credit
This course will cover the theory, operation and application of heat pump systems used in residential and commercial heating and cooling installations. The heat pump refrigeration cycle, reversing valves, defrost methods, supplemental heat, airflow and thermostats will also be covered.

**AC_R 230** 3.0 units

**Electrical Fundamentals**
2.5 hours lecture, 1.5 hours laboratory
Recommended Preparation: AC/R 220
Grading: letter grade or credit/no credit
This course includes the basic concepts of electrical principles as used in air conditioning and refrigeration. The development of schematic diagrams, the application of electrical components, the electrical sequence of operation, and troubleshooting of electrical systems will be covered.

**AC_R 233** 3.0 units

**Commercial Electrical for HVAC**
3.0 hours lecture
Prerequisite: AC_R 230
Grading: letter grade or credit/no credit
This course covers electrical systems found in commercial heating, refrigeration and air conditioning systems. It will also include time clocks, defrost systems, three phase transformers, three phase motors, timers, sequencers, starting methods and troubleshooting of commercial electrical systems.

**AC_R 236A** 2.5 units

**Automobile Air Conditioning**
2.0 hours lecture, 1.5 hours laboratory
Prerequisite: AC_R 220
Grading: letter grade or credit/no credit
This course covers tools, equipment, refrigeration fundamentals, electrical systems, air distribution, installation and repair of automobile air conditioning. System dehydration, recovery techniques, charging of refrigerants will also be covered. The material in this course will reflect the current Environmental Protection Agency (EPA) requirements of Section 609 of the Clean Air Act of 1990.

**AC_R 236B** 2.0 units

**Advanced Auto Air Conditioning**
2.0 hours lecture, 1.5 hours laboratory
Prerequisite: AC_R 236A
Grading: letter grade or credit/no credit
This course covers tools and equipment of advanced refrigeration, electrical systems, air distribution, installation and repair of automobile air conditioning. System dehydration, recovery techniques, charging of refrigerants will also be covered. The material in this course will reflect the current Environmental Protection Agency (EPA) requirements of Section 609 of the Clean Air Act of 1990.

**AC_R 240** 4.0 units

**Advanced Air Conditioning**
3.0 hours lecture, 3.0 hours laboratory
Prerequisite: AC_R 213
Grading: letter grade or credit/no credit
Covers the measurement of air and water flow, KW, circulation of EER and COP and solid state controls. Will wire and troubleshoot complex electrical controls for refrigeration and air conditioning systems.

**AC_R 271AD** 2.0 units

**Work Experience-Air Cond & Refri**
1.0 hour lecture, 4.1 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
Satisfactory completion of at least 7 units per semester including work experience and work experience issues. Vocational learning experiences through employment in work experience directly related to the industry.

**AC_R 272** 1.5 units

**Fans & Fan Applications**
1.5 hours lecture
Grading: letter grade or credit/no credit
An overview of fans and practical applications. The emphasis is on correction of field problems, maintenance and repair of operating equipment, system balancing and noise control.

**AC_R 272AD** 3.0 units

**Work Experience-Air Cond & Refri**
1.0 hour lecture, 8.3 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Courses of Instruction

Grading: letter grade or credit/no credit
Satisfactory completion of at least 7 units per semester including work experience and work experience issues.
Vocational learning experiences through employment in work experience directly related to the industry.

AC_R 273AD 4.0 units
Work Experience-Air Cond & Refri
1.0 hour lecture, 12.5 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
Satisfactory completion of at least 7 units per semester including work experience and work experience issues.
Vocational learning experiences through employment in work experience directly related to the industry.

AC_R 400A 3.0 units
Uniform Mechanical Code I
3.0 hours lecture
Grading: letter grade or credit/no credit
Learn to better understand and interpret the code ordinances involving the installation of residential heating, air conditioning and venting systems.

AC_R 400B 3.0 units
Uniform Mechanical Code II
3.0 hours lecture
Prerequisite: AC_R 400A
Grading: letter grade or credit/no credit
For the individual who deals with the design of heating, cooling, ventilation and refrigeration in large complex buildings. Covers areas where the building and mechanical codes overlap.

AC_R 420A 6.0 units
Air Conditioning/Refrig Service & Repair
6.0 hours lecture
Grading: letter grade or credit/no credit
Operation, maintenance, repair and installation of domestic and commercial air conditioning and refrigeration equipment and systems.

AC_R 420B 6.0 units
Air Conditioning/Refrig Service & Repair
6.0 hours lecture
Prerequisite: AC_R 420A
Grading: letter grade or credit/no credit
Operation, maintenance, repair and installation of domestic and commercial air conditioning and refrigeration equipment and systems.

AC_R 420C 6.0 units
Air Conditioning/Refrig Service & Repair
6.0 hours lecture
Prerequisite: AC_R 420B
Grading: letter grade or credit/no credit
Operation, maintenance, repair and installation of domestic and commercial air conditioning and refrigeration equipment and systems.

AC_R 420D 6.0 units
Air Conditioning/Refrig Service & Repair
6.0 hours lecture
Prerequisite: AC_R 420C
Grading: letter grade or credit/no credit
Operation, maintenance, repair and installation of domestic and commercial air conditioning and refrigeration equipment and systems.

AC_R 421A 3.0 units
Elect Controls for Refrig/Air Cond/Heat
3.0 hours lecture
Grading: letter grade or credit/no credit
Selection, application and maintenance of automatic controls to heating, ventilating and cooling systems.

AC_R 421B 3.0 units
Pneumatic Controls for HVAC
3.0 hours lecture
Prerequisite: AC_R 421A
Grading: letter grade or credit/no credit
Teaches selection, application and maintenance of automatic controls to heating, ventilating and cooling systems.

AC_R 422 3.0 units
Air Conditioning System Design and Installation
3.0 hours lecture
Grading: letter grade or credit/no credit
Terminology, system design, equipment application, estimating and selection of equipment used in residential and commercial applications of air conditioning, heating and ventilating systems. For service technicians, industry sales personnel, industry supply house personnel, installers, utility and school district personnel, designers of buildings and residences.

AC_R 450A 5.0 units
Transport Refrigeration
4.0 hours lecture, 3.0 hours laboratory
Grading: letter grade
Intro to transport refrigeration including application, function, power supply, basic operation safety and troubleshooting of mechanical and electrical components.

AC_R 450B 5.0 units
Advanced Transport Refrigeration
4.0 hours lecture, 3.0 hours laboratory
Prerequisite: AC_R 450A
Grading: letter grade
Advanced transport refrigeration including application, function, power supply, basic operation safety and troubleshooting of mechanical and electrical components.

ALLIED HEALTH (AH)

AH 50 2.0 units
Introduction to Health Care Careers
2.0 hours lecture
Grading: credit/no credit
Develop a basic knowledge of the health care field, present and future careers and common health care procedures.
Transfer Status: Transferable to CSU, see counselor for limitations.

AH 60 3.0 units
Medical Terminology
3.0 hours lecture
Grading: letter grade
Develop a comprehensive medical vocabulary, including spelling, definition and pronunciation of terms related to the body systems and medical specialties.
Transfer Status: Transferable to CSU, see counselor for limitations.
### Courses of Instruction

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
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<tbody>
<tr>
<td><strong>AH 61</strong></td>
<td>2.0</td>
<td>Integration of Patient Care</td>
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<tr>
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<td>1.0 hour lecture, 3.0 hours laboratory</td>
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<td>Grading: letter grade</td>
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Develop the fundamental aspects of interpersonal relations as related to the health technologies, as well as skills in selected patient care procedures. Designed for students in the Radiologic Technology (Medical Imaging) program.

**Transfer Status:** Transferable to CSU, see counselor for limitations.

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<tr>
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<tbody>
<tr>
<td><strong>AH 70</strong></td>
<td>0.5</td>
<td>Infection Control in Health Care</td>
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<tr>
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<td>0.5 hour lecture</td>
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<td>Grading: letter grade</td>
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Application of infection control/epidemiology principles in various health care settings. Includes a thorough review of federal, state and local regulations related to health care and biohazardous waste. Critical thinking is developed regarding use of supplies.

**Transfer Status:** Transferable to CSU, see counselor for limitations.

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<tr>
<td><strong>AH 206A</strong></td>
<td>3.0</td>
<td>Beginning Medical Transcription</td>
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<tr>
<td></td>
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<td>2.0 hours lecture, 3.0 hours laboratory</td>
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<td>Recommended Preparation: AH 60 (may be taken concurrently) and type 35 WPM.</td>
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<td>Grading: letter grade or credit/no credit</td>
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Designed to train students for employment as medical transcriptionists in hospitals, clinics and private physicians’ office settings. Lectures, demonstrations and use of classroom dictation equipment provide practical experience.

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<tr>
<td><strong>AH 206B</strong></td>
<td>3.0</td>
<td>Advanced Medical Transcription</td>
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<tr>
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<td>2.0 hours lecture, 3.0 hours laboratory</td>
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<td></td>
<td></td>
<td>Recommended Preparation: AH 206A, AH 220 or AH 222</td>
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<td>Grading: letter grade or credit/no credit</td>
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Enables students who completed one semester of beginning medical transcription to increase their transcribing speed while learning more advanced techniques. Focuses on practice transcription of widely varied medical specialties.

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<tbody>
<tr>
<td><strong>AH 210</strong></td>
<td>1.0</td>
<td>Math for Medications</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.0 hour lecture</td>
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<td>Grading: letter grade or credit/no credit</td>
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</table>

Designed to enable the student to acquire the knowledge to understand and solve various math problems basic to computing drug problems.

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<tr>
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<th>Units</th>
<th>Course Title</th>
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<tbody>
<tr>
<td><strong>AH 220</strong></td>
<td>1.5</td>
<td>Phlebotomy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.5 hour lecture, 1.5 hours laboratory</td>
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<tr>
<td></td>
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<td>Grading: credit/no credit</td>
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</tbody>
</table>

Instruction in the principles and practices of blood specimen collection as required by the health care regulations in California. Completion of the course meets the following requirements: 1) complete didactic and partial practice to qualify for the examination for Certified Phlebotomy Technician I as defined by the Department of Health Services; 2) complete didactic and partial practice for Medical Assistant certification as defined by the California Society of Medical Assistants; 3) complete didactic and practice for Blood Withdrawal certificate as defined by the Board of Vocational Nursing and Psychiatric Technicians.

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<tr>
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<tbody>
<tr>
<td><strong>AH 220AD</strong></td>
<td>1.0</td>
<td>Phlebotomy Practicum</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.0 hours laboratory</td>
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<tr>
<td></td>
<td></td>
<td>Corequisite: AH 220</td>
</tr>
</tbody>
</table>

Recommended Preparation: All health and safety requirements of clinical laboratories.

Grading: credit/no credit

This course provides the clinical laboratory experience in phlebotomy required to qualify for the examination of Certified Phlebotomy Technician I. This course and AH 220 are approved as a phlebotomy program by the State of California Department of Health Services Field Laboratory Services.

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<tr>
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<th>Course Title</th>
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<tbody>
<tr>
<td><strong>AH 221AD</strong></td>
<td>0.5</td>
<td>Health Promotion Practicum</td>
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<tr>
<td></td>
<td></td>
<td>1.5 hours laboratory</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prerequisite: Health evaluation, current malpractice insurance, and current CPR card for health care providers. CRT Certification, licensed as a RN or VN, or concurrent enrollment in a health care program.</td>
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<td>Grading: credit/no credit</td>
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</table>

Instruction and guidance in the application of the concepts and activities of health promotion. Opportunities will be provided to assist with community programs and to develop individual programs to meet college and community needs.

<table>
<thead>
<tr>
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<th>Units</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td><strong>AH 222</strong></td>
<td>1.0</td>
<td>Intravenous Therapy</td>
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<tr>
<td></td>
<td></td>
<td>0.5 hour lecture, 1.5 hours laboratory</td>
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<tr>
<td></td>
<td></td>
<td>Prerequisite: RT 12 &amp; AH 61 or VOCN 286 &amp; VOCN 290A or ADN 11B &amp; ADN 11BL or CRT Certificate or licensed as a VN or RN. Current CPR card for health care providers and malpractice insurance.</td>
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<td></td>
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<td>Grading: credit/no credit</td>
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</tbody>
</table>

Instruction and supervised practice in the concepts and techniques of intravenous therapy. Designed to meet: 1) the requirements of the California Board of Vocational Nursing and Psychiatric Technicians for “Intravenous Therapy” certifications for LVNs and 2) partially fulfills the requirements of the California Health and Safety Code Section 106985 pertaining to Radiologic Technologists.

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<tr>
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<th>Course Title</th>
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<tbody>
<tr>
<td><strong>AH 225</strong></td>
<td>0.5</td>
<td>Basic Arrhythmia Recognition</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.5 hour lecture</td>
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<tr>
<td></td>
<td></td>
<td>Prerequisite: ADN 11B and ADN 11BL or VOCN 278B and VOCN 278BL or EMT 251 and EMT 251L or AH61</td>
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<td>Grading: credit/no credit</td>
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</tbody>
</table>

Instruction in the interpretation of the single lead electrocardiogram. Includes the relationship between cardiac physiology and the development of cardiac rhythm, as well as the correlation of electrocardiogram status to patient condition and expected treatment. Designed for health care workers or students interested in the care of patients with cardiac problems. Successful completion prepares the student for the ECG component of the American Heart Association Advanced Cardiac Life Support class. Suitable for registered nurses, vocational nurses, radiologic technologists and emergency medical technicians.

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<tbody>
<tr>
<td><strong>AH 260</strong></td>
<td>3.0</td>
<td>Preparation for Medical Terminology</td>
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<tr>
<td></td>
<td></td>
<td>3.0 hours lecture</td>
</tr>
</tbody>
</table>

This course provides understanding to current medical terminology and abbreviations for use in various health care settings.
Grading: letter grade
An intro to medical vocabulary, including spelling, definition and pronunciation of terms related to the nine body systems. May prepare student for AH 60.

AH 276 1.0 unit
Health Care Law
1.0 hour lecture
Grading: letter grade
Develop a basic understanding of health care laws, ethics and human relations.

AH 280 2.0 units
Health Unit Secretary
2.0 hours lecture
Prerequisite: AH 60 (may be taken concurrently)
Corequisite: AH280L
Grading: letter grade
Prepare for an entry-level position in the health care clerical field. Emphasizes basic procedures utilized by the health unit secretary, including medical order transcription, chart forms and procedures, communication, supply ordering, hospital safety, legal constraints and computer application in the health care facility.

AH 280L 1.0 unit
Health Unit Secretary, Laboratory
4.0 hours laboratory
Prerequisite: AH 280
Grading: credit/no credit
Prepare for an entry-level position in the health care clerical field. Practice application of basic procedures utilized by the unit secretary, including medical order transcription, chart forms and procedures, communication, supply ordering, hospital safety, legal constraints and computer application in the health care facility.

AH 602 0.0 unit
Cardio Pulmonary Resuscitation
0.1 hour lecture , 0.3 hour laboratory
Grading: LBCC Non-Graded Course
Develop basic skills in the assessment of, need for and administration of cardio-pulmonary resuscitation. Intended for persons who need this skill in their employment. Typically offered for nine hours.

ANATOMY (ANAT)

ANAT 1 4.0 units
Human Anatomy
3.0 hours lecture , 3.0 hours laboratory
Grading: letter grade or credit/no credit
The study of the structure of the human body. Provides the basic knowledge and lab skills to meet the needs of pre-nursing, physical education, physical therapy and allied majors. Dissection of a cat is required.

ANAT 41 5.0 units
Anatomy & Physiology
4.0 hours lecture , 3.0 hours laboratory
Grading: letter grade or credit/no credit
An intro to the study of the structures and functions of the human body. Stresses basic principles and recent advances and is designed primarily for students not majoring in the life sciences. Not open for credit to students who have completed or are planning to take ANAT 1 and PHYSI 1. Dissection of the fetal pig is required.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ANTHROPOLOGY (ANTHR)

ANTHR 1 (CAN ANTH 2) 3.0 units
Physical Anthropology
3.0 hours lecture
Grading: letter grade or credit/no credit
Focuses on the evolutionary development of the human capacity for culture and its subsequent effects on human biology: the relation of people and animals; the origin and antiquity of humans; fossil humans; principles of heredity and population genetics; the synthetic theory of evolution.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ANTHR 2 (CAN ANTH 4) 3.0 units
Cultural Anthropology
3.0 hours lecture
Grading: letter grade or credit/no credit
Learn the nature, elements and development of culture, emphasizing human cultural groups throughout the world, past and present. Variations in social, economic and political customs, culture change, systems of kinship and family organization, invention, arts, language, current theories of culture and the effects of culture contact will be discussed.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ANTHR 2H 3.0 units
Honors Cultural Anthropology
3.0 hours lecture
Prerequisite: Qualification for the Honors Program
Grading: letter grade or credit/no credit
Learn the nature, elements and development of culture, emphasizing human cultural groups throughout the world, past and present. Variations in social, economic and political customs, culture change, systems of kinship and family organization, invention, arts, language, current theories of culture and the effects of culture contact will be discussed.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ANTHR 3 3.0 units
Intro to Archaeology
3.0 hours lecture
Grading: letter grade or credit/no credit
An intro to archaeology and world prehistory. The study of the prehistoric cultural and social record of Africa, Asia, the Americas and island societies. An intro to the theory, concept and methods used in the study of human prehistory. Presents the development and diverse evolution of human culture.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ANTHR 10 3.0 units
Magic, Witchcraft and Religion
3.0 hours lecture
Grading: letter grade or credit/no credit
A survey of systems of magic, witchcraft and religion from past and present societies around the world. Examines beliefs and practices in cultural settings with respect to the role of the supernatural. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ANTHR 12** 3.0 units

Medical Anthropology
3.0 hours lecture
Grading: letter grade
An intro course which surveys cross-cultural concepts of health, illness and healing. Specific cultural ecological adaptations are shown to strongly influence health and illness in human societies while different etiological concepts with regard to the origin of illness demonstrate a great cultural range of medical beliefs and behaviors. Among other topics, the course will examine health, illness, disease, nutrition, reproduction, culture change and modernization. Transfer Status: Transferable to CSU, see counselor for limitations.

**ARCHITECTURAL DESIGN (ARCHT)**

**ARCHT 60** 8.0 units

Architectural Design
6.0 hours lecture, 6.0 hours laboratory
Recommended Preparation: One year of high school drafting or DRAFT201
Grading: letter grade
A beginning computer aided drafting course that uses AutoCAD 2000i and focuses on developing basic architectural skills. The student will develop basic 2D CAD production drawing skills learning the relationship between plan, section and elevation drawings and use these to produce a preliminary set of production drawings for a building. Learn to solve basic design problems of site analysis, space relationships, roof design, building aesthetics and material selection. Alternative solutions to design problems will be explored using the computer and freehand sketching techniques. The concepts of positive and negative space and the use of line, plane and volume will be used in solving architectural problems. Transfer Status: Transferable to CSU, see counselor for limitations.

**ARCHT 61** 4.0 units

Architectural Design
3.0 hours lecture, 3.0 hours laboratory
Recommended Preparation: One year of high school drafting or DRAFT 201
Grading: letter grade
A beginning computer aided drafting course that uses AutoCAD 2000i and focuses on developing basic architectural skills. Develop basic 2D CAD production drawing skills learning the relationship between plan, section and elevation drawings and produce a preliminary set of production drawings for a building. Learn to solve basic design problems of site analysis, space relationships, roof design, building aesthetics and material selection. (Units and content are one half of ARCHT 60.) Transfer Status: Transferable to CSU, see counselor for limitations.

**ARCHT 62** 4.0 units

Architectural Design
3.0 hours lecture, 3.0 hours laboratory
Prerequisite: ARCHT 61
Grading: letter grade
A beginning computer aided drafting course that uses AutoCAD 2000i and focuses on developing basic architectural skills. Learn to solve basic design problems of site analysis, space relationships, roof design, building aesthetics and material selection. Alternative solutions to design problems will be explored using the computer and freehand sketching techniques. The concept of positive and negative space and the use of line, plane and volume will be used in solving architectural problems. (Units and content are one half of ARCHT 60.) Transfer Status: Transferable to CSU, see counselor for limitations.

**ARCHT 64** 8.0 units

Architectural Design
6.0 hours lecture, 6.0 hours laboratory
Prerequisite: ARCHT 60 or ARCHT 61 and 62
Grading: letter grade
An intermediate computer aided drafting course that uses AutoCAD 2000i. Focuses on developing further the architectural 2D CAD production drawing skills learned in ARCHT 60, with an intro to 3D drawing systems. Develop intermediate 2D CAD production drawings, including plan, elevation, section, roof and foundation drawings for a building. Solve intermediate design problems of site analysis (including parking), space relationships, roof design, building aesthetics, structural concepts and material selection. Structural solutions to design problems will be explored using the computer and freehand sketching techniques. The concepts of lateral forces, vertical forces and various structural systems will be introduced in solving architectural problems. 3D plan oblique drawings and details of the project will be developed. The concepts of tonal values and shade and shadows will be introduced and applied to the drawings. An opportunity to design and build a portable structure may exist in the Spring semester. Transfer Status: Transferable to CSU, see counselor for limitations.

**ARCHT 65** 4.0 units

Architectural Design
3.0 hours lecture, 3.0 hours laboratory
Prerequisite: ARCHT 62 or ARCHT 60
Grading: letter grade
An intermediate computer aided drafting course that uses AutoCAD 2000i. Develop further the architectural 2D CAD production drawing skills learned in ARCHT 60, with an intro to 3D drawing systems. Develop intermediate 2D CAD production drawings, including plan, section, elevation, roof and foundation drawings for a building. Learn to solve intermediate design problems of site analysis (including parking), space relationships, roof design, building aesthetics, structural concepts and material selection. Structural analysis of design problems will be explored using the computer and freehand sketching techniques. (Units and content are one-half of ARCHT 64.) Transfer Status: Transferable to CSU, see counselor for limitations.

**ARCHT 66** 4.0 units

Architectural Design
3.0 hours lecture, 3.0 hours laboratory
Grading: letter grade
Prerequisite: ARCHT 61
A beginning computer aided drafting course that uses AutoCAD 2000i and focuses on developing basic architectural skills. Learn to solve basic design problems of site analysis, space relationships, roof design, building aesthetics and material selection. Alternative solutions to design problems will be explored using the computer and freehand sketching techniques. The concept of positive and negative space and the use of line, plane and volume will be used in solving architectural problems. Transfer Status: Transferable to CSU, see counselor for limitations.
Courses of Instruction

ART (ART)

ART 1 (CAN ART 2) 3.0 units
Art and Civilization
3.0 hours lecture
Grading: letter grade or credit/no credit

ART (ART)

ART 2 (CAN ART 4) 3.0 units
Honors Art and Civilization
3.0 hours lecture
Prerequisite: Qualification for the Honors Program
Grading: letter grade or credit/no credit
Introduces the artistic heritage of western culture, prehistoric through medieval times. Emphasizes the development of art forms reflecting the socio-religious experience and aesthetic sensibilities of the historical periods covered. For art and non-art majors.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 1H (CAN ART 2) 3.0 units
Honors Art and Civilization
3.0 hours lecture
Prerequisite: Qualification for the Honors Program
Grading: letter grade or credit/no credit
Introduces the artistic heritage of western culture, prehistoric through medieval times. Emphasizes the development of art forms reflecting the socio-religious experience and aesthetic sensibilities of the historical periods covered. For art and non-art majors.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 2H (CAN ART 4) 3.0 units
Honors Art and Civilization
3.0 hours lecture
Prerequisite: Qualification for the Honors Program
Grading: letter grade or credit/no credit
Introduces the artistic heritage of western culture, prehistoric through medieval times. Emphasizes the development of art forms reflecting the socio-religious experience and aesthetic sensibilities of the historical periods covered. For art and non-art majors.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 3 3.0 units
Modern and Contemporary Art
3.0 hours lecture
Grading: letter grade or credit/no credit
A survey of modern art from its mid-19th century beginnings to contemporary trends.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 3H 3.0 units
Honors Modern and Contemporary Art
3.0 hours lecture
Prerequisite: Qualification for the Honors Program
Grading: letter grade or credit/no credit
A survey of modern art from its mid-19th century beginnings to contemporary trends.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 4 3.0 units
Tribal Art
3.0 hours lecture
Courses of Instruction

Grading: letter grade or credit/no credit
A survey of the painting, sculpture, architecture and crafts of Black Africa, Australia, Melanesia, Polynesia and Pre-Columbian North America. These traditions will be experienced through lectures, slides, movies, music and artifacts. The relationship of these areas to the mainstream of Western art will also be made.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 4H 3.0 units
Honors Tribal Art
3.0 hours lecture
Prerequisite: Qualification for the Honors Program
Grading: letter grade or credit/no credit
A survey of the painting, sculpture, architecture and crafts of Black Africa, Australia, Melanesia, Polynesia and Pre-Columbian North America. These traditions will be experienced through lectures, slides, movies, music and artifacts. The relationship of these areas to the mainstream of Western art will also be made.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 5 3.0 units
History of Asian Art
3.0 hours lecture
Grading: letter grade or credit/no credit
A comprehensive survey of Asian art traditions in which the development of painting, sculpture and architecture is examined within a context of religious and cultural backgrounds. The first half surveys the art of India, Islam and Southeast Asia; the second half surveys the art of China, Japan and Korea.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 5H 3.0 units
Honors History of Asian Art
3.0 hours lecture
Prerequisite: Qualification for the Honors Program
Grading: letter grade or credit/no credit
A comprehensive survey of Asian art traditions in which the development of painting, sculpture and architecture are examined within a context of religious and cultural backgrounds. The first half surveys the art of India, Islam and Southeast Asia; the second half surveys the art of China, Japan and Korea.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 6 3.0 units
Art on the Town/Museum Study Visits
3.0 hours lecture, 1.0 hour laboratory
Grading: letter grade or credit/no credit
An overview of the major historical periods in Western art. Meet for slide lectures that introduce a style and the appropriate museum or gallery collection within the Los Angeles and Orange County areas. The following week, students observe the process or its product. For art majors and non-majors. Credit will be earned by completing a worksheet/analysis of selected works of art.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 7 3.0 units
Art on the Town/Studio & Gallery Visits
3.0 hours lecture, 1.0 hour laboratory
Grading: letter grade or credit/no credit
Intro to the materials and techniques involved in making art through a broad survey of art styles, sources and individual artists. On alternate weeks a slide-lecture will introduce the steps involved in the artistic process and an intro to selected art styles and artists. On a field trip the following week, students observe the process or its product. For art majors and non-majors. Credit will be earned by completing a worksheet/analysis of selected works of art.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 8 3.0 units
Art on the Town/Special Exhibits
3.0 hours lecture, 1.0 hour laboratory
Grading: letter grade or credit/no credit
Part of a program which introduces students to regional and cultural exhibits of world art not available on a continuing basis. Provides a broad-based overview on art whereby students can apply art principles, identify stylistic characteristics and recognize historical context. On alternate weeks a slide-lecture will introduce the content of the exhibit and methods of analysis. A field trip occurs the following week.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 9 3.0 units
Introduction to Art
2.0 hours lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
Art 9 provides a common sense approach to exploring a student’s innate creative ability, the influence of art on everyday life and how art is made. Designed for the non-art major. Art 9 is recommended for teaching majors.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 10 3.0 units
Art Appreciation
3.0 hours lecture
Grading: letter grade or credit/no credit
An intro to the major themes and concepts that have been the source for artistic expression in the visual arts. Ideas are viewed from a thematic exploration of art to express aesthetically human wants, needs and hopes. Through lecture, visual aids and field trips, become aware of artistic ideas, media and techniques. Designed for the non-art major.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 11 3.0 units
Pre-Columbian Art
3.0 hours lecture
Grading: letter grade or credit/no credit
Pre-Columbian art from Mexico, Central and South America will be explored through the study of major monuments of sculpture, architecture, ceramics, textiles and painting. The slide-lecture format will be complemented by music, films and artifacts. Includes influences of Pre-Columbian art on modern and contemporary artists. For majors and non-art majors.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 11H 3.0 units
Honors Pre-Columbian Art
3.0 hours lecture
**Courses of Instruction**

Prerequisite: Qualification for the Honors Program
Grading: letter grade or credit/no credit
Pre-Columbian art from Mexico, Central and South America will be explored through the study of major monuments, sculpture, architecture, ceramics, textiles and painting. The slide/lecture format will be complemented by music, films and artifacts. Includes influences of Pre-Columbian art on modern and contemporary artists.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ART 15 (CAN ART 8)** 3.0 units

**Beginning Drawing, Overview**
1.0 hour lecture, 2.0 hours laboratory
Grading: letter grade or credit/no credit
An overview of basic drawing fundamentals including the use of color, form and design with an emphasis on the expression of these principles through the use of a variety of drawing media.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ART 16AD** 3.0 units

**Intermediate Drawing**
2.0 hours lecture, 4.0 hours laboratory
Prerequisite: ART 15
Grading: letter grade or credit/no credit
An advanced studio experience, emphasizing the employment of personal experiences as applied to 20th Century concepts and trends.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ART 17AD** 3.0 units

**Illustration I**
2.0 hours lecture, 4.0 hours laboratory
ART 15
Grading: letter grade or credit/no credit
Introduction to illustration and stresses the creative interpretation of subjects, situations and themes within the context of commercial art such as advertising, editorial and institutional. Special emphasis is placed on the creation of illustrations from rough concept through finished artwork. Production, media processes, color analysis and application, portfolio development and presentation are presented. Studio experience in the use of linear perspective to develop illustrative realistic representation is emphasized.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ART 18AD** 3.0 units

**Illustration II**
2.0 hours lecture, 4.0 hours laboratory
ART 15 and ART 17AD
Grading: letter grade or credit/no credit
This course is a continuation of the concepts and techniques presented in Illustration I. Increasingly more advanced illustration projects, techniques, concepts and methods will be presented. Emphasis is placed on the development of original concepts, refinements of techniques, production methods and development and presentation of portfolio-quality artwork. In addition, rendering, or sharp focus drawing techniques will be presented and incorporated in several projects.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ART 19AD** 3.0 units

**Life Drawing**
2.0 hours lecture, 4.0 hours laboratory
Recommended Preparation: ART 15
Grading: letter grade or credit/no credit
Freehand drawing of the human figure emphasizing proportion, anatomy as it affects surface form and gesture. Recommended for those interested in illustration, drawing and painting and art majors interested in transferring to a university.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ART 20AD** 1.5 units

**Life Drawing Overview**
1.0 hour lecture, 2.0 hours laboratory
Prerequisite: ART 15
Grading: letter grade or credit/no credit
Teaches the interpretation of the human figure through a wide range of media and approaches. Explore and defend a variety of drawing media and artistic points of view. Recommended for those interested in interpretative figure drawing, drawing and painting and art majors interested in transferring to a university.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ART 22AD** 1.5 units

**Painting Overview**
1.0 hour lecture, 2.0 hours laboratory
Grading: letter grade or credit/no credit
A study of the fundamentals of form, color and design, emphasizing the expression of these principles through the painting media.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ART 23** 3.0 units

**Beginning Painting**
2.0 hours lecture, 4.0 hours laboratory
Recommended Preparation: ART 15
Grading: letter grade or credit/no credit
Intro studio course emphasizing fundamental techniques and concepts appropriate to the use of color and painting as a significant means of human expression. Required of all art majors.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ART 24** 3.0 units

**Watercolor, Beginning**
2.0 hours lecture, 4.0 hours laboratory
Recommended Preparation: ART 15
Grading: letter grade or credit/no credit
Intro studio course offering an opportunity to explore and develop creative attitudes, values and personal expression in watercolor painting. Investigate unique techniques, methods and tools of the media. Emphasizes
the elements and principles of two-dimensional composition in an imaginative, personal manner. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ART 25AD**  3.0 units

Watercolor, Advanced
2.0 hours lecture, 4.0 hours laboratory
Prerequisite: ART 24
Grading: letter grade or credit/no credit
A study of transparent watercolor painting, its techniques, methods and tools. Includes a study of watercolor approaches, technical “hands on” investigation, criticism and proper display. Designed for both transfer art majors and for personal development. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ART 26AD**  3.0 units

Figure Painting
2.0 hours lecture, 4.0 hours laboratory
Prerequisite: One Semester of ART 19AD
Recommended Preparation: ART 23
Grading: letter grade or credit/no credit
Individual interpretation and expression of the human figure with the emphasis on painting. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ART 27AD**  3.0 units

Intermediate Painting
2.0 hours lecture, 4.0 hours laboratory
Prerequisite: ART 23
Grading: letter grade or credit/no credit
A continuing studio experience designed to take students with the basic skills of painting and introduce them to ideas, concepts and techniques leading to personal expression, experimental media and current trends in art. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ART 28AD**  1.5 units

Portrait Drawing and Painting
1.0 hour lecture, 2.0 hours laboratory
Grading: letter grade or credit/no credit
Development of basic skills in portrait drawing and painting. Includes pen and ink, pastels, charcoal, pencil and painting mediums. Transfer Status: Transferable to CSU, see counselor for limitations.

**ART 30 (CAN ART 16)**  3.0 units

Fundamentals of Art/Volume, Plane & Form
2.0 hours lecture, 4.0 hours laboratory
Grading: letter grade or credit/no credit
Intro to three-dimensional studio experience intended as an investigation of: 1) traditional and non-traditional effects of space and volume and 2) analysis of personal and collective values applicable to the visual arts. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ART 31 (CAN ART 14)**  3.0 units

Fundamentals of Art/Composition & Color
2.0 hours lecture, 4.0 hours laboratory
Grading: letter grade or credit/no credit
An intro, two-dimensional studio experience investigating traditional and non-traditional effects of shape, line, color, composition and analyzing personal and collective values applicable to the visual arts. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ART 32**  3.0 units

Intermediate Design
2.0 hours lecture, 4.0 hours laboratory
Prerequisite: ART 30 or 31
Grading: letter grade or credit/no credit
A creative studio experience for the student preparing to enter a field of applied design, graphic design, product design or interior design. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ART 33AD**  0.5 unit

Exploration of Decorative Arts
2.0 hours lecture, 4.0 hours laboratory
Recommended Preparation: ART 30 and 31
Grading: letter grade or credit/no credit
Explore various craft media such as metals, wood, papier-maché, plastics, clay and others. Explore several media or focus on one. Allows students to discover their aptitude for a media or technique with minimal accumulation of unit load. Transfer Status: Transferable to CSU, see counselor for limitations.

**ART 34AD**  3.0 units

Applied Design/Crafts
2.0 hours lecture, 4.0 hours laboratory
Grading: letter grade or credit/no credit
An intro to several different types of media in the design and creation of decorative and/or useful objects. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ART 35AD**  3.0 units

Jewelry/Metalsmithing 1
2.0 hours lecture, 4.0 hours laboratory
Recommended Preparation: ART 30 and 31
Grading: letter grade or credit/no credit
This course introduces the aesthetic use of gold, silver, copper, brass and semi-precious stones in jewelry making from both a historical and contemporary point of view. Emphasizes gaining knowledge, confidence and skills to execute one’s own designs. Transfer Status: Transferable to CSU, see counselor for limitations.

**ART 36AD**  3.0 units

Jewelry/Metalsmithing 2
2.0 hours lecture, 4.0 hours laboratory
Recommended Preparation: ART 30 and 31
Grading: letter grade or credit/no credit
This course introduces the aesthetic use of gold, silver, copper, brass and semi-precious stones in jewelry making from both a historical and contemporary point of view. Emphasizes gaining knowledge, confidence and skills to execute one’s own designs. Transfer Status: Transferable to CSU, see counselor for limitations.

**ART 37AD**  3.0 units

Jewelry/Metalsmithing 3
2.0 hours lecture, 4.0 hours laboratory
Recommended Preparation: ART 30 and 31
Grading: letter grade or credit/no credit
Intro to the basic hollowware techniques of die-forming, raising, chasing and repoussé. Transfer Status: Transferable to CSU, see counselor for limitations.
Courses of Instruction

ART 38AD 3.0 units
Jewelry/Metalsmithing 4
2.0 hours lecture, 4.0 hours laboratory
Prerequisite: One semester of ART 35AD
Grading: letter grade or credit/no credit
A special studies approach to metal focusing upon areas introduced in ART 35AD, 36AD, 37AD.
Transfer Status: Transferable to CSU, see counselor for limitations.

ART 41 3.0 units
Introduction to Computer Graphics
2.0 hours lecture, 4.0 hours laboratory
Grading: letter grade or credit/no credit
Will demystify computer graphics for beginners and give a broad overview of the concepts involved in selected computer art programs. Explains computer terminology, the disk system, keyboard and art related peripheral devices.
Transfer Status: Transferable to CSU, see counselor for limitations.

ART 42 3.0 units
Intro/3D & Multimedia Computer Graphics
2.0 hours lecture, 4.0 hours laboratory
Prerequisite: ART 41
Recommended Preparation: ART 30
Grading: letter grade or credit/no credit
An intro to computer graphic production for the areas of three dimensional and time based electronic media. Emphasizes the unique characteristics of three and four dimensional realities as presented in electronic media. Explore and exploit the distinct visual characteristics of virtual dimensions in both time and space.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 43AD 3.0 units
Computer Art for the Internet
2.0 hours lecture, 4.0 hours laboratory
Prerequisite: ART 41
Recommended Preparation: ART 31
Grading: letter grade or credit/no credit
Learn to apply computer graphics to a variety of communication needs. Principles for using colors and forms for charts, graphs, maps, corporate identification, illustrations and advertisements in electronic media will be demonstrated. Apply those principles to the creation of actual projects through hands-on use of a variety of software applications and delivery systems. For art and non-art majors.
Transfer Status: Transferable to CSU, see counselor for limitations.

ART 44AD 3.0 units
Computer Art for Graphic Design
2.0 hours lecture, 4.0 hours laboratory
Prerequisite: ART 41
Recommended Preparation: ART 31
Grading: letter grade or credit/no credit
Learn to use the computer in graphic design, electronic “paste-up” and electronic “layout.” Learn the basics of computer graphic design in preparation of visual communications for both digital and print media. By completing assignments on the computer, students will create pages of text and graphics. Products will be created through the use of a variety of input and output devices. Also explore a variety of network delivery systems. For art and non-art majors.
Transfer Status: Transferable to CSU, see counselor for limitations.

ART 45AD 3.0 units
Computer Art for Drawing and Painting
2.0 hours lecture, 4.0 hours laboratory
Prerequisite: ART 41
Recommended Preparation: ART 31
Grading: letter grade or credit/no credit
Learn to develop electronic thinking electronically which will manifest itself as personal expression through hands-on manipulation of the computer as a creative tool. Explore the possibilities of electronic image creation, alteration and merging in electronic studio drawing and painting exercises that make comparisons and contrasts to traditional studio methods.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 46AD 3.0 units
Computer Art & Design in 3D Modeling
2.0 hours seminar, 4.0 hours laboratory
Prerequisite: ART 41
Recommended Preparation: ART 31 and 42
Grading: letter grade or credit/no credit
Electronically construct three-dimensional objects using perspective, manipulated light sources and the logical development of multiple views. Learn to deal with abstract objects and extrapolate spatial information from 3-D computer graphics. Specific relationships will be made between electronic modeling and the visual arts, in particular, sculpture, ceramics, 3-D graphics, jewelry and metalsmithing.
Transfer Status: Transferable to CSU, see counselor for limitations.

ART 47AD 3.0 units
Computer Art & Design for Multimedia
2.0 hours lecture, 4.0 hours laboratory
Prerequisite: ART 41
Recommended Preparation: ART 31 and 42
Grading: letter grade or credit/no credit
Learn how to electronically create stand alone, as well as interactive multimedia projects. An intro to the skills of producing and developing digital multimedia. Learn the theories of computer-based animation and interactive multimedia design.
Transfer Status: Transferable to CSU, see counselor for limitations.

ART 48AD 3.0 units
Computer Art & Design for TV and Video
2.0 hours lecture, 4.0 hours laboratory
Prerequisite: ART 41
Recommended Preparation: ART 31
Grading: letter grade or credit/no credit
Learn to develop electronic visual images for broadcast requirements on the computer—symbols, pictographs and illustrations with typed titles, brief spot animation of a concept or demonstration of action. Create PSA’s (public service announcements) and station-break formatted art. Also, create program title and credit displays.
Transfer Status: Transferable to CSU, see counselor for limitations.

ART 49AD 3.0 units
Special Studies—Computer Art and Design
2.0 hours lecture, 4.0 hours laboratory
Prerequisite: ART 41
Courses of Instruction

Recommended Preparation: Four courses from ART 43AD, 44AD, 45AD, 46AD, 47AD and 48AD

Grading: letter grade or credit/no credit

For fine arts majors in computer art and design; will allow students to develop personal skills for their chosen specialty in the computer art field. Work independently on projects formulated with faculty assistance.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 50 3.0 units

Ceramics I
2.0 hours lecture , 4.0 hours laboratory
Recommended Preparation: ART 30 and 31
Grading: letter grade or credit/no credit

A creative experience in the visual arts using clay as a medium of expression. Explore basic hand and wheel methods of forming, decorating and glazing three-dimensional ceramic forms and develop a personal awareness and appreciation of the creative process.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 51AD 3.0 units

Ceramics II
2.0 hours lecture , 4.0 hours laboratory
Prerequisite: ART 50
Grading: letter grade or credit/no credit

A creative experience in the visual arts using clay as a medium of expression. Apply knowledge gained in the first course (Ceramics I) to solve more complex problems of forming, decorating and glazing three-dimensional ceramic forms. Expand aesthetic judgment, skills and confidence.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 52AD 3.0 units

Ceramics III
2.0 hours lecture , 4.0 hours laboratory
Prerequisite: ART 51AD
Grading: letter grade or credit/no credit

A creative experience in the visual arts using clay as a medium of expression. Apply knowledge gained in the first course (Ceramics I) to solve more complex problems of forming, decorating and glazing three-dimensional ceramic forms. Expand aesthetic judgment, skills and confidence.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 53AD 3.0 units

Ceramics IV
2.0 hours lecture , 4.0 hours laboratory
Prerequisite: ART 52AD
Grading: letter grade or credit/no credit

A creative experience in the visual arts using clay as a medium of expression. Apply knowledge gained in the first course (Ceramics I) to solve more complex problems of forming, decorating and glazing three-dimensional ceramic forms. Expand aesthetic judgment, skills and confidence.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 54AD 3.0 units

Introduction to Graphic Design
2.0 hours lecture , 4.0 hours laboratory
Prerequisite: ART 31
Grading: letter grade or credit/no credit

An overview of graphic design and its various components, including typography, illustration, photography and layout. The history of graphic design, as well as the relationship and differences among advertising agencies, designers, publishers, typographers and printers. Develop skills in basic inking and tool use while enhancing one’s ability to coordinate type, image and symbol.

Transfer Status: Transferable to CSU, see counselor for limitations.

ART 56AB 1.5 units

Lettering and Typography
1.0 hour lecture , 2.0 hours laboratory
Grading: letter grade or credit/no credit

Lettering, its uses and characteristics, as well as the study of typographic form.

Transfer Status: Transferable to CSU, see counselor for limitations.

ART 60 3.0 units

Beginning Sculpture
2.0 hours lecture , 4.0 hours laboratory
Recommended Preparation: ART 30
Grading: letter grade or credit/no credit

Structured to give students an understanding of the formal elements of sculpture while investigating various materials and processes. Both additive and subtractive methods are explored using clay, plaster and wood, as well as non-traditional materials. Designed to allow students to investigate form, space, material and content through selected projects, readings, field trips, slides and discussions.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 61AD 3.0 units

Intermediate Sculpture
2.0 hours lecture , 4.0 hours laboratory
Prerequisite: ART 60
Grading: letter grade or credit/no credit

An intro to a subjective approach to sculpture emphasizing the development of ideas in relation to personal/individual intent. Investigates both historical and contemporary sculpture. May include carving, casting, modeling, welding, fiberglass lamination, installation and non-studio pieces. Emphasizes the advancement of technical and material skills.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 62AD 3.0 units

Metal Fabrication Sculpture
2.0 hours lecture , 4.0 hours laboratory
Prerequisite: ART 60
Recommended Preparation: ART 30
Grading: letter grade or credit/no credit

Increase understanding of contemporary sculpture through welding, forging and mixed media combination of materials. Learn oxy-acetylene, arc and heli-arc welding, basic forging, bending and cold joint techniques.

Transfer Status: Transferable to CSU, see counselor for limitations.

ART 63AD 3.0 units

Metal Casting Sculpture
2.0 hours lecture , 4.0 hours laboratory
Prerequisite: ART 60
Recommended Preparation: ART 30

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Courses of Instruction

Grading: letter grade or credit/no credit
Learn contemporary sculpture ideas through traditional, industrial and new metal casting processes. Learn styrofoam/greensand, standard investment and ceramic shell for casting aluminum and bronze. Instruction on surfacing includes patina, stains, paints and varnish application.
Transfer Status: Transferable to CSU, see counselor for limitations.

ART 64AD 1.5 units
Sculpture: Carving
1.0 hour lecture, 2.0 hours laboratory
Prerequisite: ART 60
Recommended Preparation: ART 30
Grading: letter grade or credit/no credit
Exploration of representational, abstract and non-objective approaches to carved sculpture in clay, plaster, wood, soap stone or alabaster. Learn proper use of hand tools and related techniques. Development of creativity with carved three-dimensional forms.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 70AD 3.0 units
Printmaking, Silkscreen
2.0 hours lecture, 4.0 hours laboratory
Grading: letter grade or credit/no credit
Intro to the graphic art of printmaking as a means of personal expression. Includes relief prints and serigraphy; glue stencil, paper stencil and photosilkscreen.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 71AD 3.0 units
Printmaking, Intaglio
2.0 hours lecture, 4.0 hours laboratory
Grading: letter grade or credit/no credit
Intro to the graphic art of printmaking as a means of personal expression. Includes etching, engraving, multicolor plates, viscosity, aquatint, photo etching and related methods and mixed media techniques.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 72AD 3.0 units
Printmaking, Advanced
2.0 hours lecture, 4.0 hours laboratory
Prerequisite: One Semester of ART 70AD and 71AD
Grading: letter grade or credit/no credit
Special studies in advanced techniques and/or exploration of collagraphy, photo-silkscreen, etching, intaglio, serigraphy and woodcut. Develop and pursue individualized projects and/or gain competence in edition printing, darkroom techniques and mixed media.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 73AD 1.5 units
Introduction to Printmaking
1.0 hour lecture, 2.0 hours laboratory
Grading: letter grade or credit/no credit
An intro to the graphic art of printmaking as a means of personal expression. Activities include serigraphy, photo-silkscreen and collagraph printing.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 74AD 1.5 units
Advanced Printmaking Overview
1.0 hour lecture, 2.0 hours laboratory
Recommended Preparation: One semester of ART 73AD
Grading: letter grade or credit/no credit
Special studies in advanced techniques and/or exploration of etching, intaglio, serigraphy, photo techniques, woodcut, monoprint and collagraph. Develop and pursue individualized projects and/or gain competence in edition printing, darkroom techniques and mixed media.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 80 3.0 units
Elements of Photography
3.0 hours lecture
Grading: letter grade or credit/no credit
Intro survey of photography as a creative, personal form of expression. Learn to operate a camera, select equipment, choose appropriate subject matter and take and evaluate the final product, the photo.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 81AD 3.0 units
Introduction to Fine Art Photography
2.0 hours lecture, 4.0 hours laboratory
Prerequisite: One semester of PHOT 31AB
Recommended Preparation: ART 31
Grading: letter grade or credit/no credit
Intro to photography as a creative personal form of expression. Emphasis on acquisition of b&w darkroom skills, operation of a camera, concepts and practices of fine art photography. Suitable for students with beginning to advanced photographic skill levels.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 90AD 1.0 unit
Special Projects in Art
1.0 hour lecture, 2.0 hours laboratory
Grading: letter grade or credit/no credit
Exploration and development on an individual basis of special projects within the art field.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 91AD 2.0 units
Studio Projects in Art
2.0 hours lecture, 4.0 hours laboratory
Grading: letter grade or credit/no credit
Exploration and development on an individual basis of special projects within the art field.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 96AD 1.5 units
Fiber, Beginning
1.0 hour lecture, 2.0 hours laboratory
Grading: letter grade or credit/no credit
An intro studio course in fiber techniques, including papermaking, bookmaking, dyeing, basketry and three-dimensional structures.
Transfer Status: Transferable to CSU, see counselor for limitations.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 97AD</td>
<td>1.5</td>
<td>Fiber, Advanced</td>
<td>1.0 hour lecture, 2.0 hours laboratory. Grading: letter grade or credit/no credit. Fiber is viewed as two-and three-dimensional art forms. A non-loom approach method of instruction is used to include spinning, dyeing, felt making, twining, wrapping, needle weaving, basketry and papermaking. Projects include sculpture, wearables and wall hangings. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>ART 292</td>
<td>3.0</td>
<td>Professional Skills for Artists</td>
<td>2.0 hours lecture, 4.0 hours laboratory. Recommended Preparation: Completion of at least three studio art courses. Grading: letter grade or credit/no credit. Emphasizes developing skills and presenting artwork as a professional artist or art director. Skills and topics, covered in an applied approach, include photographing artwork, matting, framing, resume writing, crating and shipping artwork, art competitions, exhibitions, criticism, publicity and slide presentations. Topics include ethics, law, professionalism and grant-writing.</td>
</tr>
<tr>
<td>ART 600</td>
<td>0.0</td>
<td>Two-Dimensional Art Exploration</td>
<td>1.0 hour lecture, 2.0 hours laboratory. Grading: LBCC Non-Graded Course. Develop, improve and explore visual art skills and philosophy related to two-dimensional art work, such as drawing, painting, perspective, rendering, watercolor, life drawing and design. Designed for senior citizens.</td>
</tr>
<tr>
<td>ART 601</td>
<td>0.0</td>
<td>Three-Dimensional Art Exploration</td>
<td>1.0 hour lecture, 2.0 hours laboratory. Grading: LBCC Non-Graded Course. Develop, improve and explore skills and philosophy related to three-dimensional art work, such as sculpture, 3-D design, ceramics, jewelry and metalsmithing, applied design, weaving and fiber. Designed for senior citizens.</td>
</tr>
<tr>
<td>ART 602</td>
<td>0.0</td>
<td>Specialty/Technical Art Exploration</td>
<td>1.0 hour lecture, 2.0 hours laboratory. Grading: LBCC Non-Graded Course. Develop, improve and explore skills and philosophy related to process-oriented art work, such as printmaking, photo and computer art and design. Designed for senior citizens.</td>
</tr>
<tr>
<td>ART 603</td>
<td>0.0</td>
<td>Exploration in Art History</td>
<td>3.0 hours lecture. Grading: LBCC Non-Graded Course. Explore the historical, cultural, and/or thematic aspects of the visual arts through lecture, slides, films and/or museum visits. Designed for senior citizens.</td>
</tr>
<tr>
<td>ASTR 1</td>
<td>3.0</td>
<td>Elementary Astronomy</td>
<td>3.0 hours lecture. Grading: letter grade or credit/no credit. Intro to astronomy, the appearance and physical nature of the sun and the planetary system, stars and stellar systems, the formation and evolution of the universe and its contents. Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>ASTR 1L</td>
<td>2.0</td>
<td>Astronomy Laboratory</td>
<td>1.0 hour lecture, 3.0 hours laboratory. Grading: letter grade or credit/no credit. Learn about observational instruments and techniques and the collection and interpretation of astronomical data. ASTR 1 with 1L meets a physical science lab science requirement. Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>ABODY 211</td>
<td>9.0</td>
<td>Intro to Basic Auto Body Repair</td>
<td>5.0 hours lecture, 13.3 hours laboratory. Grading: letter grade or credit/no credit. Intro to basic auto body repair principles involving theory, safety practices, gas welding and brazing, hot shrinking, hammer welding, grinder, metal finishing, body solder, plastic body filler, primer and spray gun techniques.</td>
</tr>
<tr>
<td>ABODY 212</td>
<td>9.0</td>
<td>Minor Collision Repair</td>
<td>5.0 hours lecture, 13.3 hours laboratory. Recommended Preparation: ABODY211. Grading: letter grade or credit/no credit. Includes safety practices, gas welding and brazing, leading and soldering, hydraulic equipment, metal finishing, upsetting, external and internal body construction and assembly, frame straightening techniques, basic electrical systems and special projects.</td>
</tr>
<tr>
<td>ABODY 213</td>
<td>9.0</td>
<td>Major Collision Repair</td>
<td>5.0 hours lecture, 13.3 hours laboratory. Recommended Preparation: ABODY212. Grading: letter grade or credit/no credit. Includes: safety practices, gas welding and brazing, leading and soldering, hydraulic equipment, metal finishing, upsetting, external and internal body construction and assembly, frame straightening techniques, basic electrical systems and special projects.</td>
</tr>
<tr>
<td>ABODY 214</td>
<td>9.0</td>
<td>Painting Techniques</td>
<td>5.0 hours lecture, 13.3 hours laboratory. Recommended Preparation: ABODY213. Grading: letter grade or credit/no credit. Includes: safety practices, mixing and matching colors, preparation and masking, lacquers and enamels, refinish nomenclature, sealing, spray painting equipment, spray painting, frame straightening techniques and special projects.</td>
</tr>
<tr>
<td>ABODY 419AD</td>
<td>4.0</td>
<td>Auto Body Repair</td>
<td>2.0 hours lecture, 6.0 hours laboratory. Grading: letter grade or credit/no credit. Auto body and chassis repairing, spray painting procedures and safety practices.</td>
</tr>
</tbody>
</table>
Courses of Instruction

**AUTO MECHANICS (AMECH)**

**AMECH 231 9.0 units**

*Engine Repair & Automatic Transmissions*

5.0 hours lecture, 13.3 hours laboratory

Recommended Preparation: High school auto or AMECH421

Grading: letter grade or credit/no credit

Covers safety, tools and fasteners, nomenclature, theory, demonstrations and “hands on” instruction in automobile engines and transmissions. The first six weeks will cover engine repair and the remainder of the class will cover automatic transmissions.

**AMECH 232 9.0 units**

*Brakes and Steering Systems*

5.0 hours lecture, 13.3 hours laboratory

Recommended Preparation: High school auto or AMECH421

Grading: letter grade or credit/no credit

Covers safety, tools and equipment, related math and theory, drum and disc brakes, suspension systems, wheels, tires, steering systems, wheel balancing, front-end alignment, differentials, U-joints and clutches.

**AMECH 233 9.0 units**

*Auto Electrical and Fuel Systems*

5.0 hours lecture, 13.3 hours laboratory

Recommended Preparation: High school auto or AMECH421

Grading: letter grade or credit/no credit

Covers testing and repair of automotive charging and starting systems, ignition systems (conventional and transistorized), fuel systems (carburetion and fuel injection) and oscilloscopes operation (conventional and computer assisted). Preparation for the ASE (Automotive Service Excellence) test.

**AMECH 236 9.0 units**

*Automotive Emission & Computer Control*

5.0 hours lecture, 13.3 hours laboratory

Recommended Preparation: AMECH233

Grading: letter grade or credit/no credit

Covers the California State approved “Clean Air Course” and the operation and testing of the emission and computer control systems. Preparation for the Automotive Service Excellence (ASE) and the State Emission Control License test.

**AMECH 271AD 2.0 units**

*Work Experience — Automotive*

1.0 hour lecture, 4.1 hours laboratory

Corequisite: Enrollment in at least seven units including this course.

Grading: letter grade or credit/no credit

An extension of vocational learning experiences through employment in work experience directly related to the auto industry. One unit of credit shall be granted for every 75 hours per semester of paid work or every 60 hours of volunteer work for a maximum of 12 units.

**AMECH 273AD 4.0 units**

*Work Experience — Automotive*

1.0 hour lecture, 12.5 hours laboratory

Corequisite: Enrollment in at least seven units including this course.

Grading: letter grade or credit/no credit

An extension of vocational learning experiences through employment in work experience directly related to the auto industry. One unit of credit shall be granted for every 75 hours per semester of paid work or every 60 hours of volunteer work for a maximum of 12 units.

**AMECH 280A 2.0 units**

*Special Problems: Automotive*

2.0 hours lecture

Corequisite: Current enrollment in one or more of the following courses: AMECH 231, 232, 233 or 234.

Grading: letter grade or credit/no credit

Provides additional information that will apply to a specific make vehicle.

**AMECH 280B 2.0 units**

*Special Problems: Automotive*

2.0 hours lecture

Corequisite: Current enrollment in one or more of the following courses: AMECH 231, 232, 233 or 234.

Grading: letter grade or credit/no credit

Provides additional information that will apply to a specific make vehicle.

**AMECH 280C 2.0 units**

*Special Problems: Automotive*

2.0 hours lecture

Corequisite: Current enrollment in one or more of the following courses: AMECH 231, 232, 233 or 234.

Grading: letter grade or credit/no credit

Provides additional information that will apply to a specific make vehicle.

**AMECH 280D 2.0 units**

*Special Problems: Automotive*

2.0 hours lecture

Corequisite: Current enrollment in one or more of the following courses: AMECH 231, 232, 233 or 234.

Grading: letter grade or credit/no credit

Provides additional information that will apply to a specific make vehicle.

**AMECH 421 3.0 units**

*Auto Mechanics 1*

2.0 hours lecture, 3.0 hours laboratory

Grading: letter grade or credit/no credit

An intro to the principles of the operation of the modern auto. Provides practical experience in maintenance and repair at the owner-operator level. Consumer awareness is emphasized.

**AMECH 424 3.0 units**

*Auto Air Conditioning*

2.0 hours lecture, 3.0 hours laboratory

Grading: letter grade or credit/no credit
Courses of Instruction

Covers tools and equipment, refrigeration fundamentals, electrical systems, air distribution, automatic air conditioning, installation, maintenance and repair of auto air conditioning.

AMECH 426 3.5 units
Clean Air Car
2.9 hours lecture , 1.5 hours laboratory
Grading: letter grade or credit/no credit
Prepares the mechanic to take a state exam and obtain a license to work as a smog mechanic in the statewide Motor Vehicle Pollution Control Program. A prerequisite for admission into the state-administered inspection and Maintenance (I/M) Training.

AMECH 430 6.0 units
Auto Wheel Alignment
5.0 hours lecture , 3.0 hours laboratory
Recommended Preparation: High school auto mechanics or AMECH421
Grading: letter grade or credit/no credit
Covers the theory, design and operation of chassis units affecting stability, power flow, suspension and steering in autos and small trucks. Includes testing, trouble diagnosis and modern methods of servicing. Preparation for taking the ASE (Automotive Service Excellence) test is emphasized.

AMECH 432 6.0 units
Automotive Brake Systems
5.0 hours lecture , 3.0 hours laboratory
Recommended Preparation: AMECH421
Grading: letter grade or credit/no credit
Covers the theory, design and operation of the standard, disc and anti-lock brake systems common to most autos and small trucks. Includes testing, diagnosing and modern methods of servicing the brake system.

AMECH 434 6.0 units
Engine Repair
5.0 hours lecture , 3.0 hours laboratory
Grading: letter grade or credit/no credit
Instruction in the operation of tools common to engine rebuilding and an in-depth study of engine design and theory of construction, testing, troubleshooting and rebuilding an engine block. Prepare to take the ASE (Automotive Service Excellence) test.

AMECH 436 6.0 units
Automatic and Standard Transmissions
5.0 hours lecture , 3.0 hours laboratory
Recommended Preparation: High school auto or AMECH421
Grading: letter grade or credit/no credit
Covers construction, operation, maintenance, adjustment and overhaul of manual and automatic transmissions. Individualized self-paced instruction is used.

AMECH 438 6.0 units
Auto Emission Controls
5.0 hours lecture , 3.0 hours laboratory
Recommended Preparation: High school auto mechanics or AMECH421
Grading: letter grade or credit/no credit
Covers the California State approved “Clean Air Course,” as well as preparation for the California Inspection and Maintenance Emission Control License. Also, covers operation and testing of computer-controlled oxygen feedback systems and use of the California State approved Test Systems Analyzer (TAS).

AMECH 440 6.0 units
Automotive Computer Systems
5.0 hours lecture , 3.0 hours laboratory
Recommended Preparation: AMECH421
Grading: letter grade or credit/no credit
Covers the operation and testing of computer controlled oxygen feedback systems, the use of the California State Approved Test Systems Analyzer (TAS) and the use of computer-assisted auto systems analyzers. Prepare to take the ASE (Automotive Service Excellence) and the California state emission control license tests.

AMECH 442 6.0 units
Automotive Fuel Systems
5.0 hours lecture , 3.0 hours laboratory
Recommended Preparation: AMECH421
Grading: letter grade or credit/no credit
Covers the testing and repair of auto fuel systems (carburetion and fuel injection) and operation of auto oscilloscopes for testing purposes. Prepare to take the ASE (Automotive Service Excellence) test.

AMECH 444 6.0 units
Automotive Electrical Systems
5.0 hours lecture , 3.0 hours laboratory
Recommended Preparation: AMECH421
Grading: letter grade or credit/no credit
Covers the testing and repair of auto charging and starting systems. Auto ignition systems (conventional and transistorized) and operation of auto oscilloscopes (conventional and computer assisted) are covered. Prepare to take the ASE (Automotive Service Excellence) test.

AMECH 480 3.0 units
Introduction to Electric Vehicles
2.0 hours lecture , 3.0 hours laboratory
Grading: letter grade or credit/no credit
Overview of the world of electric vehicle conversions. Alternatives to gasoline powered vehicular travel and advantages of electric powered automobiles. Conversion process, testing, assembly, operation and maintenance of EVs. Appropriate safety related instruction included in each segment.

AMECH 481 3.0 units
Advanced Electric Vehicles
2.0 hours lecture , 3.0 hours laboratory
Grading: credit/no credit
Furthers skills in electric vehicle (EV) conversions and an intro to advanced EV designs and propulsion systems. Will work with hybrids, A.C. drive systems and advanced design electric vehicles. Includes the EV design and construction, the testing, assembly, operation and maintenance of EVs; the influence of aerodynamic design; advanced technology batteries and intelligent charging systems; hydrogen fuel cell technology and alternative EV drive systems. Appropriate safety related instruction will be included in each segment.

AMECH 483 3.0 units
Electric Vehicle Projects
2.0 hours lecture , 3.0 hours laboratory
Grading: letter grade or credit/no credit
Increases student skill and knowledge and updates the student in the area of their choice regarding electric vehicle technology. Emphasizes OEM (original
Courses of Instruction

equipment manufacturer) electric vehicle conversion programs and dedicated OEM EVs, continued EV component knowledge, hybrid-electric vehicles and advances in battery and charger technologies showing sensitivity to the diversity and backgrounds of the students. Appropriate safety related instructions will be included in each segment.

AMECH 490 3.5 units
Introduction to Alternative Fuels
3.0 hours lecture , 1.5 hours laboratory
Grading: letter grade or credit/no credit
Alternative fueled vehicles are the way of the future. Covers theory of operation, installation, testing, trouble-shooting and repair of gaseous fuels with a focus on natural gas. Includes both dedicated and after-market systems. Gasoline and diesel powered vehicles are discussed with an emphasis on computer-controlled fuel injection. Current trends in the industry and preparation for taking the ASE (Automotive Service Excellence) F1 test are included.

AMECH 491 3.5 units
Heavy Duty Alternative Fuels
3.0 hours lecture , 1.5 hours laboratory
Grading: letter grade or credit/no credit
Heavy duty/diesel alternative fueled vehicles with an emphasis on natural gas. Includes the theory of operation, installation, testing, trouble-shooting and repair of alternatively-fueled heavy duty vehicles with both dedicated and after-market systems. Gasoline and diesel powered vehicles are discussed, emphasizing computer controlled fuel management. Current trends in the industry and preparation for taking the ASE (Automotive Service Excellence) F1 test are included.

AMECH 492 3.5 units
Heavy Duty Alternative Fuels
3.0 hours lecture , 1.5 hours laboratory
Grading: letter grade or credit/no credit
Covers theory of operation, installation, testing, trouble-shooting and repair of alternatively-fueled heavy duty vehicles with both dedicated and after-market systems. Gasoline and diesel powered vehicles are discussed, emphasizing computer controlled fuel management. Current trends in the industry and preparation for taking the ASE (Automotive Service Excellence) F1 test are included.

AMECH 493 3.5 units
Alt Fuels Conversion, Diagnosis & Repair
3.0 hours lecture , 1.5 hours laboratory
Grading: letter grade or credit/no credit
Covers chassis conversion of light and heavy duty vehicles to run on alternative fuels. The theory of conversion, installation, regulations and certification, manufacturing techniques and trouble-shooting of alternatively-fueled vehicles, emphasizing natural gas and computer controlled fuel management systems. Current trends in the industry and preparation for taking the ASE (Automotive Service Excellence) F1 test are included.

AMECH 801 2.0 units
Quick Service Tech-Lubrication Service
2.0 hours lecture , 0.2 hour laboratory
Grading: credit/no credit
Learning to be a Quick-Service Lubrication Technician is one of the fastest ways to a job in automotive technology. This one-week course prepares you to enter this field immediately with skills needed for an entry-level job doing oil changes, lubrication, under hood services and vehicle inspections. Job seeking skills are included. Also excellent for the do-it-yourselfer who wants to learn how professionals do a lubrication service.

AMECH 803 2.0 units
Quick Service Tech-Brake Inspection
2.0 hours lecture , 0.2 hour laboratory
Grading: credit/no credit
Learning to be a Quick Service Brake Inspection Technician is one of the fastest ways to a job in automotive technology. This one-week course prepares you to enter this field immediately with skills needed for an entry-level job doing tire rotation, repair, replacement, balancing and vehicle inspections. Job seeking skills included. Also excellent for the do-it-yourselfer who wants to learn how professionals do brake service.

AMECH 802 2.0 units
Quick Service Tech-Tire Service
2.0 hours lecture , 0.2 hour laboratory
Grading: credit/no credit
Learning to be a Quick Service Tire Technician is one of the fastest ways to a job in automotive technology. This one-week course prepares you to enter this field immediately with skills needed for an entry-level job doing tire rotation, repair, replacement, balancing and vehicle inspections. Job seeking skills included. Also excellent for the do-it-yourselfer who wants to learn how professionals do tire service.

AVMNT 210 14.0 units
General Aviation Maintenance Technology
9.0 hours lecture , 15.0 hours laboratory
Grading: letter grade
A required course leading to the FAA Aviation Maintenance Technician Certificate with a rating of Power plant and/or Airframe Mechanic. Includes: basic electricity, aircraft drawings, weight and balance, fluid lines and fittings, materials and processes, ground operation and servicing, cleaning and corrosion control, math, maintenance forms and records, basic physics, maintenance publications and mechanic’s privileges and limitations.

AVMNT 211 7.0 units
General Aviation Maintenance Technology
13.0 hours lecture
Grading: letter grade
Beginning course for persons wishing to become airplane mechanics. Partially fulfills the requirements stated in FAR 147. Includes safety, basic electricity, weight and balance, materials and processes, math and basic physics. Typically offered for nine weeks.

AVMNT 241 8.0 units
Airframe Structures
6.2 hours lecture , 9.3 hours laboratory
Recommended Preparation: AVMNT211
Grading: letter grade
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>AVMNT 242</td>
<td>Aircraft Systems and Components 1</td>
<td>8.0</td>
<td>Includes safety, wood structures, aircraft covering, sheet metal structures, ice and rain control, welding, aircraft finishing, cleaning and corrosion control, wood structures and aircraft drawings. Typically offered for nine weeks.</td>
</tr>
<tr>
<td>AVMNT 243</td>
<td>Aircraft Systems and Components 2</td>
<td>8.0</td>
<td>Includes safety, assembly and rigging, airframe inspection, hydraulic and pneumatic power systems, cabin atmosphere, aircraft drawing, aircraft instrument systems, aircraft electrical systems, position and warning systems, fluid line and fittings, cleaning and corrosion control. Typically offered for nine weeks.</td>
</tr>
<tr>
<td>AVMNT 251</td>
<td>Powerplant Theory and Maintenance</td>
<td>8.0</td>
<td>Includes safety, reciprocating engine-A, turbine engine-A, lubrication systems and maintenance forms and records. Typically offered for nine weeks.</td>
</tr>
<tr>
<td>AVMNT 252</td>
<td>Powerplant Systems and Components 1</td>
<td>8.0</td>
<td>Includes safety, ignition systems, fuel metering systems, propellers-A, engine fuel systems, induction systems, engine cooling, mechanic privileges and limitations, maintenance forms and records, ground operation, aircraft drawings and aircraft instruments.</td>
</tr>
<tr>
<td>AVMNT 253</td>
<td>Powerplant Systems and Components 2</td>
<td>8.0</td>
<td>Includes safety, reciprocating engines-B, turbine engines-B, engine instrument systems, propellers-B, engine electrical systems, engine fire protection, engine inspection, engine exhaust systems, aircraft instrument system, communication and navigation systems, ice and rain control, additional practices and exams.</td>
</tr>
<tr>
<td>AVMNT 427A</td>
<td>Aviation Electronics (Avionics)</td>
<td>4.0</td>
<td>Covers theory and practical applications of electronic equipment for aircraft including the following systems: safety, publications, drawings and schematics, FCC regulations and abbreviations, hand tools and test equipment, review of electronic principles and circuits, communications, navigational, multiplexing, distance measuring equipment and autopilot systems.</td>
</tr>
<tr>
<td>AVMNT 427B</td>
<td>Avionics</td>
<td>4.0</td>
<td>Theory and practical applications of electronic equipment for aircraft including the following systems: ADF, radar, marker beacon, glideslope and localizer, antennae and servo. Lectures and selected field trips.</td>
</tr>
<tr>
<td>AVMNT 440</td>
<td>Aircraft Mechanics License Preparation</td>
<td>4.0</td>
<td>Review of theoretical and technical information related to airframe and powerplant mechanics in preparation for the FAA written, oral and practical exams.</td>
</tr>
<tr>
<td>AVMNT 441A</td>
<td>Aircraft Blueprint Reading</td>
<td>2.0</td>
<td>Fundamentals of blueprint reading and related information as applied to aircraft manufacturing.</td>
</tr>
<tr>
<td>AVMNT 460</td>
<td>Airframe Structures 1</td>
<td>4.0</td>
<td>Includes safety, wood structures, aircraft covering and sheet metal structures.</td>
</tr>
<tr>
<td>AVMNT 461</td>
<td>Airframe Structures 2</td>
<td>4.0</td>
<td>Includes safety, wood structures, aircraft covering and sheet metal structures.</td>
</tr>
<tr>
<td>AVMNT 462</td>
<td>Aircraft Systems and Components 1</td>
<td>4.0</td>
<td>Includes safety, wood structures, aircraft covering and sheet metal structures.</td>
</tr>
<tr>
<td>AVMNT 463</td>
<td>Aircraft Systems and Components 2</td>
<td>4.0</td>
<td>Includes safety, wood structures, aircraft covering and sheet metal structures.</td>
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</table>
### Courses of Instruction

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Title</th>
<th>Hours</th>
<th>Grading</th>
<th>Transfer Status</th>
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</thead>
<tbody>
<tr>
<td>AVMNT 464</td>
<td>4.0</td>
<td>Aircraft Systems and Components 3</td>
<td>3.0</td>
<td>lecture, laboratory</td>
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<td>Grading: letter grade</td>
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<td></td>
<td></td>
<td>Partially fulfills the requirements for aircraft systems and components</td>
<td></td>
<td>stated in FAR 147, including position and warning systems, cleaning and corrosion control, assembly and rigging and ground operation.</td>
<td></td>
</tr>
<tr>
<td>AVMNT 465</td>
<td>4.0</td>
<td>Aircraft Systems and Components 4</td>
<td>3.0</td>
<td>lecture, laboratory</td>
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<td>Grading: letter grade</td>
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<tr>
<td></td>
<td></td>
<td>Partially fulfills the requirements for aircraft systems and components</td>
<td></td>
<td>stated in FAR 147, including airframe inspection, hydraulic and pneumatic power systems, communication and navigation.</td>
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</tr>
<tr>
<td>AVMNT 466</td>
<td>4.0</td>
<td>Aircraft Systems and Components 5</td>
<td>3.0</td>
<td>lecture, laboratory</td>
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<td>Grading: letter grade</td>
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<tr>
<td></td>
<td></td>
<td>Partially fulfills the requirements for aircraft systems and components</td>
<td></td>
<td>stated in FAR 147, including aircraft fuel systems, drawing, ice and rain control, fluid lines and fittings.</td>
<td></td>
</tr>
<tr>
<td>AVMNT 470</td>
<td>4.0</td>
<td>Powerplant Theory and Maintenance</td>
<td>3.0</td>
<td>lecture, laboratory</td>
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<td>Grading: letter grade</td>
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<td></td>
<td></td>
<td>Partially fulfills the requirements for powerplants stated in FAR 147,</td>
<td></td>
<td>including reciprocating engines, lubrication systems, maintenance forms and induction systems.</td>
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</tr>
<tr>
<td>AVMNT 471</td>
<td>4.0</td>
<td>Powerplant Systems and Components 1</td>
<td>3.0</td>
<td>lecture, laboratory</td>
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<td>Grading: letter grade</td>
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<td></td>
<td></td>
<td>Partially fulfills the requirements for powerplants stated in FAR 147,</td>
<td></td>
<td>including turbine engine, ignition systems, engine cooling systems and mechanic privileges and limitations.</td>
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</tr>
<tr>
<td>AVMNT 472</td>
<td>4.0</td>
<td>Powerplant Systems and Components 2</td>
<td>3.0</td>
<td>lecture, laboratory</td>
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<td>Grading: letter grade</td>
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<tr>
<td></td>
<td></td>
<td>Partially fulfills the requirements for powerplants stated in FAR 147,</td>
<td></td>
<td>including fuel metering systems, propellers “A,” ground operation and aircraft drawings.</td>
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<tr>
<td>AVMNT 473</td>
<td>4.0</td>
<td>Powerplant Systems and Components 3</td>
<td>3.0</td>
<td>lecture, laboratory</td>
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<td>Grading: letter grade</td>
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<td></td>
<td></td>
<td>Partially fulfills the requirements for powerplants as stated in FAR 147,</td>
<td></td>
<td>including engine fuel systems, induction systems, aircraft instruments and propellers “B.”</td>
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<tr>
<td>AVMNT 474</td>
<td>4.0</td>
<td>Powerplant Systems and Components 4</td>
<td>3.0</td>
<td>lecture, laboratory</td>
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<td>Grading: letter grade</td>
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<td></td>
<td></td>
<td>Partially fulfills the requirements for powerplants as stated in FAR 147,</td>
<td></td>
<td>including reciprocating engines “B,” turbine engines “B,” engine inspection and exhaust systems.</td>
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<tr>
<td>AVMNT 475</td>
<td>4.0</td>
<td>Powerplant Systems and Components 5</td>
<td>3.0</td>
<td>lecture, laboratory</td>
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<td>Grading: letter grade</td>
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<td></td>
<td>Partially fulfills the requirements for powerplants as stated in FAR 147,</td>
<td></td>
<td>including engine instrument systems, propellers “B,” communication and navigation systems.</td>
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<tr>
<td>AVMNT 476</td>
<td>4.0</td>
<td>Powerplant Systems and Components 6</td>
<td>3.0</td>
<td>lecture, laboratory</td>
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<td>Grading: letter grade</td>
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<td></td>
<td></td>
<td>Partially fulfills the requirements for powerplants as stated in FAR 147,</td>
<td></td>
<td>including engine electrical systems, engine fire protection, ice and rain control and additional practices and exams.</td>
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<tr>
<td>AVMNT 477</td>
<td>4.0</td>
<td>Advanced Gas Turbine Engine</td>
<td>6.0</td>
<td>lecture</td>
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<td>Grading: letter grade</td>
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<td></td>
<td></td>
<td>Partially fulfills the requirements for powerplants as stated in FAR 147,</td>
<td></td>
<td>including gas turbine engine theory, types of gas turbine engines, internal turbine engine components, jet engine system descriptions, gas turbine maintenance, handling and operation.</td>
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<tr>
<td>AVMNT 601</td>
<td>0.0</td>
<td>Aviation Refresher Training</td>
<td>15.0</td>
<td>laboratory</td>
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<td></td>
<td>Grading: LBCC Non-Graded Course</td>
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<td>Preparation for entry or re-entry into and for advancement in an aviation maintenance field. Develop or review basic terminology, basic hand tool and equipment identification and application, basic math and other knowledge and skills needed for job preparation.</td>
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**AVIATION PILOT (AVPLT)**

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<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Title</th>
<th>Hours</th>
<th>Grading</th>
<th>Transfer Status</th>
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<tbody>
<tr>
<td>AVPLT 49</td>
<td>1.0</td>
<td>Professional Pilot Career Orientation</td>
<td>1.0</td>
<td>lecture</td>
<td>Transferable to CSU, see counselor for limitations.</td>
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<td></td>
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<td>Grading: credit/no credit</td>
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<tr>
<td></td>
<td></td>
<td>Covers career orientation for prospective professional pilots.</td>
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<td>Surveys major airlines, commuter airlines, corporate, flight instruction,</td>
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<td>work operation, military aviation and other pilot careers.</td>
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<td>Covers historical hiring patterns, the hiring cycle, employment outlook,</td>
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<td>pay scales and career preparation, physical and medical considerations,</td>
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<td>work schedules and other working conditions, employee benefits and career progression.</td>
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<td><em>Transfer Status: Transferable to CSU, see counselor for limitations.</em></td>
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<tr>
<td>AVPLT 50</td>
<td>5.0</td>
<td>Basic Aeronautical Ground School</td>
<td>5.0</td>
<td>lecture</td>
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<td></td>
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<td>Grading: letter grade or credit/no credit</td>
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<td></td>
<td></td>
<td>Satisfies FAA requirements for private pilot ground instruction and</td>
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<td>provides substantial additional preparation for becoming a safe pilot.</td>
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<td>Weather navigation, aircraft and engines, radio, theory of flight,</td>
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<td>safety and FAR’s are discussed.</td>
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<td><em>Transfer Status: Transferable to CSU, see counselor for limitations.</em></td>
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</tbody>
</table>

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Courses of Instruction

AVPLT 51 3.0 units
Commercial Ground School
3.0 hours lecture
Recommended Preparation: AVPLT50 or FAA private pilot certificate.
Grading: letter grade or credit/no credit
Covers airplane aerodynamics, engines, instruments and systems. Airplane performance, weight and balance control, aircraft operation, aeronautical decision making, judgment and other human factors are discussed. Selected sections of FAR parts 1, 61, 91, 135 and 121; NTSB Part 830, AVPLT51, plus either AVPLT50 or 54 and 56 satisfies the requirement of FAR 61. 125 for Commercial Pilot aeronautical knowledge.
Transfer Status: Transferable to CSU, see counselor for limitations.

AVPLT 52 3.0 units
Instrument Ground School
3.0 hours lecture
Recommended Preparation: AVPLT50 or FAA private pilot certificate. Helpful but not necessary to have completed AVPLT51 and 56.
Grading: letter grade or credit/no credit
Covers use and interpretation of flight instruments, flight planning, aircraft performance and human factors, pre-flight weather briefing, regulations and air traffic control procedures and preparation for FAA written exam. Satisfies requirement of Federal Aviation Administration Part 61 for instrument pilot-airplane ground school.
Transfer Status: Transferable to CSU, see counselor for limitations.

AVPLT 54 3.0 units
Navigation
3.0 hours lecture
Recommended Preparation: AVPLT50 or FAA private pilot certificate.
Grading: letter grade or credit/no credit
Covers pilotage, dead reckoning and radio navigation, emphasizing the practical application to cross-country navigation of general aviation aircraft.
Transfer Status: Transferable to CSU, see counselor for limitations.

AVPLT 56 3.0 units
Meteorology
3.0 hours lecture
Grading: letter grade or credit/no credit
Covers the atmosphere, temperature, pressure, wind, moisture, stability, clouds, air masses, fronts, turbulence, icing, thunderstorms, fog, weather observations, forecasts and reports.
Transfer Status: Transferable to CSU, see counselor for limitations.

AVPLT 57 3.0 units
Aircraft Engines and Related Systems
3.0 hours lecture
Grading: letter grade or credit/no credit
This course primarily covers reciprocating engines, including types and construction; lubrication systems; propellers and governors; carburetion fuel injection; superchargers and turbochargers; ignition systems; fire protection; and engine operation. Pilots are taught how to detect, troubleshoot and report maintenance problems. Aircraft maintenance regulations, forms, and procedures are covered. The course also includes an introduction to turbine engines, and is intended for pilots and aircraft owners.
Transfer Status: Transferable to CSU, see counselor for limitations.

AVPLT 59 3.0 units
Aero Systems
3.0 hours lecture
Grading: letter grade or credit/no credit
Retractable gear is discussed, as well as electrical, basic hydraulic, fuel, pneumatic, de-icing, anti-icing, oxygen and pressurization systems. Normal and emergency operating procedures are discussed, as well as inflight trouble-shooting and problem reporting. Note: for pilots, not for prospective aircraft mechanics (see Aviation Maintenance Technician courses).
Transfer Status: Transferable to CSU, see counselor for limitations.

AVPLT 60 2.0 units
Aero Law
2.0 hours lecture
Grading: credit/no credit
Legal rights, responsibilities and problems associated with aircraft ownership, operation and repair. Note: course does not cover Federal Air Regulations, but is designed primarily for pilots, aircraft owners and aircraft operators.
Transfer Status: Transferable to CSU, see counselor for limitations.

AVPLT 61 2.0 units
Basic Simulator Flight Training
1.0 hour lecture, 3.0 hours laboratory
Grading: credit/no credit
Discusses flight simulator characteristics and operation, instrument interpretation and aircraft control by reference to instruments, altitude instrument flying, intro to radio navigation procedures, flight safety and emergency procedures.
Transfer Status: Transferable to CSU, see counselor for limitations.

AVPLT 62AD 2.0 units
Advanced Simulator Flight Training
1.0 hour lecture, 3.0 hours laboratory
Recommended Preparation: AVPLT61 or FAA private pilot certificate.
Grading: credit/no credit
Transfer Status: Transferable to CSU, see counselor for limitations.

AVPLT 63AD 2.0 units
Commercial Pilot-Single Engine Simulator
1.0 hour lecture, 3.0 hours laboratory
Recommended Preparation: AVPLT 62AD or instrument rating
Grading: credit/no credit
Flight simulator characteristics and operation, clearance copying, radio communication, air traffic control, transponder, departure, enroute and instrument approach procedures, complex aircraft operation, air traffic control radar, instrument approach facilities and
Courses of Instruction

emergency procedures. Note: not an instrument ground school course.
Transfer Status: Transferable to CSU, see counselor for limitations.

**AVPLT 65AD**
Commercial Pilot Multi-Engine Simulator
1.0 hour lecture, 3.0 hours laboratory
Grading: credit/no credit
Transfer Status: Transferable to CSU, see counselor for limitations.

**AVPLT 66AD**
Airline Transport Pilot Multi-Eng. Sim
1.0 hour lecture, 3.0 hours laboratory
Prerequisite: A commercial pilot FAA certificate with instrument rating. (AMEL)
Grading: credit/no credit
Partial preparation for airline transport pilot-airplane (multi-engine) flight test. Also useful for preparing for initial and recurrent flight checks required in FAR 135.297. Includes an intro to “cockpit resources management.” Uses an ATC $10 multi-engine simulator (ground trainer) similar to the Piper Navajo.
Transfer Status: Transferable to CSU, see counselor for limitations.

**AVPLT 71**
Flight & Ground Instructor
3.0 hours lecture
Recommended Preparation: AVPLT51 or passing score on the FAA commercial pilot written exam.
Grading: letter grade or credit/no credit
Provides preparation for FAA flight instructor written and oral exams and the FAA ground instructor written exams. Review of knowledge required for private and commercial pilot certificate.
Transfer Status: Transferable to CSU, see counselor for limitations.

**AVPLT 74**
Transport Category Jet Aircraft Systems
6.0 hours lecture
Recommended Preparation: FAA Commercial Pilot Certificate with instrument rating.
Grading: letter grade or credit/no credit
FOR PILOTS AND FLIGHT ENGINEERS. An in-depth study of systems for transport category jets operated under FAR Part 121. Also includes related FAR Part 121, aerodynamics, meteorology, weight and balance and aircraft performance. Prepares for the FAA Flight Engineer-Basic and Turbojet knowledge exam and prepares for airline new hire ground schools.
Transfer Status: Transferable to CSU, see counselor for limitations.

**BIO**

**BIO 1A**
Biology for Science Majors
3.0 hours lecture, 6.0 hours laboratory
Prerequisite: CHEM 1A
Grading: letter grade
The first semester of a one-year survey of biology. Includes the chemistry of life, cellular organization, biological membranes, energetics, genetics, evolution and diversity of lower life forms.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**BIO 1B**
Biology for Science Majors
5.0 units
Prerequisite: BIO 1A
For students who have completed the microbiology of foods and beverages.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**BIO 2 (CAN BIOL 14)**
General Microbiology
3.0 hours lecture, 6.0 hours laboratory
Grading: letter grade or credit/no credit
An intro to the anatomy of bacteria, fungi, algae, protozoa, viruses, microbial metabolism, bacterial genetics, genetic engineering, control of microorganisms, antimicrobial drugs, current microbial classification, characteristics of the most common genera of microorganisms, replication of viruses, common diseases caused by microorganisms and viruses, microbial ecology, aquatic microbiology and the microbiology of foods and beverages.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**BIO 5**
Plant Biology
4.0 units
3.0 hours lecture
Grading: letter grade or credit/no credit
Develop an understanding of the fundamental concepts and principles of plant life, including a study of plant structures, functions and diversity. Designed for non-science majors. Not open to students registered in or with credit in BIO 1A.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**BIO 11**
Environmental Problems of Man
3.0 units
3.0 hours lecture
Grading: letter grade or credit/no credit
A study of the effects of man’s interaction with the total environment, the problems resulting from ignoring known ecological principles and the socio-cultural implication of biological concepts. Selected crisis situations will be examined. Physical, biological and political means and methods of reversing environmental...
Courses of Instruction

deterioration will be considered, as well as conservation and management of natural resources. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**BIO 18**  
**Edible, Poisonous & Useful Plants**  
3.0 hours lecture  
Grading: letter grade or credit/no credit  
An intro to the identification and usages of plants of various Southern California areas. Specific plants used as sources of food, drugs, fibers, dyes and those known to be poisonous will be described and discussed. Includes lectures in the classroom and in the field. Designed for non-science majors. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**BIO 20**  
**Marine Biology**  
3.0 hours lecture, 3.0 hours laboratory  
Grading: letter grade or credit/no credit  
An intro to marine natural history, incorporating biological concepts: plants, animals and habitats of the marine environment. A variety of marine communities are discussed in relation to their biotic and physical/chemical components. Includes lab work and field trips. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**BIO 20H**  
**Honors Marine Biology**  
3.0 hours lecture, 3.0 hours laboratory  
Prerequisite: Qualification for the Honors Program  
Grading: letter grade or credit/no credit  
An intro to marine natural history, incorporating biological concepts: plants, animals and habitats of the marine environment. A variety of marine communities are discussed in relation to their biotic and physical/chemical components. Includes lab work and field trips. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**BIO 22**  
**Oceanus: The Marine Environment**  
2.0 hours lecture  
Grading: letter grade or credit/no credit  
Focuses on the marine environment as a unique feature of the planet Earth and investigates areas of intense scientific and public concern: the pervasiveness of the ocean and its effect on weather, its contributions to the size and diversity of life forms and to the physical and historical development of humankind, its impact on geopolitical and economic matters, the impact of oceanic pollutants and the potential exploitation of the marine resources. Transfer Status: Transferable to CSU, see counselor for limitations.

**BIO 25**  
**Biology and Society**  
3.0 hours lecture  
Grading: letter grade or credit/no credit  
Covers a variety of basic biological concepts, discoveries and theories that also have important social, philosophical, ethical and religious implications. Sharpen critical thinking skills while exploring scientific thinking, biological evolution, natural selection, bioethics, abortion, cloning, homosexuality, AIDS, genetic engineering, reproductive technologies, overpopulation and major ecological issues. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**BIO 28**  
**Field Natural History of the Mountains**  
1.3 hours lecture, 2.0 hours laboratory  
Grading: letter grade or credit/no credit  
Intro to mountain environments and communities. Covers physical and biological aspects of mountain ecosystems, using at least two weekend field trips to explore and compare various California mountain ranges. Emphasizes the various life zones and the identification of their representative plants and animals. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**BIO 30**  
**Wildlife Biology**  
3.0 hours lecture, 3.0 hours laboratory  
Grading: letter grade or credit/no credit  
A natural history course that provides a general survey of ecological principles which describe organisms, their habits and how they relate to the environment. Includes all major forms of life, characteristics and behaviors of selected forms, using California representatives as examples. Various natural communities are discussed with reference to their local geology, geography, climate, seasonal influences, ecological principles and biotic communities. Communities emphasized include marine habitats, chaparral regions, mountain ranges and life zones and deserts. After taking the course, the student should be familiar with climate, rocks, plants, animals, major ecological factors and biogeography of any area in California. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**BIO 31**  
**Birds**  
1.5 hours lecture, 1.5 hours laboratory  
Grading: letter grade or credit/no credit  
An intro to the identification and recognition of the birds of Southern California. Emphasizes field identification, habitats, behaviors, songs, migratory patterns, ecology and natural history will be stressed. Includes at least three field trips. Transfer Status: Transferable to CU/CSU, see counselor for limitations.

**BIO 37**  
**Field Natural Hist: South Calif. Deserts**  
1.3 hours lecture, 2.0 hours laboratory  
Grading: letter grade or credit/no credit  
Acquaints students with the basic physical and biological features of the desert environment. Emphasizes plants and animals of the desert ecosystem and their adaptations to the environment. The associations and habitats characteristic to the desert will be examined. Offered spring semester. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**BIO 38**  
**Field Natural History: Newport Bay**  
1.3 hours lecture, 2.0 hours laboratory  
Grading: letter grade or credit/no credit
A study of the estuarine wetland habitats of Newport Bay. Become acquainted with the basic physical and biological features of Newport Bay. A study of the common plants and animals of both the marine and terrestrial environments will be made. Emphasizes how these organisms adapt to estuarine conditions. Historical and political background of the Bay will be discussed as it pertains to that particular environment.

Transfer Status: Transferable to CSU, see counselor for limitations.

**BIO 41**
Contemporary Biology
3.0 hours lecture
Grading: letter grade or credit/no credit
Covers the general principles of biology, such as molecular biology, organic evolution, taxonomy, basic similarities of living patterns, basic physiology and anatomy of body systems, genetic continuity and environmental biology. Significant problems of modern biology are included. Not open for credit to students registered in or with credit in BIO 1A-B or 5.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**BIO 41H**
Honors Contemporary Biology
3.0 hours lecture
Prerequisite: Qualification for the Honors Program.
Corequisite: BIO 41L
Grading: letter grade or credit/no credit
Covers the general principles of biology such as molecular biology, organic evolution, taxonomy, basic similarities of living patterns, basic physiology and anatomy of body systems, genetic continuity and environmental biology. Significant problems of modern biology are included. Not open for credit to students registered in or with credit in BIO 1A-B or 5.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**BIO 41L**
Contemporary Biology Laboratory
1.0 unit
Grading: letter grade or credit/no credit
An audio tutorial biology lab providing practical experience. Experiments and demonstrations are selected which clarify the principles developed in BIO 41. Not open for credit to students registered in or with credit in BIO 1A-B or 5.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**BIO 60**
Human Biology 1
4.0 units
Grading: letter grade or credit/no credit
Combines the elementary principles of anatomy, physiology, microbiology, nutrition and very elementary pathology. Leads into the terminology of these fields as a foundation for further study of medical problems and diseases. Designed to fulfill the general science requirement and to meet the needs of the health occupations student. Not open for credit to students registered in or with credit in ANAT 1 and PHYS 1.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**BIO 60L**
Human Biology 1 Laboratory
1.0 unit
Grading: letter grade or credit/no credit
An audio tutorial biology lab providing practical experience in human anatomy, physiology and microbiology. Experiments and demonstrations are selected which clarify the principles developed in BIO 60.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**BIO 61**
Human Biology 2
3.0 hours lecture
Prerequisite: BIO 60
Grading: letter grade or credit/no credit
Intro to the study of disease, including cause, prevention and symptoms of the common human diseases, assumes a basic understanding of anatomy and physiology. Designed for the general student and those in the health technology fields.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**BIO 62**
Human Biology 3
3.0 hours lecture
Prerequisite: Eligibility ENGL 1 and BIO 60.
Grading: letter grade or credit/no credit
An advanced anatomy, physiology and microbiology course. Includes the nervous system, sense organs, the circulatory, respiratory, excretory and digestive systems, common infectious diseases and epidemiology.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**BIO 261**
Human Biology for Vocational Nurses
3.0 hours lecture
Prerequisite: BIO 60
Grading: letter grade
A course in human anatomy, physiology and disease processes for vocational nurses and general students. Builds on the students’ knowledge of the human body obtained in BIO 60. Includes info on nutrition, infectious diseases, genetics and the common diseases that affect each body system. Not to be used for transfer into the ADN program.

**BUSINESS, GENERAL (GBUS)**

**GBUS 5**
Introduction to Business
3.0 hours lecture
Grading: letter grade
Surveys functions, characteristics, organization and problems of industry. Serves as a foundation for later, specialized study, particularly in accounting and economics. Orient students toward vocational specialization.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**GBUS 216A**
Fundamentals of Investments
1.0 hour lecture
Grading: letter grade
Covers risks and procedures involved in investment programs with major emphasis on marketing corporate equities, mutual funds, taxation and financial statements. Typically offered for six weeks.

**GBUS 216B 1.0 unit**
**Fundamentals of Investments**
1.0 hour lecture
Grading: letter grade
Covers risks and procedures involved in investment programs with major emphasis on bonds, wills, insurance, real estate and pension and estate planning. Typically offered for six weeks.

**GBUS 251 3.0 units**
**Business Mathematics**
3.0 hours lecture
Recommended Preparation: Basic math skills.
Grading: letter grade
Emphasizes quantitative business techniques as applied to pricing, markdowns, discounts, interest, calculating payroll, ratios, business statistics, income statements and balance sheets.

**GBUS 271AD 2.0 units**
**Work Experience — Business, General**
1.0 hour lecture, 4.1 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
Gain vocational learning experiences through employment directly related to the industry.

**GBUS 272AD 3.0 units**
**Work Experience — Business, General**
1.0 hour lecture, 8.3 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
Gain vocational learning experiences through employment directly related to the industry.

**GBUS 273AD 4.0 units**
**Work Experience — Business, General**
1.0 hour lecture, 12.5 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
Gain vocational learning experiences through employment directly related to the industry.

**BUSINESS, INTERNATIONAL (IBUS)**

**IBUS 1 3.0 units**
**Introduction to International Business**
3.0 hours lecture
Grading: letter grade
Intro to the global business macro-environment and orients students toward a career in the field of international business.

**Transfer Status: Transferable to CSU, see counselor for limitations.**

**IBUS 30 3.0 units**
**International Business Management**
3.0 hours lecture
Grading: letter grade
Emphasizes the concept that management of an international operation differs in many ways from that which takes place in just one country. Gain knowledge, insight, foresight and competence needed in the international decision-making process.

**Transfer Status: Transferable to CSU, see counselor for limitations.**

**IBUS 40 3.0 units**
**International Banking and Finance**
3.0 hours lecture
Grading: letter grade
Emphasizes the financial requirements of international business, source of funds, international credit and payment arrangements and methods of minimizing financial risks.

**Transfer Status: Transferable to CSU, see counselor for limitations.**

**IBUS 52 3.0 units**
**International Marketing**
3.0 hours lecture
Grading: letter grade
Orients the student to the performance of business activities that direct the flow of a company’s goods and services to the consumers or users in more than one nation. Emphasizes the practical skills and techniques utilized to successfully market on an international basis.

**Transfer Status: Transferable to CSU, see counselor for limitations.**

**IBUS 60 3.0 units**
**International Business Law**
3.0 hours lecture
Grading: letter grade
Provides a general overview and understanding of international law as it applies to international business and global trade.

**Transfer Status: Transferable to CSU, see counselor for limitations.**

**IBUS 273AD 4.0 units**
**Work Experience-International Business**
1.0 hour lecture, 12.5 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade
Improve your skills in international business. Students who are currently employed in the field or seeking an internship will gain valuable insights through a mentored program designed to assist them in setting and achieving work goals. This course is offered once per year.
BUSINESS, LAW (LAW)

LAW 18A  3.0 units
Business Law
3.0 hours lecture
Grading: letter grade
Intro to law and court systems, contracts, government, property, bailment and sales.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

LAW 18B  3.0 units
Business Law
3.0 hours lecture
Grading: letter grade
Confirmation of the completion of LAW 18A and the study of secured transactions, agency and employment, business organizations and property.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

CABINET MAKING (CABMK)

CABMK 201  9.0 units
Intro to Wood Products Manufacturing
4.0 hours lecture, 15.0 hours laboratory
Grading: letter grade or credit/no credit
A beginning course that covers the employment opportunities, safety practices, materials and techniques used to fabricate the wood products.

CABMK 202  9.0 units
Traditional Wood Products Manufacturing
4.0 hours lecture, 15.0 hours laboratory
Prerequisite: CABMK 201
Grading: letter grade or credit/no credit
Safety, advanced detailing, stock billing, cabinet wood selection, cutting distortions from cabinet woods, fundamentals of power machine operation and wood technology are outlined. Special projects and field trips are included.

CABMK 203  9.0 units
Contemporary Wood Products Manufacturing
4.0 hours lecture, 15.0 hours laboratory
Prerequisite: CABMK 202
Grading: letter grade or credit/no credit
Safety, advanced application of woodworking hand tools, advanced wood working power machine operation, machine tool maintenance, material for cabinet making, furniture design and case goods — residential-commercial cabinet construction are outlined. Special projects and field trips are included.

CABMK 290AD  2.0 units
Advanced Practices
6.0 hours laboratory
Prerequisite: CABMK 201 or CABMK 301
Grading: letter grade or credit/no credit
A comprehensive lab course for students enrolled in the cabinet making program. Includes techniques and machining practices.

CABMK 455  4.0 units
Wood Products for Aircraft Interiors
3.0 hours lecture, 3.0 hours laboratory
Recommended Preparation: CABMK201 or 301
Grading: letter grade or credit/no credit
Covers the special materials and techniques used to fabricate the wood products that are used in aircraft. Identifying the information required from engineering drawings, planning the production process, application of fasteners and hardware, installing the products and protecting the product are included. Upon completion, a thorough knowledge of and skill development in the techniques to fabricate wood products for aircraft interiors will be achieved.

CARPENTRY (CARP)

CARP 211  10.0 units
Carpentry 1
5.0 hours lecture, 15.0 hours laboratory
Grading: letter grade or credit/no credit
Covers hand tools, power tools, materials of the carpentry trade, land and lot locating, intro to blueprint reading, foundations, trade history, ethics and safety. Class includes field trips and special projects.

CARP 212  10.0 units
Carpentry 2
5.0 hours lecture, 15.0 hours laboratory
Prerequisite: CARP 211
Grading: letter grade or credit/no credit
Safety, rough framing to include: mudsills and their placement, girder placement, floor joists, sub-flooring, wall framing systems, ceiling joists and roughing out stairs, as well as field trips and special projects.

CARP 213  10.0 units
Carpentry 3
5.0 hours lecture, 15.0 hours laboratory
Prerequisite: CARP 212
Grading: letter grade or credit/no credit
Safety, roof framing, exterior covering and finish, interior finishing and stairway finishing are included, as well as field trips and special projects.

CARP 219  4.0 units
Residential Roof Framing
2.0 hours lecture, 6.0 hours laboratory
Recommended Preparation: Carpentry 211
Grading: letter grade
This is an advanced course in Carpentry covering residential roof framing. Topics of instruction include roof structures, calculations and layout of various rafters, codes requirements, roof construction, and estimating. Practical instruction is given in the use of tools and materials through carpentry laboratory work.

CARP 222  4.0 units
Residential Stairs
2.0 hours lecture, 6.0 hours laboratory
Recommended Preparation: CARP 211
Grading: letter grade
This is an advanced course in Carpentry covering residential stairs framing. Topics of instruction include stair design, calculation, layout, and construction. Practical instruction is given in the carpentry laboratory work.

CARP 225  4.0 units
Metal Framing
2.0 hours lecture, 6.0 hours laboratory
Recommended Preparation: CARP 211
Grading: letter grade
This course covers the fundamentals of residential light steel framing. Topics include: raised floor construction, wall framing, trussed roof fabrication and installation, applicable building codes and blueprint reading. The fundamentals are learned through laboratory work which requires the use of standard construction tools and materials.

**CARP 230**  
**Cost Estimating**  
4.0 hours lecture  
Recommended Preparation: CARP 440  
Grading: letter grade or credit/no credit  
This course is designed for those individuals needing to produce accurate project estimates; topics will include interpretation of project information from a detailed blueprint and processing it into a final detailed estimate.

**CARP 240**  
**OSHA Safety for Construction**  
2.0 hours lecture  
Grading: letter grade  
This course presents a concise introduction to OSHA standards and regulations.

**CARP 250**  
**Pre-Apprenticeship Training**  
3.0 hours lecture, 8.0 hours laboratory  
Grading: letter grade or credit/no credit  
Comprehensive preparation for students to enter variety of apprenticeship programs related to Construction Trades. Topics include safe use of hand tools, blueprint reading, requirements of apprenticeship programs, employer expectations and hands-on experience in technical areas including form work, cement work, electrical and plumbing.

**CARP 415A**  
**Home Remodeling and Repair**  
1.0 hour lecture, 3.0 hours laboratory  
Grading: letter grade or credit/no credit  
Construction safety, hand tools, power tools and special tools. How to plan and lay out for a new kitchen, bath and room addition. How to obtain building permits. Learn the latest building code requirements for plumbing, electrical, framing and heating and cooling. Learn the uses of the builders level and transit for laying out lots and new additions. Specifications and drawings, footings and foundations, floor construction, carpeting, tile and parquet floors. How to install drywall.

**CARP 415B**  
**Home Remodeling and Repair**  
1.0 hour lecture, 3.0 hours laboratory  
Prerequisite: CARP 415A  
Grading: letter grade or credit/no credit  
Learn setting of forms for porches, patios and sidewalks and stripping of foundation walls. Wall coverings, paneling and moldings, tile board for tub and shower areas, installation of acoustical tile with and without ceiling suspension and preparing surfaces for painting and varnishing. Roof framing, types of roofs, materials and how to install a new roof and repair the old one are included.

**CARP 415C**  
**Home Remodeling and Repair**  
1.0 hour lecture, 3.0 hours laboratory  
Prerequisite: CARP 415B  
Grading: letter grade or credit/no credit  
Learn installation of brick and stone for decorating purposes, stucco and stucco repairs, energy conservation types of material and calculating quantity for exterior and interior installations. Installation of sewer lines, floor and wall plumbing and minor repairs of bathroom and kitchen plumbing. How to install a new door and fix the old one.

**CARP 415D**  
**Home Remodeling and Repair**  
1.0 hour lecture, 3.0 hours laboratory  
Prerequisite: CARP 415C  
Grading: letter grade or credit/no credit  
Learn to install garbage disposals, toilets, tubs, water heaters and how to fix and maintain them. Electrical installations and repairs for circuit breakers, ground fault interrupters circuits, duplex plugs and switches. Minor repairs on lamps and appliances. Landscaping and how to install a new sprinkler system and repair the old one.

**CARP 440**  
**Blueprint Reading for Construction Trade**  
3.0 hours lecture  
Grading: letter grade or credit/no credit  
Intro to materials and review of methods of construction used in the residential, industrial and commercial building blueprint reading.

**CHEMISTRY (CHEM)**

**CHEM 1A (CAN CHEM 2)**  
**General Chemistry**  
4.0 hours lecture, 5.0 hours laboratory  
Prerequisite: Qualification through the Chemistry assessment process or CHEM 2.  
Recommended Preparation: One year high school Chemistry.  
Grading: letter grade or credit/no credit  
Studies the physical aspects of solid, liquid and gas phases including coverage of crystalline structures, solutions and ideal gas. Emphasizes stoichiometric calculations. Thermochemistry, oxidation-reduction, atomic theory and bonding and an intro to kinetics and equilibrium are also considered. The lab stresses quantitative measurements in systems undergoing chemical changes.  
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**CHEM 1B (CAN CHEM 4)**  
**General Chemistry**  
4.0 hours lecture, 5.0 hours laboratory  
Prerequisite: CHEM 1A  
Grading: letter grade or credit/no credit  
Extends the study of equilibrium to weak acids and bases, slightly soluble salts and complex ions in aqueous solution. Presents the basic principles of thermodynamics and electrochemistry. Intro to coordination, nuclear and organic chemistry. The lab stresses descriptive inorganic chemistry and qualitative analysis. Meets the requirements for majors in chemistry, engineering, life science, math and physics and is part of the baccalaureate requirements for pre-dental, pre-medical and pre-nursing programs.  
Transfer Status: Transferable to UC/CSU, see counselor for limitations.
**Courses of Instruction**

**CHEM 2** 4.0 units

*Elementary Chemistry*
4.0 hours lecture, 2.0 hours laboratory
Prerequisite: MATH 110 or 110B or 880 or qualification through the math assessment process or one year high school Elementary Algebra with a grade of B or better as reflected in the second semester grade.
Grading: letter grade or credit/no credit
For science or pre-professional majors who lack adequate preparation for CHEM 1A. Provides basic knowledge and problem solving techniques necessary for CHEM 1A-B. Formula and equation writing, basic laws and stoichiometry are stressed. Meets the prerequisite for CHEM 1A; if so used, no college credit is given.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**CHEM 3A** 4.0 units

*Intro to General and Organic Chemistry*
4.0 hours lecture, 2.0 hours laboratory
Prerequisite: MATH 110 or 110B or 880 or qualification through the math assessment process or one year high school Elementary Algebra with a grade of B or better as reflected in the second semester grade.
Grading: letter grade or credit/no credit
Satisfies the needs of nursing, home economics and allied health sciences students. Intro to the principles of chemistry and the beginning study of organic chemistry. Includes atomic theory, chemical formulas, nomenclature, chemical bonds, stoichiometry, states of matter, solutions, chemical equilibrium, acids and bases, hydrocarbons, alcohols and ethers. Lab work reinforces basic concepts and provides experiments in manipulating lab equipment. Does not prepare students for CHEM 1A.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**CHEM 3B** 4.0 units

*Introduction to General and Organic Chemistry*
4.0 hours lecture, 2.0 hours laboratory
Prerequisite: CHEM 3A
Grading: letter grade or credit/no credit
Continuation of the study of organic chemistry and an intro to biochemistry. Includes amines, carbonyl compounds, organic acids and their derivatives, carbohydrates, lipids, amino acids and proteins, enzymes, nucleic acids, biochemical energetics and metabolism of energy yielding compounds. Not open to chemistry majors.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**CHEM 12A** 5.0 units

*Organic Chemistry*
4.0 hours lecture, 5.0 hours laboratory
Prerequisite: CHEM 1A and 1B
Grading: letter grade or credit/no credit
Covers bonding, structure, properties and reactions of organic compounds. Modern spectroscopic and analytical techniques are covered, and an emphasis is placed on reaction mechanisms and kinetics. Offered fall semester.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**CHEM 12B** 5.0 units

*Organic Chemistry*
4.0 hours lecture, 5.0 hours laboratory
Prerequisite: CHEM 12A
Grading: letter grade or credit/no credit
Continued survey of bonding, structure, properties, reactions and mechanisms and spectroscopy of fundamental functional groups, with emphasis on carbohydrates, fats and proteins. Meets requirements for most universities and colleges for chemistry, pre-dental, pre-medical, pre-nursing and life science students. Offered spring semester.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**CHILD DEVELOPMENT — FAMILY DEVELOPMENT**

**CDF 210A** 3.0 units

*Family Workers Pt 1*
3.0 hours lecture
Corequisite: CDF 298CD
Grading: letter grade or credit/no credit
This course is part one of a two part series. The course is designed to prepare students and workers to assist families with the values, knowledge, and skills needed to empower families to achieve self-reliance. Focus will be on the principles of family development, family empowerment skills, self-support for family workers, effective communication with families and cultural competency.

**CDF 210B** 3.0 units

*Family Workers Pt 2*
3.0 hours lecture
Corequisite: CDF 298A
Grading: letter grade or credit/no credit
This course is part two of a two part series. The course is designed to prepare students and workers to assist families with the values, knowledge, and skills needed to empower families to achieve self-reliance. Part two focuses on strength-based assessment, resource development, service coordination, collaboration and networking, home visitations, team building, goal setting, and family conference facilitation.

**CDF 273AD** 4.0 units

*Work Experience-Family Development*
1.0 hour lecture, 10.0 hour laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
This course consists of discussions regarding work experience objectives, career goals, employment adjustments and issues encountered on the job. It also involves vocational learning experiences through employment/internship directly related to the occupational goal or career of interest to the student. This course is recommended for currently employed family service workers.

**CHILD DEVELOPMENT-ADULT DEVELOPMENT (CDAD)**

**CDAD 270** 3.0 units

*Adult Development*
3.0 hours lecture
Grading: letter grade or credit/no credit
This course designed for prospective caregivers of adults needing assistance and the elderly. It provides an overview of social, psychological and physical effects of aging, emphasizing differences among individuals, including ethnic differences.

CDAD 273AD 4.0 units
Work Experience — Adult Development
1.0 hour lecture, 10.0 hour laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
This course consists of discussions regarding work experience objectives, career goals, employment adjustments and issues encountered on the job. It also involves vocational learning experiences through employment/internship of personal/family responsibility directly related to occupational goal or career of interest to the student.

CHILD DEVELOPMENT-EARLY CHILDHOOD EDUCATION(CDECE)

CDECE 1 1.0 unit
Career Explorations in Child Development
1.0 hour lecture
Grading: letter grade or credit/no credit
Provide opportunities to explore and evaluate on-the-job realities of specific occupations for men and women in child development and parent education.
Transfer Status: Transferable to CSU, see counselor for limitations.

CDECE 19 2.0 units
Child Nutrition & Safety D7
2.0 hours lecture
Grading: letter grade or credit/no credit
For school food service managers, child care and family day care providers who assume responsibility for child nutrition programs and education and education safety. Includes guidelines for compliance with current federal, state and local legislation associated with child feeding and safety. Not open for credit to students registered in or with credit in F&N 19.
Transfer Status: Transferable to CSU, see counselor for limitations.

CDECE 30 3.0 units
The Community and its Schools
3.0 hours lecture
Grading: letter grade or credit/no credit
An intro to education for students considering teaching as a career; observe and visit a variety of public and private schools.
Transfer Status: Transferable to CSU, see counselor for limitations.

CDECE 31 2.0 units
Adult Supervision
2.0 hours lecture
Recommended Preparation: Current or prior experience as a teacher in an ECE program.
Grading: letter grade
Covers the principles and practices of supervision and evaluation of staff in early childhood education programs. Emphasizes the role of experienced classroom teachers who function as mentors to new teachers while simultaneously addressing the needs of children, parents and other staff. Meets the State Department of Education requirements for the Child Development Master Teacher, Site Supervisor and Program Director Permits.
Transfer Status: Transferable to CSU, see counselor for limitations.

CDECE 34 3.0 units
Children’s Literature
3.0 hours lecture
Grading: letter grade
Survey of contemporary and traditional children’s literature including a bibliography for schools and community libraries, aids to parents, preschool and elementary school teachers in guiding children’s reading, and textbook and resource information for educators.
Transfer Status: Transferable to CSU, see counselor for limitations.

CDECE 40 3.0 units
Infant Development & Educaring D4
3.0 hours lecture
Grading: letter grade
A study of the infant, pre-birth to 18 months of age. The role of the adult in designing, evaluating and implementing the educare (education and care) of infants in center-based programs, family home care and parental care based on and respectful of the infant’s unique abilities and needs is explored. Developmental theories, program quality standards, laws and regulations (Title 22), the role of the primary caregiver, curricula, culturally sensitive care, as well as early recognition and intervention for infants with special needs, are emphasized. Information about the health, nutrition and safety components of infant care is included. Meets the Department of Social Services Classification Indicator DS 4.
Transfer Status: Transferable to CSU, see counselor for limitations.

CDECE 41 3.0 units
Toddler Development & Educaring D4
3.0 hours lecture
Grading: letter grade
A study of the educare (education and care) of toddlers 18 to 36 months of age. The role of the adult in a center-based program, in family home care and parental care, as well as an overview of child development theories pertinent to this age, is provided. Activities and methods which nurture the toddler’s intellectual, language, emotional, social, personality and motor development are explored. Effective behavior management is covered. Laws and regulations (Title 22), program quality standards, group size and continuity of care, the role of the primary caregiver, curricula, the toddler’s unique development needs, culturally sensitive care, as well as early recognition and intervention for toddlers with special needs, are emphasized. Information about the health, nutrition and safety components of toddler care is included. Meets the Department of Social Services Classification Indicator DS4.
Transfer Status: Transferable to CSU, see counselor for limitations.

CDECE 45 3.0 units
Child & Adolescent Development
3.0 hours lecture
Grading: letter grade or credit/no credit
A study of social, emotional, intellectual and physical growth patterns from conception through adolescence. Theories of development are studied as an integrated approach to each of the aforementioned phases of life. Meets the State of California requirement for teaching in early childhood education programs. Not open for credit to students registered in or with credit in CDECE 47. Does not meet the general education requirement for Area D nor does it meet the prerequisite for the Nursing program.

Transfer Status: Transferable to CSU, see counselor for limitations.

**CDECE 47** 3.0 units

**Human Development**

3.0 hours lecture

Grading: letter grade or credit/no credit

A study of emotional, intellectual and physical growth patterns from conception to death. Theories of development are studied as an integrated approach to each phase of life. Meets the State of California requirement for teaching nursery school and the prerequisite for entrance into the nursing program. Not open for credit to students registered in or with credit in CDECE 45.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**CDECE 48** 3.0 units

**Child, Family and Community D2**

3.0 hours lecture

Grading: letter grade or credit/no credit

A study of how family, school and community affect a child’s development. Emphasizes the dynamics of human relations in a multi-cultural, urban environment and agencies concerned with health, education and welfare of children and families. Fulfills state licensing requirements for child, family and community D2.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**CDECE 53** 3.0 units

**Intro to Early Childhood Education**

3.0 hours lecture

Grading: letter grade or credit/no credit

Surveys educational programs for young children and their development and implementation of them.

Transfer Status: Transferable to CSU, see counselor for limitations.

**CDECE 54** 2.0 units

**Art for Children D3**

2.0 hours lecture

Grading: letter grade or credit/no credit

Learn the philosophy, principles and implementation of art experiences for the young child. Fulfills state licensing requirements for programs, curriculum D3.

Transfer Status: Transferable to CSU, see counselor for limitations.

**CDECE 55** 2.0 units

**Music for Children D3**

2.0 hours lecture

Grading: letter grade or credit/no credit

Principles and methods of providing musical experiences for young children. Development of skills with simple musical instruments suitable for use in early childhood education programs.

Transfer Status: Transferable to CSU, see counselor for limitations.

**CDECE 56** 2.0 units

**Creative Movement for Young Children D3**

2.0 hours lecture

Grading: letter grade or credit/no credit

Principles and methods of developing motor skills and providing creative experiences in body movement and dance for young children.

Transfer Status: Transferable to CSU, see counselor for limitations.

**CDECE 57** 2.0 units

**Science in Early Childhood D3**

2.0 hours lecture

Grading: letter grade or credit/no credit

A study of methods and materials that encourages preschool children to explore and experiment in their natural environment. Relate mathematical, spatial and problem-solving concepts to discovery through play activities. Satisfies state licensing requirement for curriculum program D3.

Transfer Status: Transferable to CSU, see counselor for limitations.

**CDECE 58** 2.0 units

**Language Arts for Young Children D3**

2.0 hours lecture

Grading: letter grade

A survey of literature, language arts and emerging literacy activities for young children. Meets state licensing requirements for program curriculum D3.

Transfer Status: Transferable to CSU, see counselor for limitations.

**CDECE 59** 3.0 units

**Child Behavior D3**

3.0 hours lecture

Grading: letter grade or credit/no credit

A study of the ways of approaching and understanding children’s behavior.

Transfer Status: Transferable to CSU, see counselor for limitations.

**CDECE 60A** 3.0 units

**Admin of Child Development Programs D6**

3.0 hours lecture

Prerequisite: CDECE 45 or 47.

Grading: letter grade or credit/no credit

A study of the principles of organizing and administering early childhood education programs.

Transfer Status: Transferable to CSU, see counselor for limitations.

**CDECE 60B** 3.0 units

**Advanced Supervision of ECE D6**

3.0 hours lecture

Prerequisite: CDECE 45 or 47.

Grading: letter grade or credit/no credit

An in-depth study of the principles of organizing and administrating preschool programs, emphasizing staffing issues, program quality and working with parents.

Transfer Status: Transferable to CSU, see counselor for limitations.

**CDECE 61** 3.0 units

**Children/Multicultural Classroom D3**

3.0 hours lecture

Grading: letter grade or credit/no credit
Philosophy, principles and methods relating to the teaching of multicultural young children and their parents. Meets state licensing requirements for program curriculum D3.

Transfer Status: Transferable to CSU, see counselor for limitations.

CDECE 66 3.0 units
The Preschool Child D3
2.0 hours lecture, 3.0 hours laboratory
Grading: letter grade
A study of the physical, social, emotional and cognitive development of the preschool child in a variety of planned programs for preschool children, emphasizing the interaction of parents, children and teachers. Three hours of observation/participation at the Child Development Center are required each week. Meets state licensing requirements for program, curriculum D3. Proof of a negative TB test is required to participate and observe in children’s licensed program.

Transfer Status: Transferable to CSU, see counselor for limitations.

CDECE 68 3.0 units
Early Childhood Ed Practicum D3
2.0 hours lecture, 3.0 hours laboratory
Prerequisite: CDECE 45 or 47 and 48, 54, 55, 57, 58, 66.
Grading: letter grade or credit/no credit
Provides an opportunity to plan, prepare, execute and evaluate various experiences with preschool age children. Includes learning specific techniques of working with children, parents and staff, procedures necessary for maintenance and use of equipment and the planning of curriculum for early childhood education programs.

Transfer Status: Transferable to CSU, see counselor for limitations.

CDECE 71AD 2.0 units
Work Experience — Child Development
1.0 hour lecture, 1.0 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
An extension of vocational learning experiences through employment or volunteer activities directly related to the occupational goal or career in early childhood or school age child care.

Transfer Status: Transferable to CSU, see counselor for limitations.

CDECE 72AD 3.0 units
Work Experience — Child Development
1.0 hour lecture, 1.5 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
An extension of vocational learning experiences through employment or volunteer activities directly related to the occupational goal or career in early childhood or school age child care.

Transfer Status: Transferable to CSU, see counselor for limitations.

CDECE 73AD 4.0 units
Work Experience — Child Development
1.0 hour lecture, 1.25 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit

An extension of vocational learning experiences through employment or volunteer activities directly related to the occupational goal or career in early childhood or school age child care.

Transfer Status: Transferable to CSU, see counselor for limitations.

CDECE 72 3.0 units
Work Experience — Child Development
1.0 hour lecture, 1.5 hours laboratory
Prerequisite: CDECE 45 or 47.
Grading: letter grade or credit/no credit
Provides an opportunity to plan, prepare, execute and evaluate various experiences with preschool age children. Includes learning specific techniques of working with children, parents and staff, procedures necessary for maintenance and use of equipment and the planning of curriculum for early childhood education programs.

Transfer Status: Transferable to CSU, see counselor for limitations.

CDECE 71AD 2.0 units
Work Experience — Child Development
1.0 hour lecture, 1.0 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
An extension of vocational learning experiences through employment or volunteer activities directly related to the occupational goal or career in early childhood or school age child care.

Transfer Status: Transferable to CSU, see counselor for limitations.

CDECE 72AD 3.0 units
Work Experience — Child Development
1.0 hour lecture, 1.5 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
An extension of vocational learning experiences through employment or volunteer activities directly related to the occupational goal or career in early childhood or school age child care.

Transfer Status: Transferable to CSU, see counselor for limitations.

CDECE 73AD 4.0 units
Work Experience — Child Development
1.0 hour lecture, 1.25 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit

An extension of vocational learning experiences through employment or volunteer activities directly related to the occupational goal or career in early childhood or school age child care.

Transfer Status: Transferable to CSU, see counselor for limitations.
Courses of Instruction

homemade instruments are included. Fulfills state licensing requirements for program, curriculum.

**CDECE 263** 1.0 unit
**Autoharp & Bells in Early Childhood D3**
1.0 hour lecture
Grading: letter grade or credit/no credit
Designed to demonstrate the use of the autoharp and bells in a preschool setting. Specific instruction is given for the use of these instruments in: song accompaniment, group experiences, informal exploration, story telling and special effects.

**CDECE 431AD** 0.5 unit
**Mentor Seminar**
0.5 hour lecture
Grading: credit/no credit
A seminar for early childhood mentors to explore issues related to their role as supervisors of beginning teachers. Seminar content will be individualized. For mentors who have been selected into the California Early Childhood Mentor Teacher Program.

**CDECE 455** 1.0 unit
**BEST-Arts Music for Young Children D3**
1.0 hour lecture
Prerequisite: CDECE 45 or 47 and 55.
Grading: letter grade or credit/no credit
B.E.S.T (Building Educational Success Through the Arts) Music for preschool children is designed as an enrichment class for the experienced child development student. Emphasizes musical techniques to use with children based on curriculum from the Wolf Trap Institute for Early Learning Through the Arts. Artists from the Education Division of the Performing Arts Center of Los Angeles County will demonstrate performance skills and techniques of involving children in musical activities. Lecture topics will relate music to literacy, problem solving, conflict resolution, brain development and diversity.

**CDECE 456** 1.0 unit
**BEST-Arts Movement for Young Children D3**
1.0 hour lecture
Prerequisite: CDECE 45 or 47 and 55.
Grading: letter grade or credit/no credit
B.E.S.T Arts (Building Educational Success Through the Arts)-Dance and movement for preschool children is designed as an enrichment class for the experienced child development student. Emphasizes dance/movement techniques to use with children based on curriculum from the Wolf Trap Institute for Early Learning Through the Arts. Artists from the Education Division of the Performing Arts Center of Los Angeles County will demonstrate performance skills and techniques of involving children in movement activities. Lectures include movement and large/small motor skills, brain development and self-esteem.

**CDECE 458** 1.0 unit
**BEST Arts-Storytelling for Children D3**
1.0 hour lecture
Prerequisite: CDECE 45 or 47 and 58.
Grading: letter grade or credit/no credit
B.E.S.T. (Building Educational Success through the Arts) Arts-Storytelling for preschool children is designed as an enrichment class for the experienced child development student. Emphasizes storytelling skills and the use of dramatic techniques to use with children based on curriculum from the Wolf Trap Institute for Early Learning Through the Arts. Artists from the Education Division of the Performing Arts Center of Los Angeles County will demonstrate performance skills and techniques. Lectures include storytelling as it relates to the development of language, cognitive and social skills, conflict resolution, cultural diversity and building self-esteem.

**CDECE 800A** 0.5 unit
**Special Topics in ECE**
0.5 hour lecture
Grading: credit/no credit
A study of situations related to the special topic. Special topics include but are not limited to the following: school age child care, curriculum in early childhood, organization of day care centers and supervision responsibilities in early childhood settings.

**CDECE 800B** 0.5 unit
**Special Topics in ECE**
0.5 hour lecture
Grading: credit/no credit
A study of situations related to the special topic. Special topics include but are not limited to the following: school age child care, curriculum in early childhood, organization of day care centers and supervision responsibilities in early childhood settings.

**CDECE 800C** 0.5 unit
**Special Topics in ECE**
0.5 hour lecture
Grading: credit/no credit
A study of situations related to the special topic. Special topics include but are not limited to the following: school age child care, curriculum in early childhood, organization of day care centers and supervision responsibilities in early childhood settings.

**CDECE 800D** 0.5 unit
**Special Topics in ECE**
0.5 hour lecture
Grading: credit/no credit
A study of situations related to the special topic. Special topics include but are not limited to the following: school age child care, curriculum in early childhood, organization of day care centers and supervision responsibilities in early childhood settings.

**CHILD DEVELOPMENT-FAMILY DAY CARE (CDFDC)**

**CDFDC 212** 3.0 units
**Family Child Care Management**
3.0 hours lecture
Grading: letter grade or credit/no credit
Assists persons planning to become or currently involved in the day care of children in the home.

**CHILD DEVELOPMENT-LEARNING LAB (CDLL)**

**CDLL 51A** 2.0 units
**Ecology of Early Childhood-Whole Child**
1.0 hour lecture, 4.0 hours laboratory
Grading: letter grade or credit/no credit
A study of child development research and theory from birth to twenty-nine months. Emphasizes physical, cognitive, social/emotional and language development.
### Courses of Instruction

| Course Code | Title                                              | Units | Grading: letter grade or credit/no credit | 1.0 hour lecture | 4.0 hours laboratory | Transfer Status: Transferable to CSU, see counselor for limitations.
<table>
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<tbody>
<tr>
<td>CDLL 51B</td>
<td>Ecology of Early Childhood-Whole Child</td>
<td>2.0</td>
<td></td>
<td>A study of child development research and theory from birth to twenty-nine months. Emphasizes physical, cognitive, social/emotional and language development. Proof of a negative TB test required for participation and observation in the children’s program. Students participating without a child must also complete fingerprint clearance to participate.</td>
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<tr>
<td>CDLL 51C</td>
<td>Ecology of Early Childhood-Whole Child</td>
<td>2.0</td>
<td></td>
<td>A study of child development research and theory from birth to twenty-nine months. Emphasizes physical, cognitive, social/emotional and language development. Proof of a negative TB test required for participation and observation in the children’s program. Students participating without a child must also complete fingerprint clearance to participate.</td>
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<tr>
<td>CDLL 51D</td>
<td>Ecology of Early Childhood-Whole Child</td>
<td>2.0</td>
<td></td>
<td>A study of child development research and theory from birth to twenty-nine months. Emphasizes physical, cognitive, social/emotional and language development. Proof of a negative TB test required for participation and observation in the children’s program. Students participating without a child must also complete fingerprint clearance to participate.</td>
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<tr>
<td>CDLL 52A</td>
<td>Preschool Child Techniques</td>
<td>2.0</td>
<td></td>
<td>A study of current concepts and research in early childhood education through lectures and lab participation. Designed for child development majors, early childhood education majors and parents. Proof of a negative TB test required for participation and observation in the children’s program. Students participating without a child must also complete fingerprint clearance to participate.</td>
<td>1.0</td>
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<td>1.0</td>
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<td>CDLL 52D</td>
<td>Preschool Child Techniques</td>
<td>2.0</td>
<td></td>
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<tr>
<td>CDLL 91AD</td>
<td>Special Studies</td>
<td>2.0</td>
<td></td>
<td>Exploration and development on an individual basis of special projects within the child development field. Proof of a negative TB test required for participation and observation in the children’s program. Students participating without a child must also complete fingerprint clearance to participate.</td>
<td>1.0</td>
<td>3.0</td>
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<tr>
<td>CDLL 231A</td>
<td>Practicum for Working with Parents</td>
<td>2.0</td>
<td></td>
<td>Practicum for working with parents through lecture and lab participation. Proof of a negative TB test required for participation and observation in the Children’s program. Students participating without a child must also complete fingerprint clearance to participate.</td>
<td>1.0</td>
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<tr>
<td>CDLL 231B</td>
<td>Practicum for Working with Parents</td>
<td>2.0</td>
<td></td>
<td>Practicum for working with parents through lecture and lab participation. Proof of a negative TB test required for participation and observation in the Children’s program. Students participating without a child must also complete fingerprint clearance to participate.</td>
<td>1.0</td>
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</tbody>
</table>
Courses of Instruction

Plan preschool/pre-kindergarten experiences for parents through lecture and lab participation. Proof of a negative TB test required for participation and observation in the Children’s Program. Students participating without a child must also complete fingerprint clearance to participate.

**CDLL 232A** 0.5 unit
Organizing ECE Interest Centers  
0.2 hour lecture, 1.0 hour laboratory  
Grading: letter grade or credit/no credit  
Plan interest centers for children participating at the Child Development Centers. Emphasizes summertime activities, i.e., water play, carpentry, field trips. (Normally offered in summer sessions.) Proof of a negative TB test required for participation and observation in the children’s program. Students participating without a child must also complete fingerprint clearance to participate.

**CDLL 232B** 0.5 unit
Organizing ECE Interest Centers  
0.2 hour lecture, 1.0 hour laboratory  
Grading: letter grade or credit/no credit  
Plan interest centers for children participating at the Child Development Centers. Emphasizes summertime activities, i.e., water play, carpentry, field trips. (Normally offered in summer sessions.) Proof of a negative TB test required for participation and observation in the children’s program. Students participating without a child must also complete fingerprint clearance to participate.

**CDLL 232C** 0.5 unit
Organizing ECE Interest Centers  
0.2 hour lecture, 1.0 hour laboratory  
Grading: letter grade or credit/no credit  
Plan interest centers for children participating at the Child Development Centers. Emphasizes summertime activities, i.e., water play, carpentry, field trips. (Normally offered in summer sessions.) Proof of a negative TB test required for participation and observation in the children’s program. Students participating without a child must also complete fingerprint clearance to participate.

**CDLL 232D** 0.5 unit
Organizing ECE Interest Centers  
0.2 hour lecture, 1.0 hour laboratory  
Grading: letter grade or credit/no credit  
Plan interest centers for children participating at the Child Development Centers. Emphasizes summertime activities, i.e., water play, carpentry, field trips. (Normally offered in summer sessions.) Proof of a negative TB test required for participation and observation in the children’s program. Students participating without a child must also complete fingerprint clearance to participate.

**CDLL 603** 0.0 unit
LBCC Child Development Centers Participation  
6.0 hours laboratory  
Grading: LBCC Non-Graded Course  
A non-credit lab experience for students participating in LBCC Child Development Center Demonstration Lab Schools, including child care in order to provide guided education and observation.

**CHILD DEVELOPMENT—PARENT EDUCATION (CDPE)**

**CDPE 200AD** 0.5 unit
Infant Parent Education  
0.5 hour lecture, 1.0 hour laboratory  
Grading: letter grade or credit/no credit  
Formerly 301AD. For parents to study the growth and development of their children in a lab setting. Lectures and discussions focus on the social, intellectual, physical and personality development of infants who are four months to walking, approximately twelve months.

**CDPE 201AD** 1.0 unit
Infant Parent Education  
1.0 hour lecture, 2.0 hours laboratory  
Grading: letter grade or credit/no credit  
Designed for parents to study the growth and development of their children in a lab setting. The lectures and discussions focus on the social, intellectual, physical and personality development of infants approximately four months to walking, approximately twelve months.

**CDPE 202AD** 1.0 unit
Toddler Parent Education  
1.0 hour lecture, 2.0 hours laboratory  
Grading: letter grade or credit/no credit  
Designed for parents to study the growth and development of their children in a lab setting. The lectures and discussions focus on the social, intellectual, physical and personality development of toddler children who are walking, approximately twelve months to 24 months.

**CDPE 203AD** 1.0 unit
Preschool Parent Education  
1.0 hour lecture, 2.0 hours laboratory  
Grading: letter grade or credit/no credit  
Designed for parents to study the growth and development of their children in a lab setting. The lectures and discussions focus on the social, intellectual, physical and personality development of children two to three years old.
CDPE 204AD 1.0 unit  
Preschool Parent Education  
1.0 hour lecture, 2.0 hours laboratory  
Grading: letter grade or credit/no credit  
Designed for parents to study the growth and development of their children in a lab setting. The lectures and discussions focus on the social, intellectual, physical and personality development of children three-to four-years old.

CDPE 205AD 1.0 unit  
Preschool Parent Education  
1.0 hour lecture, 2.0 hours laboratory  
Grading: letter grade or credit/no credit  
Designed for parents to study the growth and development of their children in a lab setting. The lectures and discussion focus on the social, intellectual, physical and personality development of children four-to five-years old.

CDPE 406A 3.0 units  
Foster Care Education for Foster Parents  
3.0 hours lecture  
Grading: letter grade or credit/no credit  
A study of human growth and development with special emphasis on the foster child and foster parents. Behavior problems, discipline, social interactions, community resources and ways of helping the child leave the foster home will be emphasized.

CDPE 406A2 1.0 unit  
Foster Care Education for Foster Parents  
1.0 hour lecture  
Grading: letter grade or credit/no credit  
A study of human growth and development with special emphasis on the foster child and foster parents. Behavior problems, discipline, social interactions, community resources and ways of helping the child leave the foster home will be emphasized.

CDPE 406A3 1.5 units  
Foster Care Education for Foster Parents  
1.5 hours lecture  
Grading: letter grade or credit/no credit  
A study of human growth and development with special emphasis on foster children and foster parents. Behavior problems, discipline, social interactions, community resources and ways of helping children leave the foster home will be emphasized.

CDPE 406A4 1.0 unit  
Foster Care Education for Foster Parents  
1.0 hour lecture  
Grading: letter grade or credit/no credit  
A study of human growth and development with special emphasis on foster children and foster parents. Behavior problems, discipline, social interactions, community resources and ways of helping children leave the foster home will be emphasized.

CDPE 406A5 1.0 unit  
Foster Care Education for Foster Parents  
1.0 hour lecture  
Grading: letter grade or credit/no credit  
A study of human growth and development with special emphasis on the foster child and foster parents. Behavior problems, discipline, social interactions, community resources and ways of helping the child leave the foster home will be emphasized.

CDPE 406A6 1.0 unit  
Foster Care Education for Foster Parents  
1.0 hour lecture  
Grading: letter grade or credit/no credit  
A study of human growth and development with special emphasis on the foster child and foster parents. Behavior problems, discipline, social interactions, community resources and ways of helping the child leave the foster home will be emphasized.

CDPE 406A7 1.0 unit  
Foster Care Education for Foster Parents  
1.0 hour lecture  
Grading: letter grade or credit/no credit  
A study of human growth and development with special emphasis on the foster child and foster parents. Behavior problems, discipline, social interactions, community resources and ways of helping the child leave the foster home will be emphasized.

CDPE 605 0.0 unit  
Parenting Skills  
1.0 hour lecture  
Grading: LBCC Non-Graded Course  
A study of parent/child relationships.

CDPE 606 0.0 unit  
Parent Education for Foster Parents  
3.0 hours lecture  
Grading: LBCC Non-Graded Course  
A study of the parenting skills and knowledge needed to aid the adaptation of children into foster homes.

CHILD DEVELOPMENT—SCHOOL AGE (CDSA)

CDSA 62 2.0 units  
Creative Express for School Age Children  
2.0 hours lecture  
Grading: letter grade or credit/no credit  
A study of principles, methods and materials which will encourage creative expression in school children.  
Transfer Status: Transferable to CSU, see counselor for limitations.

CDSA 63 3.0 units  
The School Age Child  
2.0 hours lecture, 3.0 hours laboratory  
Grading: letter grade  
A study of the physical, social, emotional and cognitive development of the school age child, emphasizing the interaction of children and teachers in child care settings. Three hours of observation/participation at approved sites are required each week.  
Transfer Status: Transferable to CSU, see counselor for limitations.

CDSA 65 3.0 units  
School Age Curriculum  
3.0 hours lecture  
Grading: letter grade  
A survey of curriculum and activities appropriate for the school age child.  
Transfer Status: Transferable to CSU, see counselor for limitations.
CDSA 75  3.0 units
School Age Child Care Practicum D5
2.0 hours lecture, 3.0 hours laboratory
Prerequisite: CDECE 45 or 47 and CDSA 62, 63, 65
Grading: letter grade
An opportunity to plan, prepare, present and evaluate curriculum activities offered to school-age children (6-12) in various public and private school-age child care settings. Proof of negative TB test and fingerprint clearance required to participate in children’s licensed program.
Transfer Status: Transferable to CSU, see counselor for limitations.

CHILD DEVELOPMENT—SPECIAL EDUCATION (CDSED)

CDSED 5  3.0 units
Community Resources/Special Education
3.0 hours lecture
Grading: letter grade or credit/no credit
Briefly surveys disabling conditions and acquaints students with community agencies, schools and services available to individuals with exceptional needs. The affective aspects of disabilities are also considered. Field trips to special educational classrooms and agencies will be an integral part of the student’s experience.
Transfer Status: Transferable to CSU, see counselor for limitations.

CDSED 67  3.0 units
The Exceptional Child
3.0 hours lecture
Grading: letter grade or credit/no credit
A survey course examining each of the areas of exceptionality. Emphasizes the educational, social and emotional development of the exceptional child during the school years. Early intervention and transition to adulthood will be covered briefly.
Transfer Status: Transferable to CSU, see counselor for limitations.

CDSED 69  3.0 units
Special Education Practicum
2.0 hours lecture, 3.0 hours laboratory
Prerequisite: CDSED 67, 5, 70 and CDECE 45 or 47
Grading: letter grade
Plan, prepare, execute and evaluate various experiences with disabled individuals in schools and agencies in the greater Long Beach area. Learn specific techniques of working with children, adults, parents and staff to provide an appropriate experience for the disabled individual.
Transfer Status: Transferable to CSU, see counselor for limitations.

CDSED 70  3.0 units
Teaching Exceptional Students
3.0 hours lecture
Grading: letter grade
A systematic study of developmentally appropriate learning in the inclusive classroom to include teaching methods and materials used in instruction of children with special needs. Development and interpretation of an Individualized Education Program (IEP) as well as specific areas of curriculum development will be addressed.
Transfer Status: Transferable to CSU, see counselor for limitations.

CHINESE (CHIN)

CHIN 1  (Part of CAN CHIN SEQUENCE A)  5.0 units
Elementary Chinese 1
5.0 hours lecture, 1.0 hour laboratory
Grading: letter grade or credit/no credit
Intro to the Chinese language (Mandarin). Learn comprehension, speaking, reading and writing, the study of grammar, vocabulary and pronunciation, etc. Emphasizes the traditions and customs of China. Not recommended for native speakers.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

CHIN 1A  3.0 units
Elementary Chinese 1A
3.0 hours lecture
Grading: letter grade or credit/no credit
The first half of CHIN 1, Intro to the Chinese Language (Mandarin). Learn comprehension, speaking, reading and writing, the study of grammar, vocabulary and pronunciation, etc. Emphasizes traditions and the customs of China. This course in combination with CHIN 1B is equivalent to CHIN 1. Not recommended for native speakers.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

CHIN 1B  2.0 units
Elementary Chinese 1B
2.0 hours lecture, 1.0 hour laboratory
Prerequisite: CHIN 1A
Grading: letter grade or credit/no credit
The second half of CHIN 1, Intro to the Chinese Language (Mandarin). Learn comprehension, speaking, reading and writing, the study of grammar, vocabulary and pronunciation, etc. Emphasizes traditions and the customs of China. This course in combination with CHIN 1A is equivalent to CHIN 1. Not recommended for native speakers.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

CHIN 2  (Part of CAN CHIN SEQUENCE A)  5.0 units
Elementary Chinese 2
5.0 hours lecture, 1.0 hour laboratory
Prerequisite: CHIN 1
Grading: letter grade or credit/no credit
Increased emphasis is on the development of oral communication, reading and writing skills. Use of materials dealing with contemporary issues in the Chinese world. Not recommended for native speakers.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

CITIZENSHIP (CIT)

CIT 601  0.0 unit
Citizenship
3.0 hours lecture
Grading: LBCC Non-Graded Course
Rapid review of the history of the United States, Constitution, the government of the United States and state and local government. Designed for foreign-born persons preparing for the naturalization exam.
### Courses of Instruction

#### COMMUNICATIVE DISORDERS (COMDI)

**COMDI 2A** 3.0 units  
**American Sign Language, Beginning**  
3.0 hours lecture  
Grading: letter grade or credit/no credit  
Instruction in the language system most used by deaf persons, instruction and practice in the fundamentals of signing (ASL) and finger spelling for communicating with the deaf. Includes development of signed conversational skills and an overview of the culture of the deaf.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**COMDI 2B** 3.0 units  
**American Sign Language, Beginning**  
3.0 hours lecture  
Grading: letter grade or credit/no credit  
Instruction in the language system most used by deaf persons, instruction and practice in the fundamentals of signing (ASL) and finger spelling for communicating with the deaf. Includes development of signed conversational skills and an overview of the culture of the deaf.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**COMDI 3A** 3.0 units  
**American Sign Language, Intermediate**  
3.0 hours lecture  
Prerequisite: COMDI 2A and 2B.  
Grading: letter grade or credit/no credit  
Intermediate instruction for the continuing student of ASL and finger spelling. The purpose is to increase signing vocabulary, emphasizing practice in improving expressive and receptive conversational skills with the goal of increasing smoothness, clarity and speed of signing. Hearing loss, history of sign language, deaf culture and deaf psychology will also be introduced.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**COMDI 3B** 3.0 units  
**American Sign Language, Intermediate**  
3.0 hours lecture  
Prerequisite: COMDI 2A and 2B.  
Grading: letter grade or credit/no credit  
Intermediate instruction for the continuing student of ASL and finger spelling. Increase signing vocabulary, emphasizing practice in improving expressive and receptive conversational skills with the goal of increasing smoothness, clarity and speed of signing. Hearing loss, history of sign language, deaf culture and deaf psychology will also be introduced to students.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**COMDI 633** 0.0 unit  
**Beginning Speech Reading (Lip Reading)**  
2.0 hours laboratory  
Grading: LBCC Non-Graded Course  
Learn lip reading techniques for the hearing impaired. Special attention is given to communication difficulties of the hearing.

**COMDI 634** 0.0 unit  
**Intermediate Speech Reading (Lip Reading)**  
2.0 hours laboratory  
Grading: LBCC Non-Graded Course  
An intermediate degree of proficiency in lip reading skills to enhance communication for the hearing impaired.

**COMDI 678** 0.0 unit  
**Speech and Hearing Correction**  
3.0 hours laboratory  
Grading: LBCC Non-Graded Course  
For students with communication disabilities that affect articulation, voice or hearing. This includes stuttering, aphasia and other disorders which inhibit the ability to understand or effectively approximate a standard American dialect. Will be expected to participate in a lab program at the LBCC/Speech and Hearing Clinic.

#### COMPUTER AND BUSINESS INFORMATION SYSTEMS (CBIS)

**CBIS 2** 3.0 units  
**Advanced MS Office-Help Desk Emphasis**  
2.0 hours lecture, 3.0 hours laboratory  
Prerequisite: CBIS 6 or CAOTC 34 and one of the following: CAOTC 41E-F, CAOTC 44D or CAOTC 39A.  
Grading: letter grade  
The second class in a three class series that extends the student’s knowledge of a popular word processor, spreadsheet, database, and presentation software package. Topics include advanced office concepts and skills, help desk concepts, and an introduction to visual basic application programming. This class will also prepare the students for Microsoft Office User Specialists and the Desktop Applications Developer certification examinations.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**CBIS 3A** 1.0 unit  
**Windows Command Line**  
1.0 hour lecture, 0.5 hour laboratory  
Grading: letter grade  
An operating system (OS) such as Disk Operating System (DOS) is the mechanism employed by application software users, computer programmers and anyone wishing to upgrade or maintain their own personal computer. Presents an up-to-date overview of computers and addresses basic hardware and software concepts. Topics covered include operating system functions, utilities and OS commands.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**CBIS 3B** 1.0 unit  
**Advanced Operating Systems-Windows 9X**  
1.0 hour lecture, 0.5 hour laboratory  
Prerequisite: CBIS 3A  
Grading: letter grade  
Presents an up-to-date overview of computers and covers advanced hardware and software operating system concepts. Includes managing and backing up hard disks, using troubleshooting tools and writing batch files. Learn to customize, configure and optimize computer systems by executing utilities, loading
Courses of Instruction

Terminate and Stay Resident (TSR) programs, managing memory and installing device drivers. 
Transfer Status: Transferable to CSU, see counselor for limitations.

CBIS 6 4.0 units
Introduction to Information Systems
3.0 hours lecture, 3.0 hours laboratory
Grading: letter grade
The general principles and applications of computers. Intro to computer hardware, the concept of local area network, software (word processing, spreadsheet and data base applications), procedures, computer systems and the integration of these applications in business and industry. Also, the fundamentals of problem solving techniques and programming in high level programming languages are discussed and applied with “hands on” experience using IBM compatible microcomputers. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

CBIS 7 1.0 unit
Business Programming Logic and Design
1.0 hour lecture, 0.5 hour laboratory
Prerequisite: CBIS 6
Grading: letter grade
Comprehensive coverage of business application-oriented logic for programming design. The following areas covered include flowchart design, validity checking, extracting and manipulating data from single and multidimensional tables and arrays, internal sorting and sequential file processing. Prepares the student for additional programming classes. Transfer Status: Transferable to CSU, see counselor for limitations.

CBIS 8B 4.0 units
Visual Basic Programming
3.0 hours lecture, 3.0 hours laboratory
Recommended Preparation: CBIS 6
Grading: letter grade
Fundamental programming concepts emphasizing problem solving and structured techniques. Includes creating sequential disk files, report formatting, interactive programming, array search, menus, sorting and subroutines. Proper programming, documentation and structure are emphasized. Visual BASIC language using IBM PCs.

CBIS 11 3.5 units
Computer Programming/C++ I
3.0 hours lecture, 2.0 hours laboratory
Prerequisite: MATH 110 or 110B or qualification through the Math assessment process.
Recommended Preparation: CBIS 6
Grading: letter grade
An intro course in C++ programming language, a problem solving technique used in modern software technology. The features of “C++” that support the development of small and large systems are included, thus providing a method for prototyping the commercial software development in business and industry. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

CBIS 12 3.5 units
Computer Programming/C++ II
3.0 hours lecture, 2.0 hours laboratory
Prerequisite: CBIS 11
Grading: letter grade
A second course in C++ includes: further explanation of C++ areas (data types, input/output, data structures, pointers and accessing files) and object-oriented programming (object hierarchy, operator overloading and streams).
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

CBIS 13 3.5 units
C++ Data Structures and Algorithms
3.0 hours lecture, 2.0 hours laboratory
Prerequisite: CBIS 12 and MATH 50
Grading: letter grade
This course continues the introduction to Object Oriented Programming with C++ begun in CBIS 11 & 12, with an emphasis on algorithms, data structures and software engineering. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

CBIS 14A 3.5 units
Computer Programming/JAVA
3.0 hours lecture, 2.0 hours laboratory
Prerequisite: MATH 110 or 110B or qualification through the Math assessment process.
Recommended Preparation: CBIS 6
Grading: letter grade
An intro to the fundamentals of Object-Oriented Programming using the JAVA computer language. Includes structured programming and design techniques, creating classes and applets, using JAVA’s AWT to create multimedia applets, components and containers, I/O streams and utility classes, thread and networking and creating of client/server programs. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

CBIS 15 3.5 units
Computer Programming/RPG
3.0 hours lecture, 2.0 hours laboratory
Prerequisite: MATH 110 or 110B or qualification through the Math assessment process.
Recommended Preparation: CBIS 6
Grading: letter grade
An intro to RPG (Report Program Generator) now used on IBM’s mid-range computer Application System/400 (AS/400) which contains all the features of RPGIII. Learn a problem-oriented language and gain in-depth exposure to the solutions of typical business problems and to design, code, compile and edit a program in RPG/400 to ensure reliable, predictable performance. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

CBIS 36 3.0 units
Systems Analysis and Design
2.0 hours lecture, 3.0 hours laboratory
Prerequisite: CBIS 6, 38 and one of the following: CBIS 8B, 12, 14A or 40
Grading: letter grade
An analysis of accounting systems and procedures, form design, internal control, work simplification and uses of data processing equipment in integrated systems. Transfer Status: Transferable to CSU, see counselor for limitations.

CBIS 38 4.0 units
Database Concepts
4.0 hours lecture
Recommended Preparation: CBIS 6
Courses of Instruction

Grading: letter grade
Concepts and techniques, which include planning, design and implementation of database systems, the study of database management systems, the fourth generation programming language-SQL, the data modeling, the role and responsibilities of the database administrator and processing business application programs. Transfer Status: Transferable to CSU, see counselor for limitations.

CBIS 40
3.0 units
MS Office Expert Level
2.0 hours lecture, 3.0 hours laboratory
Prerequisite: CBIS 6
Grading: letter grade
An intro to microcomputer integrated software. Hands-on using three popular software applications. Transfer Status: Transferable to CSU, see counselor for limitations.

CBIS 41
3.0 units
Networking Fundamentals
3.0 hours lecture, 1.0 hour laboratory
Recommended Preparation: CBIS 6, 3B
Grading: letter grade
Learn to install, configure, upgrade and troubleshoot a computer network. Discuss local area networks, wide area networks, communications protocols, network topologies, transmission media, security and assess career opportunities in networking. Address all of the objectives of the CompTIA Network+ certification. Practice exercises will help you to prepare for the CompTIA Network+ certification exam. Transfer Status: Transferable to CSU, see counselor for limitations.

CBIS 71AD
2.0 units
Work Experience-Comp Business Info Sys
1.0 hour lecture, 4.1 hours laboratory
Prerequisite: Completion of any CBIS course
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
Vocational learning experiences through employment directly related to the computer industry. Under the supervision of the instructor, master specific instructional units from the Computer Business Information Systems (CBIS) program, administer written quizzes and exams on these units, solve problems as they arise in the computer lab and tutor students. For advanced students who wish to pursue a career in the computer business information industry. May earn a maximum of twelve units from a total of four enrollments in the work experience course. Transfer Status: Transferable to CSU, see counselor for limitations.

CBIS 72AD
3.0 units
Work Experience-Comp Business Info Sys
1.0 hour lecture, 8.3 hours laboratory
Prerequisite: Completion of any CBIS course
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
Vocational learning experiences through employment directly related to the computer industry. Under the supervision of the instructor, master specific instructional units from the Computer Business Information Systems (CBIS) program, administer written quizzes and exams on these units, solve problems as they arise in the computer lab and tutor students. For advanced students who wish to pursue a career in the computer business information industry. May earn a maximum of twelve units from a total of four enrollments in the work experience course. Transfer Status: Transferable to CSU, see counselor for limitations.

CBIS 73AD
4.0 units
Work Experience-Comp Business Info Sys
1.0 hour lecture, 12.5 hours laboratory
Prerequisite: Completion of any CBIS course
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
Vocational learning experiences through employment directly related to the computer industry. Under the supervision of the instructor, master specific instructional units from the Computer Business Information Systems (CBIS) program, administer written quizzes and exams on these units, solve problems as they arise in the computer lab and tutor students. For advanced students who wish to pursue a career in the computer business information industry. May earn a maximum of twelve units from a total of four enrollments in the work experience course. Transfer Status: Transferable to CSU, see counselor for limitations.

CBIS 200
3.5 units
Introduction to IBM Compatible Computers
3.0 hours lecture, 2.0 hours laboratory
Prerequisite: CBIS 3A, 3B and 6
Grading: letter grade
In-depth study of the IBM-compatible personal computers and its latest common components and variations. Class coverage includes 386, 486 and Pentium/Power-PC based systems, computer buses, disk controllers and computer memory concepts and components. Class lectures will be supplemented with “hands on” classroom labs using diagnostic software and tools.

CBIS 206A
1.0 unit
Navigating the Internet
1.0 hour lecture, 0.5 hour laboratory
Recommended Preparation: CBIS 6
Grading: letter grade
Designed for anyone who wants to learn to use the Internet: people who want to use it in their work, in their studies, for recreation, for communication and those who are just curious about it. Learn how to use the Internet in a productive and satisfying way to access services, resources, information and to communicate electronically with other individuals or groups.

CBIS 206C
1.5 units
World Wide Web Database Programming
1.5 hours lecture
Prerequisite: CBIS 38 and 206B
Grading: letter grade
An advanced web page construction course focusing on connecting web sites to a database. Includes Perl, CGI, Internet Database Connector (IDC), Open Database Connectivity (ODBC) and Microsoft Internet Information Server (MSIIS).
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>CBIS 207AD</td>
<td>2.0</td>
<td>Web Construction</td>
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<tr>
<td></td>
<td></td>
<td>1.0 hour lecture, 3.0 hours laboratory</td>
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<td></td>
<td></td>
<td>Recommended Preparation: CBIS 206A</td>
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<td>Grading: letter grade</td>
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<td>This course teaches students how to design, create, format and publish web pages using different popular industry approaches. It covers basic skills, such as creating and enhancing a Web page, to more advanced skills, such as publishing a website using Layers, CSS, and forms.</td>
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<tr>
<td>CBIS 207E</td>
<td>2.5</td>
<td>Advanced Web Construction</td>
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<td></td>
<td></td>
<td>2.0 hours lecture, 2.0 hours laboratory</td>
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<tr>
<td></td>
<td></td>
<td>Recommended Preparation: CBIS 220</td>
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<td></td>
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<td>Grading: letter grade</td>
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<td>This course is an advanced web page construction course focusing on emerging HTML standards, XML, Javascript and other scripting languages. It is designed for students who already have a basic knowledge of web construction using a high level development tool such as FrontPage or Dreamweaver.</td>
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<tr>
<td>CBIS 208B</td>
<td>4.0</td>
<td>Advanced Visual Basic Programming</td>
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<td></td>
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<td>3.0 hours lecture, 3.0 hours laboratory</td>
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<td></td>
<td></td>
<td>Prerequisite: CBIS 208A</td>
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<td></td>
<td></td>
<td>Recommended Preparation: CBIS 38</td>
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<td></td>
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<td>Grading: letter grade</td>
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<td>This is an advanced Visual Basic programming class covering such topics as advanced methods for object, database, client/server, and Internet programming. The main focus of the class will be on database design and implementation tasks using VB, basic database theory, designing and building VB programs to access Microsoft Access and SQL servers, techniques for designing and enhancing user interfaces using class modules and Active X components, and developing applications for the Internet.</td>
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<tr>
<td>CBIS 208C</td>
<td>3.0</td>
<td>Visual Basic for Application Programming</td>
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<td>2.0 hours lecture, 3.0 hours laboratory</td>
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<td></td>
<td>Prerequisite: CBIS 208B</td>
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<td>Recommended Preparation: CBIS 2</td>
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<td>Grading: letter grade</td>
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<td>This is an advanced Visual Basic programming class on the writing of Visual Basic for Applications (VBA) programs for the Microsoft Office Suite. The procedures and programs created in the class will demonstrate how to customize and enhance the applications included in MS Office. Topics covered will include how to write program procedures using the sequence, selection, and repetition programming structures as well as how to create and implement dialog boxes, lists, and option/check box controls in Office Word, Excel, Access, and Outlook.</td>
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<tr>
<td>CBIS 210A</td>
<td>3.0</td>
<td>Novell Administration &amp; Upgrades</td>
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<td></td>
<td></td>
<td>2.0 hours lecture, 3.0 hours laboratory</td>
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<td>Recommended Preparation: CBIS 41</td>
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<td>Grading: letter grade</td>
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<td>Introduces administrative concepts and tasks. Explains the responsibilities of the functions and features of NetWare. Provides the technical tools needed, including NetWare utilities. Prepares the student for the Novell NetWare System Administrator Certification exam offered by Novell.</td>
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<tr>
<td>CBIS 210B</td>
<td>1.5</td>
<td>Novell Adv Administration &amp; Upgrades</td>
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<td></td>
<td></td>
<td>1.0 hour lecture, 1.5 hours laboratory</td>
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<td></td>
<td></td>
<td>Prerequisite: CBIS 210A</td>
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<td>Grading: letter grade</td>
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<td>Intro to advanced administrative concepts and tasks. Enhances the network management and monitoring skills. Provides a technical foundation for participants pursuing the CNE and CNI Programs. Intended to prepare the student for the Novell Advanced Administrator exam offered by Novell.</td>
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<tr>
<td>CBIS 215</td>
<td>1.5</td>
<td>Novell NetWare Installation/Config.</td>
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<td></td>
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<td>1.0 hour lecture, 1.5 hours laboratory</td>
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<td></td>
<td>Prerequisite: CBIS 210B</td>
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<td>Grading: letter grade</td>
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<td>Installation of a network operating system, upgrading from prior versions, installing workstation software, upgrading and configuring the system software. Includes network hardware requirements analysis. Hands-on exercises to perform the installation and upgrades.</td>
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<tr>
<td>CBIS 220</td>
<td>3.0</td>
<td>i-Net+ Internet Technologies</td>
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<td>3.0 hours lecture, 1.0 hour laboratory</td>
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<td>Recommended Preparation: CBIS 6</td>
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<td>Grading: letter grade or credit/no credit</td>
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<td>Teaches the baseline technical knowledge needed to enter an Internet Industry oriented career. After course completion, will be prepared to take the industry standard i-Net+ certification test.</td>
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<tr>
<td>CBIS 222A</td>
<td>3.0</td>
<td>Advanced Java for Sun Certification I</td>
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<td>2.5 hours lecture, 2.0 hours laboratory</td>
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<td>Prerequisite: CBIS 14A</td>
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<td>Grading: letter grade or credit/no credit</td>
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<td>A course in advanced java programming designed to teach the skill set required to pass the Sun Microsystems java programming certification exam.</td>
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<tr>
<td>CBIS 222B</td>
<td>3.0</td>
<td>Advanced Java for Sun Certification II</td>
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<td>2.5 hours lecture, 2.0 hours laboratory</td>
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<td></td>
<td>Prerequisite: CBIS 222A</td>
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<td>Grading: letter grade or credit/no credit</td>
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<td>A course in advanced java programming designed to teach the skill set required to pass the Sun Microsystems java developer certification exam. Also gives the student a solid skill set to successfully enter a java programming career.</td>
</tr>
<tr>
<td>CBIS 223</td>
<td>3.0</td>
<td>Unix/Linux Fundamentals</td>
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<td>2.0 hours lecture, 3.0 hours laboratory</td>
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<td>Prerequisite: MATH 110 or 110B or qualification through the Math assessment process.</td>
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<td>Recommended Preparation: CBIS 6</td>
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<td>Grading: letter grade</td>
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<td>Prepares students to work with Linux as an applications programmer, a computer operator or system administrator. Includes an overview of basic operating systems concepts, a history of Unix and its influence on modern operating systems, basic internal structure, details of Unix file system structures, pipes, filters and redirection, scripts, images and processes, shells, time-slicing and interrupts, memory management and Unix internals.</td>
</tr>
</tbody>
</table>
Courses of Instruction

CBIS 225  2.5 units
Microsoft Windows Client OS
2.0 hours lecture, 2.0 hours laboratory
Recommended Preparation: CBIS 41
Grading: letter grade or credit/no credit
Learn to install, configure and administer Windows 2000 Professional in a networking environment. Prepares the student to take the MCSE Certification Exam #70-210.

CBIS 226  2.5 units
Microsoft Windows Server OS
2.0 hours lecture, 2.0 hours laboratory
Prerequisite: CBIS 225
Grading: letter grade or credit/no credit
Learn to install, configure and administer Windows 2000 Server in a networking environment. Prepare to take the MCSE Certification Exam #70-215.

CBIS 227  2.5 units
Microsoft Windows Networking
2.0 hours lecture, 2.0 hours laboratory
Prerequisite: CBIS 226
Grading: letter grade or credit/no credit
Learn to install, configure and administer Windows 2000 networking services and protocols. Prepare to take the MCSE Certification Exam #70-216.

CBIS 228  2.5 units
Microsoft Windows Directory Services
2.0 hours lecture, 2.0 hours laboratory
Prerequisite: CBIS 226
Grading: letter grade or credit/no credit
Learn to install, configure and administer Windows 2000 Directory Services. Prepare to take the MCSE Certification Exam #70-217.

CBIS 234  3.5 units
AS/400 Computer Operations
3.0 hours lecture, 2.0 hours laboratory
Recommended Preparation: CBIS 6
Grading: letter grade
An intro to the operation of midrange business computer systems. Operating systems and systems software are described in general and in detail. Learn to operate the computer and related devices utilizing the campus’s IBM AS/400 facilities.

CBIS 239AD  3.5 units
Oracle Designer
3.0 hours lecture, 2.0 hours laboratory
Prerequisite: CBIS 38
Grading: letter grade
An intro to database development using database management client/server tools to prototype and develop enterprise-wide information systems. Topics include installing client/server database development tools, repository administration, process modeling, system modeling, systems design, client application generation, server generation and using current database management designer tools.

CBIS 240A  2.5 units
Solaris Unix Fundamentals
2.0 hours lecture, 2.0 hours laboratory
Recommended Preparation: CBIS 41
Grading: letter grade or credit/no credit
This course covers the basics of the Unix operating system. It presents basic commands, creation and manipulation of directories and files, basic network commands and using the Unix shell to streamline command execution.

CBIS 240B  4.5 units
Solaris Unix- Systems Administration I
4.0 hours lecture, 2.0 hours laboratory
Prerequisite: CBIS 240A
Grading: letter grade or credit/no credit
This course covers the basics of Unix systems administration. It presents basic Unix administration terms and functions. The course will cover adding and managing users and groups, setting up security, working with file systems, managing printers and installing the operating system.

CBIS 240C  4.5 units
Solaris Unix- Systems Administration II
4.0 hours lecture, 2.0 hours laboratory
Prerequisite: CBIS 240B
Grading: letter grade or credit/no credit
This course covers more advanced features of Unix systems administration. It presents Unix administration terms and functions as implemented in a client server environment. The course will cover the configuration of various network naming services, management console operations, network monitoring, event logging and automating the installation process across a network.

CBIS 242  2.5 units
Programming: Introduction to Oracle
2.0 hours lecture, 2.0 hours laboratory
Prerequisite: CBIS 6
Grading: letter grade
This course will provide students with an introduction to the relational database programming language, Structured Query Language (SQL) using Oracle database administration system. Topics will include an introduction to relational database design and database administration topics. Hands-on programming skills of using SQL Data Manipulation Language and Data Definition Language, as well as Oracle PL/SQL will be emphasized. The course is also designed to help students to pass Oracle Test, Introduction to Oracle: SQL and PL/SQL.

CBIS 243  2.0 units
Programming: Oracle Program Units
1.5 hours lecture, 1.5 hours laboratory
Prerequisite: CBIS 242
Grading: letter grade
This course covers how to write PL/SQL procedures, functions and packages in both the Oracle Procedure Builder and SQL*Plus environments. Gain knowledge about the creation of PL/SQL program units and database triggers, as well as various Oracle-supplied packages. The course also helps students prepare for the Oracle PL/SQL Program Units certification exam. Upon completion of this course, students are ready to take Oracle Developer Build Forms I/II or Developer Build Reports courses.

CBIS 244  2.5 units
Develop Oracle Forms
2.0 hours lecture, 2.0 hours laboratory
Prerequisite: CBIS 243
Grading: letter grade or credit/no credit
This course enables students to create Oracle forms, with extensive coverage of triggers. Additional topics include: wizards, data blocks, the debugger; fields; sub-routines; property manipulation; menus; calling
forms; variables; and the Internet Developer Suite as it pertains to forms. The course helps students prepare for the Oracle Certified Exam, Oracle Developer: Build Forms I/II.

CBIS 245 2.0 units
Develop Oracle Reports
1.5 hours lecture, 1.5 hours laboratory
Prerequisite: CBIS 243
Grading: letter grade or credit/no credit
This course enables you to create Oracle reports in a variety of styles and to customize them to meet specific business requirements. The concepts covered in the course are: object navigator, report wizard; templates; layout editor; parameters; list of values (LOV); triggers; report types; and the Internet Developer Suite as it pertains to reports. The course helps students prepare for the Oracle Certified Exam, Oracle Developer: Build Reports.

CBIS 246 2.5 units
Oracle DBA Fundamentals
2.0 hours lecture, 2.0 hours laboratory
Prerequisite: CBIS 242
Grading: letter grade
This course is for the students who need Oracle DBA training or to prepare for the Oracle DBA track certification. Students will gain a conceptual understanding of Oracle database architecture and how its components work and interact with one another. Students will also learn how to create an operational database and properly manage the various structures in an effective and efficient manner. The lecture topics are reinforced with structured hands-on lab practices.

CBIS 250 1.0 unit
Computer Careers & Certification Paths
1.0 hour lecture, 0.5 hour laboratory
Prerequisite: CBIS 6
Grading: letter grade
Educates students in the fine art of career-building within the Information Technology (IT) field and can be used by individuals deciding which career to pursue or those who know which track matches their interests and talents. Focuses on the professional characteristics involved with obtaining a position, as well as on maintaining and advancing your career once you are hired.

CBIS 251 3.5 units
Introduction to ASP.NET
3.0 hours lecture, 2.0 hours laboratory
Recommended Preparation: CBIS 38 or comparable work experience/knowledge of HTML and relational database applications.
Grading: letter grade or credit/no credit
This course covers how to create dynamic web pages and web-enabled database applications by using the Microsoft ASP.NET object model. Topics include, but are not limited to, the ASP.NET object programming model; the VS.NET user interface; server controls; ASP.NET rich controls; using VB.NET within an ASP.NET page; configuring an ASP.NET application; troubleshooting and deploying an ASP.NET application; managing data sources, data-driven ASP.NET applications, data-driven web applications; and XML web services.

CBIS 260 1.0 unit
Help Desk Concepts
1.5 hours lecture
Prerequisite: CBIS 40 and 200
Recommended Preparation: CBIS 41
Grading: letter grade
An intro to help desk concepts and procedures. Includes help desk operations, people, process, technology and information components, as well as help desk setup, customer support and resources.

CBIS 633 0.0 unit
Adaptive Computer Technology
4.0 hours laboratory
Grading: LBCC Non-Graded Course
Provides assessment, evaluation, training and instruction in the use of adaptive computer technology to students with disabilities. Access and training in adaptive computer technology will allow full participation in courses or career paths in which computers play an integral part.

CBIS 673 0.0 unit
Computer Learning Improvement Center
2.0 hours laboratory
Grading: LBCC Non-Graded Course
Designed to enhance classroom instruction, provide additional lab experience for the student and to improve computer skills.

COMPUTER AND INFORMATION SCIENCE (COMIS)

COMIS 1A 1.0 unit
Using the IBM Microcomputer
0.5 hour lecture, 1.5 hours laboratory
Grading: credit/no credit
Provides a minimum ability to use microcomputers to do useful work. Included are word processing, spreadsheet analysis and simple data base and telecommunications applications. Satisfies the computer proficiency graduation requirement.
Transfer Status: Transferable to CSU, see counselor for limitations.

COMPUTER APPLICATIONS AND OFFICE TECHNOLOGY (CAOTC)

CAOTC 31A 1.0 unit
Microsoft Windows Operating System, Beg.
0.5 hour lecture, 1.5 hours laboratory
Grading: letter grade or credit/no credit
This course provides an introduction to beginning windows operating system concepts. Through hands-on practice, students will learn to use the mouse, perform electronic desktop functions including file management, rearrange and use information from the desktop, use My Computer, Explorer, various desktop accessories, Notepad, WordPad.
Transfer Status: Transferable to CSU, see counselor for limitations.

CAOTC 31B 1.0 unit
Microsoft Windows Operating System, Adv
0.5 hour lecture, 1.5 hours laboratory
Recommended Preparation: CAOTC31A (may be taken concurrently)
Courses of Instruction

Grading: letter grade or credit/no credit
Students will learn to use advanced features of the Microsoft Windows operating system such as the control panel, object linking and embedding, multimedia, telecommunications and the Internet. Transfer Status: Transferable to CSU, see counselor for limitations.

CAOTC 34 3.0 units
Introduction to Computers & Applications
2.0 hours lecture, 3.0 hours laboratory
Recommended Preparation: CAOTT233, 200 or 200A or type 25 wpm.
Grading: letter grade or credit/no credit
An opportunity to examine general principles and applications of computers. Introduces computer hardware, the concept of telecommunications and the impact of computers upon society. Also, an intro to microcomputer application software currently being used in business. Transfer Status: Transferable to CSU, see counselor for limitations.

CAOTC 35 3.0 units
Microsoft Office
2.5 hours lecture, 1.5 hours laboratory
Recommended Preparation: CAOTC39A AND 41E
Grading: letter grade or credit/no credit
Develop skill in producing documents by using integration techniques in application software. Hands-on practice creating, editing, linking and transferring data between applications. Practice in electronic mail. Transfer Status: Transferable to CSU, see counselor for limitations.

CAOTC 39A 1.0 unit
Microsoft Word for Office, Beginning
1.0 hour lecture, 1.0 hour laboratory
Recommended Preparation: Type 45 wpm with five or fewer errors for five minutes.
Grading: letter grade or credit/no credit
Provides equipment training with Microsoft Word. Learn basic text editing including: creating, saving, printing, editing, formatting lines (centering, line spacing, justification), setting margins and indents, maintaining files through routine disk maintenance, changing fonts and using tools such as speller and Thesaurus. Transfer Status: Transferable to CSU, see counselor for limitations.

CAOTC 39B 1.0 unit
Microsoft Word for Office, Intermediate
1.0 hour lecture, 1.0 hour laboratory
Recommended Preparation: CAOTC39A (may be taken concurrently) and type 45 wpm with five or fewer errors for five minutes.
Grading: letter grade or credit/no credit
Reinforces basic skills and training in manipulating tabs, creating headers and footers, creating footnotes and endnotes, manipulating text within and between documents, revising documents and merging documents. Transfer Status: Transferable to CSU, see counselor for limitations.

CAOTC 39C 1.0 unit
Microsoft Word for Office, Advanced
1.0 hour lecture, 1.0 hour laboratory
Recommneded Preparation: CAOTC39B (may be taken concurrently) and type 45 wpm with five or fewer errors for five minutes.
Grading: letter grade or credit/no credit
Reinforces intermediate skills and introduces advanced formatting (hyphenation, line height alterations, special symbols, hard spaces, bookmarks, case conversion), graphics, graphic elements, columns, tables and incorporating Web information into a document. Transfer Status: Transferable to CSU, see counselor for limitations.

CAOTC 39D 1.0 unit
Microsoft Word for Office, Expert
1.0 hour lecture, 1.0 hour laboratory
Recommended Preparation: Type 45 wpm with five or fewer errors for five minutes.
Grading: letter grade or credit/no credit
For students who have completed the beginning, intermediate and advanced levels of Word and wish to learn and utilize Word expert shortcuts. Helps increase efficiency, reinforces advanced skills and teaches the following: sorting and extracting text, using styles and creating outlines, indexes, lists and table of contents. Transfer Status: Transferable to CSU, see counselor for limitations.

CAOTC 41E 1.0 unit
Excel for Windows-Beginning
0.5 hour lecture, 1.5 hours laboratory
Recommended Preparation: CAOTC41E (may be taken concurrently)
Grading: letter grade or credit/no credit
Intro to spreadsheet software for the office using Microsoft Excel on PCs. Through hands-on practice, create, enhance, design, sort and print spreadsheets. Transfer Status: Transferable to CSU, see counselor for limitations.

CAOTC 41F 1.0 unit
Excel for Windows, Intermediate
0.5 hour lecture, 1.5 hours laboratory
Recommended Preparation: CAOTC41F
Grading: letter grade or credit/no credit
Continuation of CAOTC41E. Through hands-on practice, learn to use the spreadsheet software’s database functions, develop macros and print reports. Transfer Status: Transferable to CSU, see counselor for limitations.

CAOTC 41J 1.0 unit
Excel for Windows, Advanced
0.5 hour lecture, 1.5 hours laboratory
Recommended Preparation: CAOTC41F
Grading: letter grade or credit/no credit
Continuation of CAOTC41F. Through hands-on practice, learn to work with financial functions, create and enhance charts, work with multiple worksheets and perform advanced printing functions. Transfer Status: Transferable to CSU, see counselor for limitations.

CAOTC 42A 1.0 unit
Desktop Publishing-Small Business 1
0.5 hour lecture, 1.5 hours laboratory
Recommended Preparation: CAOTC39A AND 41E
Grading: letter grade or credit/no credit
Beginning desktop publishing functions used with PCs in the home and office. Through hands-on practice, learn to create professional-looking publications (stationery, business cards, calendars, brochures, flyers, newsletters,
etc.). See the class schedule for brand of software offered.

Transfer Status: Transferable to CSU, see counselor for limitations.

**CAOTC 42**  1.0 unit

Desktop Publishing-Small Business 2

0.5 hour lecture , 1.5 hours laboratory

Recommended Preparation: CAOTC42A (may be taken concurrently)

Grading: letter grade or credit/no credit

Advanced desktop publishing functions used with PCs in the office and home to produce documents including forms, brochures, booklets, labels and press releases. Through hands-on practice, learn to use electronic scanners and assemble lengthy documents.

Transfer Status: Transferable to CSU, see counselor for limitations.

**CAOTC 43**  1.0 unit

Desktop Publishing-Business 1

0.5 hour lecture , 1.5 hours laboratory

Recommended Preparation: CAOTC31A

Grading: letter grade or credit/no credit

An intro to desktop publishing software used with PCs in the office to produce business documents, including reports, forms, brochures, newsletters and flyers. See the current class schedule for brand of software offered. Through hands-on practice, learn commands to set up the document, draw lines and shapes, import pictures and print camera-ready copy.

Transfer Status: Transferable to CSU, see counselor for limitations.

**CAOTC 44**  1.0 unit

Desktop Publishing-Business 3

0.5 hour lecture , 1.5 hours laboratory

Recommended Preparation: CAOTC43A

Grading: letter grade or credit/no credit

Continuation of CAOTC43A. Through hands-on practice, learn to enter and edit text with various type sizes and styles, transfer text created with word processing software into a document and combine text with graphics.

Transfer Status: Transferable to CSU, see counselor for limitations.

**CAOTC 45**  2.0 units

Internet for Office and Personal Use

1.0 hour lecture , 3.0 hours laboratory

Grading: letter grade or credit/no credit

Intro to telecommunication terminology, devices and software using IBM-compatible computers. Through hands-on practice, the students will learn to use the design template to create a slide show and imbed visuals. Additional advanced topics include automating presentations. There is a research component to the course where students will create presentations based on information gathered from electronic sources.

Transfer Status: Transferable to CSU, see counselor for limitations.

**CAOTC 46**  1.0 unit

Independent Project — Desktop Publishing

0.5 hour lecture , 1.5 hours laboratory

Recommended Preparation: CAOTC43D

Grading: letter grade or credit/no credit

Business Graphics-Paint/Draw Software

0.5 hour lecture , 1.5 hours laboratory

Recommended Preparation: CAOTC31A (may be taken concurrently)

Grading: letter grade or credit/no credit

An intro to painting and/or drawing software used with PCs in the office to produce graphic images for word processing, desktop publishing and media publishing. Through hands-on practice, learn to use electronic drawing tools and enhance commercial clip art illustrations.

Transfer Status: Transferable to CSU, see counselor for limitations.

Power Point for Windows, Beginning

0.5 hour lecture , 1.5 hours laboratory

Recommended Preparation: CAOTC31A (may be taken concurrently)

Grading: letter grade or credit/no credit

An intro to presentation graphics software used with PCs in the office. See the class schedule for version of software offered. Through hands-on practice, learn to combine text and graphic images to develop computerized slide shows, transparencies and charts for group presentations.

Transfer Status: Transferable to CSU, see counselor for limitations.

Power Point for Windows, Advanced

0.5 hour lecture , 1.5 hours laboratory

Recommended Preparation: CAOTC44D

Grading: letter grade or credit/no credit

This course is designed for students who are continuing in presentation graphics software using IBM-compatible computers. Through hands-on practice, the students will learn to use the design template to create a slide show and imbed visuals. Additional advanced topics include automating presentations. There is a research component to the course where students will create presentations based on information gathered from electronic sources.

Transfer Status: Transferable to CSU, see counselor for limitations.
Advanced study using desktop publishing computer software. Work independently with faculty assistance on an application of the software to meet an actual office need.

**Transfer Status:** Transferable to CSU, see counselor for limitations.

**CAOTC 46D**  1.0 unit

**Independent Project — Business Graphics**
0.5 hour lecture, 1.5 hours laboratory
Recommended Preparation: CAOTC44C or 44D
Grading: letter grade or credit/no credit
Advanced study using business graphics computer software. Work independently with faculty assistance on an application of the software to meet an actual office need.

**Transfer Status:** Transferable to CSU, see counselor for limitations.

**CAOTC 46E**  1.0 unit

**Independent Project-Telecommunications**
0.5 hour lecture, 1.5 hours laboratory
Recommended Preparation: CAOTC31A
Grading: letter grade or credit/no credit
Advanced study using telecommunications software. Work independently with faculty assistance on an application of the software to meet an actual office need.

**Transfer Status:** Transferable to CSU, see counselor for limitations.

**CAOTC 47A**  3.0 units

**Access for Office Applications, Begin**
2.0 hours lecture, 3.0 hours laboratory
Recommended Preparation: Type 30 wpm or CAOTT200 or 200C
Grading: letter grade or credit/no credit
Hands-on relational database application course on the personal computer: creating databases, designing queries, forms and reports for retrieving, viewing and sorting information, modifying design of forms and reports with graphics.

**Transfer Status:** Transferable to CSU, see counselor for limitations.

**CAOTC 47B**  3.0 units

**Access for Office Applications, Intermed**
2.0 hours lecture, 3.0 hours laboratory
Recommended Preparation: CAOTC47A and type 30 wpm or CAOTT200 or 200C
Grading: letter grade or credit/no credit
Hands-on training on PCs using a software application that creates and manages a computerized database.

**Transfer Status:** Transferable to CSU, see counselor for limitations.

**CAOTC 215A**  2.0 units

**Microsoft Outlook**
1.0 hour lecture, 3.0 hours laboratory
Recommended Preparation: Type 30 wpm minimum or CAOTT200 or CAOTT 200C
Grading: letter grade or credit/no credit
This course is designed for students entering the field of office work and presently employed students seeking upgraded skills. Provides hands-on computer training in desktop management using Microsoft Outlook.

**CAOTC 215AD**  3.0 units

**Computerized Office Job Training**
2.0 hours lecture, 3.0 hours laboratory
Recommended Preparation: Type 30 wpm minimum or CAOTT200 or 200C
Grading: letter grade or credit/no credit
For students entering the field of office work, as well as presently employed students seeking upgraded skills. Provides hands-on computer training in records management, payroll processing, inventory management, billing, bank reconciliation, accounts receivable and payable and financial statements.

**CAOTC 215B**  2.0 units

**Electronic Records Management**
1.0 hour lecture, 3.0 hours laboratory
Recommended Preparation: Type 30 wpm minimum or CAOTT 200 or CAOTT 200C
Grading: letter grade or credit/no credit
This course is designed for students entering the field of office work, as well as presently employed students seeking upgraded skills. The basics for both manual filing and electronic records management are addressed and reinforced through hands-on training in filing and address coding, indexing and retrieving records, and manipulating databases using Microsoft Access.

**CAOTC 215C**  2.0 units

**Lotus Notes**
1.0 hour lecture, 3.0 hours laboratory
Type 30 WPM minimum or CAOTT 200 or CAOTT 200C
Grading: letter grade
This course is designed for students entering the field of office work and presently employed students seeking upgraded skills. This course provides hands-on computer training in desktop management using Lotus Notes.

**CAOTC 220**  1.0 unit

**Hand-Held Electronic Organizers**
0.8 hour lecture, 0.2 hour laboratory
Grading: letter grade or credit/no credit
Take advantage of everything your Hand-Held Electronic Organizer has to offer. Make your HHEO work the way you want it to: use built-in and third party applications, keep track of your schedule, and connect to the Internet. You’ll get full details on how to prepare your HHEO for the address book, the to do list, the memo pad, a business trip, how to beam information to another HHEO, and even how to go wireless. This is the perfect course for every HHEO user.

**CAOTC 236A**  1.0 unit

**Word Processing-WordPerfect, Beginning**
1.0 hour lecture, 1.0 hour laboratory
Recommended Preparation: Type 45 wpm with five or fewer errors for five minutes
Grading: letter grade or credit/no credit
Provides equipment training with WordPerfect. Learn basic text editing including: creating, saving, printing, editing, formatting lines (centering, line spacing, justification), setting margins and indents, maintaining files through routine disk maintenance, changing fonts, and using tools such as Spell Checker, Thesaurus, and Grammatik.

**CAOTC 236B**  1.0 unit

**Word Processing-WordPerfect, Intermed.**
1.0 hour lecture, 1.0 hour laboratory
Recommended Preparation: Type 45 wpm with five or fewer errors for five minutes
Grading: letter grade or credit/no credit
Courses of Instruction

Reinforces basic skills and training in manipulating tabs, creating headers and footers, creating footnotes and endnotes, manipulating text within and between documents, revising documents, and merging documents.

**CAOTC 236C**  
Word Processing-WordPerfect, Advanced  
1.0 hour lecture, 1.0 hour laboratory  
Recommended Preparation: Type 45 wpm with five or fewer errors for five minutes  
Grading: letter grade or credit/no credit  
Reinforces intermediate skills and introduces advanced formatting (hyphenation, line height alterations, special symbols, hard spaces, bookmarks, case conversion), macros, graphics, and graphic elements, columns, envelopes, labels, tables, and incorporating Web information into a document.

**CAOTC 236D**  
Word Processing-WordPerfect, Expert  
1.0 hour lecture, 1.0 hour laboratory  
Recommended Preparation: Type 45 wpm with five or fewer errors for five minutes  
Grading: letter grade or credit/no credit  
For students who have completed the beginning, intermediate and advanced levels of WordPerfect and wish to learn and utilize WordPerfect expert shortcuts. Helps increase efficiency, reinforce advanced skills and teaches the following: sorting and extracting text, using styles and creating outlines, indexes, lists and table of contents.

**CAOTC 240AB**  
Microsoft Office Exam Prep-Word  
0.5 unit  
0.5 hour lecture  
Recommended Preparation: CAOTC39A-B  
Grading: letter grade or credit/no credit  
A test preparation course for the Microsoft Word proficient-user certification exam. Review all topics that appear in the guidelines for Word MOUS proficient-user certification. MOUS certified courseware will be used. Proficient-user certification indicates that individuals can process a wide range of everyday tasks easily.

**CAOTC 241AB**  
Microsoft Office Exam Prep-Excel  
0.5 unit  
0.5 hour lecture  
Recommended Preparation: CAOTC41F or 41J  
Grading: letter grade or credit/no credit  
This is a test preparation course for the Microsoft Excel proficient-user certification exam. Students will review all topics that appear in the guidelines for Excel MOUS proficient user certification. MOUS certified courseware will be used. Proficient User certification indicates that individuals can process a wide range of everyday tasks easily.

**CAOTC 242**  
Microsoft Office Exam Prep-PowerPoint  
0.5 unit  
0.2 hour lecture, 0.8 hour laboratory  
Recommended Preparation: CAOTC44D  
Grading: letter grade or credit/no credit  
Test preparation for the Microsoft PowerPoint certification exam. Students will review all topics that appear in the guidelines for PowerPoint MOUS certification. MOUS certified courseware will be used. Certification indicates that individuals can use the PowerPoint program to prepare a wide range of PowerPoint presentations.

**CAOTC 243**  
Microsoft Office Exam Prep-Access  
0.5 unit  
0.2 hour lecture, 0.8 hour laboratory  
Recommended Preparation: CAOTC47A  
Grading: letter grade or credit/no credit  
A test preparation course for the Microsoft Access core-user certification exam. Will review all topics that appear in the guidelines for Access MOUS core-user certification. MOUS certified courseware will be used. Core-user certification indicates that individuals can process a wide range of everyday tasks easily.

**CAOTC 246**  
Financial Applications  
3.0 units  
2.0 hours lecture, 3.0 hours laboratory  
Recommended Preparation: Type 30 wpm or CAOTT200 or 200C  
Grading: letter grade or credit/no credit  
The first in a sequence of three designed for students who wish to pursue a career as a data entry operator. Through hands-on practice, learn to operate software for data entry. The key stroking goal is 6,000 strokes per hour.

**CAOTC 250A**  
Data Entry — Level 1  
2.0 units  
1.0 hour lecture, 3.0 hours laboratory  
Recommended Preparation: Type 30 wpm  
Grading: letter grade or credit/no credit  
Continuation of CAOTC250B. Through hands-on practice, continue to develop speed and accuracy skills in using forms and data of intermediate key stroking difficulty when entering data. The key stroking goal is 8,000 strokes per hour.

**CAOTC 250B**  
Data Entry — Level 2  
3.0 units  
2.0 hours lecture, 3.0 hours laboratory  
Recommended Preparation: CAOTC250A; Type 35 wpm  
Grading: letter grade or credit/no credit  
Continuation of CAOTC250A. Through hands-on practice, continue to develop speed and accuracy skills in using forms and data of advanced key stroking difficulty in entering data. The key stroking goal is 10,000 strokes per hour.

**CAOTC 250C**  
Data Entry — Level 3  
3.0 units  
2.0 hours lecture, 3.0 hours laboratory  
Recommended Preparation: CAOTC250B; Type 40 wpm  
Grading: letter grade or credit/no credit  
Continuation of CAOTC250B. Through hands-on practice, continue to develop speed and accuracy skills in using forms and data of advanced key stroking difficulty in entering data. The key stroking goal is 10,000 strokes per hour.

**CAOTC 265**  
Computer Transcription  
2.0 units  
1.0 hour lecture, 3.0 hours laboratory  
Recommended Preparation: Type 40 wpm, CAOTT201/202 or CAOTC236B or 39B  
Grading: letter grade or credit/no credit  
Offers hands-on training on the microcomputer in machine transcription. The dictation material is recorded on cassette tapes from which the student learns to transcribe directly onto a microcomputer.
Courses of Instruction

CAOTC 617 0.0 unit
Refresher Training: Office Technologies
5.0 hours laboratory
Grading: LBCC Non-Graded Course
Preparation for entry or re-entry into and for advancement in an office job. Develop, review or provide additional practice in computer applications, business English, filing, calculating machines, telephone techniques and other office knowledge and skills needed by an individual student.

COMPUTER OFFICE TECHNOLOGIES (CAOTO)

CAOTO 15 3.0 units
Business Communications
3.0 hours lecture
Grading: letter grade or credit/no credit
Emphasis is on the creation, form and usage in the preparation of all business communication, such as letters, reports, memos, email and minutes. Not open for credit to students who have completed GBUS 15 or MGMT 15.
Transfer Status: Transferable to CSU, see counselor for limitations.

CAOTO 30 2.0 units
Business Calculating Machines
2.0 hours lecture, 1.0 hour laboratory
Grading: letter grade or credit/no credit
Instruction in the use of electronic printing calculators and the computer calculator and keypad.
Transfer Status: Transferable to CSU, see counselor for limitations.

CAOTO 214A 1.0 unit
Filing
1.0 hour lecture
Grading: letter grade
A self-paced program for mastering and applying alphabetic indexing for personal and business names using the ARMA rules as the records management industry standard. Both manual and computerized techniques are taught.

CAOTO 214B 1.0 unit
Filing
1.0 hour lecture
Recommended Preparation: CAOTO214A (may be taken concurrently)
Grading: letter grade
A self-paced program for mastering and applying indexing rules for cross referencing, government, subject, numeric and geographic filing using ARMA rules. Both manual and computerized techniques are taught.

CAOTO 216 1.0 unit
Proofreading Skills
1.0 hour lecture
Grading: letter grade or credit/no credit
Develop skills in detecting and correcting errors in office documents through the study of basic English and proofreading principles.

CAOTO 222 3.0 units
Job Search Skills
3.0 hours lecture, 2.0 hours laboratory
Recommended Preparation: CAOTT200B or higher
Grading: letter grade
Explore job opportunities. Prepare a winning resume and letter of application. Develop interviewing skills to make a favorable impression. Assess skill-level for successful completion of office employment tests. Enhance interview follow-up skills.

CAOTO 223 3.0 units
Legal Procedures, Litigation
3.0 hours lecture, 1.0 hour laboratory
Recommended Preparation: CAOTT200 and CAOTC236A
Grading: letter grade or credit/no credit
For the beginning worker in a legal office. Provides training in legal office routine, the setting up of legal documents in the areas of litigation and federal cases, procedures for court filing and calendaring and obtaining and completing legal forms using a legal procedures computer software program.

CAOTO 224 3.0 units
Legal Procedures
3.0 hours lecture, 1.0 hour laboratory
Recommended Preparation: CAOTT200 and CAOTC236A
Grading: letter grade or credit/no credit
For the beginning worker in a legal office. Provides training in legal office routine, the setting up of legal documents in the areas of family law, real estate, worker’s compensation, wills and probate, procedures for court filing and calendaring and obtaining and completing legal forms using a legal procedures computer software program.

CAOTO 260 1.0 unit
Business Telephone Procedures
1.0 hour lecture
Grading: letter grade
For the person who needs instruction and practice in using the telephone and state-of-the-art telephone-related equipment to its greatest potential in the business office.

CAOTO 261 3.0 units
Business English
3.0 hours lecture
Grading: letter grade
Offers thorough training in the mechanics of English: spelling, grammar, punctuation, sentence structure and word usage. Develop a business vocabulary.

CAOTO 262 1.0 unit
Professional Development
1.0 hour lecture
Grading: letter grade or credit/no credit
Covers the fundamentals of human relations in the business office and develops a basic proficiency in those principles.

CAOTO 263 1.0 unit
Customer Service
1.0 hour lecture
Grading: letter grade or credit/no credit
This course covers the essentials of customer service in today’s economy including needs, support, and relationships. The number of customer service jobs has increased greatly. Customer service positions may be found in retail stores, offices, call centers, help desks for
computer software companies, or web-based companies, just to name a few.

**CAOTO 264 1.0 unit**

**Call Centers**
1.0 hour lecture
Recommended Preparation: CAOTT 200A or CAOTT 233 or type 25 WPM; CAOTO 260 (may be taken concurrently).
Grading: letter grade or credit/no credit
This course is designed for those who are already in a position or those seeking a position in a call center. Students will learn to develop the ability to multitask, reduce stress, be flexible, get along with people, display a positive attitude, and other interpersonal skills increasing the chances of being successful on the job.

**CAOTO 265 1.0 unit**

**Customer Conflict Management**
1.0 hour lecture
Grading: letter grade or credit/no credit
The student will explore several different aspects of conflict and learn important skills that can help manage conflicts effectively as a Customer Service employee.

**CAOTO 272AD 3.0 units**

**Work Experience — Computer Applications & Office Technology**
1.0 hour lecture, 6.6 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade

**COMPUTER PROFICIENCY FOR ACADEMIC SUCCESS (CPAS)**

**CPAS 1 1.0 unit**

**Using the Mac as a Tool for Learning**
0.5 hour lecture, 1.5 hours laboratory
Grading: credit/no credit
Provides the minimum ability to use a Macintosh computer and integrated software products to successfully perform classroom tasks. Included are word processing, spreadsheet, graphics and data base applications. Satisfies the computer proficiency graduation requirement.
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**CPAS 10 1.0 unit**

**Advanced Computer Skills for Learning**
0.5 hour lecture, 1.5 hours laboratory
Recommended Preparation: Basic computer experience in word processing, spreadsheets and graphics.
Grading: credit/no credit
An advanced course in which you will learn to use the computer effectively to prepare documents for any class using word processing, spreadsheets, graphics manipulation, web presentations, Internet uses and resources.
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**CPAS 805 0.5 unit**

**Preparation for Distance Learning**
0.3 hour lecture, 0.8 hour laboratory
Grading: credit/no credit
This course introduces students to the skills necessary for success in any distance education course. Topics include skills for learning with technology which are necessary for success in distance education, characteristics of successful distance education students, and introduction to the Internet, creating and using an e-mail account and other methods of online communications, basic aspects of word processing, and hardware/software basics.

**COMPUTER SCIENCE (CS)**

**CS 21 3.5 units**

**Introduction to Computer Science I**
3.0 hours lecture, 2.0 hours laboratory
Recommended Preparation: CBIS 7 and MATH 40
Grading: letter grade
This is the first of three introductory courses in computer science. This course introduces the basics of computer software design, programming, and related underlying concepts required with java programming.
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**CS 22 3.5 units**

**Introduction to Computer Science II**
3.0 hours lecture, 2.0 hours laboratory
Prerequisite: CBIS 14A and MATH 50
Grading: letter grade
Formerly CBIS 14B. This is the second of three introductory courses in computer science. This course introduces the classic data structures (queues, stacks, tables, and trees) and looks at alternate implementation as abstract data types. This course also covers the topics of time and space efficiency, recursion, OOP and functional programming and models of computation.
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**COMPUTER/TYPING KEYBOARD (CAOTT)**

**CAOTT 200 3.0 units**

**Beginning Typing/Keyboarding**
2.0 hours lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
For the person who desires to develop a skill in typing for business or personal use. Covers simple business and personal letters, envelopes, tabulations, memorandums, report writing, manuscripts and outlines. Taught using PCs.

**CAOTT 200A 1.0 unit**

**Beginning Typing/Keyboarding**
1.0 hour lecture, 1.0 hour laboratory
Recommended Preparation: CAOTT200A (may be taken concurrently)
Grading: letter grade or credit/no credit
For the person who desires to develop touch control of the computer keyboard. Emphasizes proper typing techniques and building basic speed and accuracy. Typically offered as self-paced, open-entry/open-exit course.

**CAOTT 200B 1.0 unit**

**Beginning Typing/Keyboarding B**
1.0 hour lecture, 1.0 hour laboratory
Recommended Preparation: CAOTT200A (may be taken concurrently)
Grading: letter grade or credit/no credit
Courses of Instruction

Develop skills in typing and/or computer keyboarding for business or personal use. Emphasizes increased speed and accuracy and covers business and personal letters, tabulation, manuscripts and correct word division. Typically offered as self-paced, open-entry/open-instruction.

**CAOTT 200C** 1.0 unit
Beginning Typing/Keyboarding C
1.0 hour lecture, 1.0 hour laboratory
Recommended Preparation: CAOTT200B (may be taken concurrently)
Grading: letter grade or credit/no credit
Develop skills in typing and/or computer keyboarding for business or personal use. Emphasizes increased speed and accuracy and covers memorandums, envelopes, reports with footnotes and endnotes, job application papers, business letters, business forms and tables. Typically offered as self-paced, open-entry/open-instruction.

**CAOTT 201** 2.0 units
Intermediate Typing/Keyboarding
2.0 hours lecture, 1.0 hour laboratory
Recommended Preparation: CAOTT200 or 200C; Type 35 wpm.
Grading: letter grade
To increase speed and accuracy in the preparation of business reports and letters. Taught using PCs.

**CAOTT 202** 2.0 units
Advanced Typing/Keyboarding
2.0 hours lecture, 1.0 hour laboratory
Recommended Preparation: CAOTT201; type 40 wpm.
Grading: letter grade
Provides a realistic office-type experience to integrate skills, techniques and knowledge for the person who desires to become an executive typist. Taught using PCs.

**CAOTT 209AB** 1.0 unit
Speed/Accuracy Bldg for Typists
3.0 hours laboratory
Recommended Preparation: CAOTT200 or 200C or 233 or type 25 wpm minimum.
Grading: letter grade or credit/no credit
Directed supervision to assist those who wish to maintain and improve their typing skills.

**CAOTT 233** 1.0 unit
Computer Keyboarding
1.0 hour lecture, 1.0 hour laboratory
Grading: letter grade or credit/no credit
Develop touch inputting skills on the alphanumeric keyboard and ten-key pad for business or personal use.

**COUNSELING/GUIDANCE (COUNS)**

**COUNS 1** 0.5 unit
Orientation for College Success
0.5 hour lecture
Grading: letter grade or credit/no credit
Recommended for all students and designed to orient them to the college environment and educational opportunities in the holistic manner. An intro to academic procedures and policies, goal setting, educational planning, college services and facilities and an exploration of the various opportunities of higher education in California. Develop an educational plan to achieve tentative goals.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**COUNS 2** 3.0 units
Making A Difference With Mentoring
3.0 hours lecture
Grading: letter grade or credit/no credit
This course is designed for students who are interested in learning the techniques of mentoring first year students. Theories of the first year experience, and mentoring, will be explored. Students will learn how to promote the academic development and socialization of first year students, using a variety of techniques learned through lecture and activities. Campus and community resources will be discussed and explored.

Transfer Status: Transferable to CSU, see counselor for limitations.

**COUNS 48** 1.0 unit
Career Exploration
1.0 hour lecture, 0.5 hour laboratory
Grading: letter grade or credit/no credit
For those not sure of their educational and/or career goals. Intro to a career decision making model including personal assessment, self-understanding career and labor market research, integration of information and goal setting. Emphasizes one’s self-description as it impacts career choices.

Transfer Status: Transferable to CSU, see counselor for limitations.

**COUNS 49** 2.0 units
College Study Techniques
2.0 hours lecture
Grading: letter grade or credit/no credit
Group guidance in the methods of effective study, including self-appraisal of the factors of motivation, interests and academic abilities.

Transfer Status: Transferable to CSU, see counselor for limitations.

**COUNS 49A** 1.0 unit
College Study Techniques
1.0 hour lecture
Grading: letter grade or credit/no credit
An intro to methods of effective study at the college level, including self-analysis of current skills, time management, learning theories, textbook study, note-taking skills and exam-taking strategies.

Transfer Status: Transferable to CSU, see counselor for limitations.

**COUNS 50** 3.0 units
Career Planning: A Life-Long Process
3.0 hours lecture
Grading: credit/no credit
Presents a reflective model of decision making that integrates theory and practice which is applicable in a variety of situations over the life span. Through a study of career decision making, students explore the impact of psycho-social, physical and affective factors on one’s own cognitive processes. This objectified self-discovery serves as a foundation for life-long learning skills with an immediate focus on achieving success on the student’s education/career plan.

Transfer Status: Transferable to CSU, see counselor for limitations.
COUNS 600  0.0 unit
Disability and Self-Concept
2.0 hours lecture, 1.0 hour laboratory
Grading: LBCC Non-Graded Course
Aids college students with a disability in successfully integrating into the mainstream college program and provides a guidance and counseling function based upon the individual needs of the students. Meet with the instructor in a group and individually to discuss present, as well as future, academic, vocational and personal problems that might mitigate against successful college performance. Includes factors related to realistic self-appraisal, defenses related to adjustment, self-concept and inter-personal relationships.

CREATIVE ARTS (CART)

CART 41  3.0 units
The Arts and Modern Man
3.0 hours lecture
Grading: letter grade or credit/no credit
An intro to the creative arts (art, film, music and the theatre arts) for the general student.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

CULINARY ARTS (CULAR)

CULAR 20  3.0 units
App. Food Serv Sanit in Hotel/Rstr Mgmt
3.0 hours lecture
Grading: letter grade
Describes the significance of sanitation in food service and provides the practical knowledge needed to implement a sanitation program in any kitchen. Stresses the importance of the food poisoning problem of today and shows how important sanitation is from an economic, legal and moral point of view.
Transfer Status: Transferable to CSU, see counselor for limitations.

CULAR 200AD  1.0 unit
Introduction to Chocolate
0.5 hour lecture, 1.5 hours laboratory
Grading: letter grade or credit/no credit
This course introduces the student to the principles involved in tempering chocolate, processing and storage of chocolate, molding of hollow forms, and pouring of flat surfaces.

CULAR 201A  8.0 units
Hotel, Restaurant: Institutional Cooking
5.0 hours lecture, 10.0 hour laboratory
Grading: letter grade
Develop the basic skills of commercial cooking, including: preparation of vegetables, salads, soups, sandwiches, entrees, pastries and specialty dishes. Develop knowledge of nutrition, menu, supplies, hygiene and sanitation, safety practices and employer-employee relations.

CULAR 201B  8.0 units
Hotel, Restaurant: Institutional Cooking
5.0 hours lecture, 10.0 hour laboratory
Grading: letter grade
Develop basic skills of commercial cooking, including: preparation of vegetables, salads, soups, sandwiches, entrees, pastries and specialty dishes. Develop knowledge of nutrition, menu, supplies, hygiene and sanitation, safety practices and employer-employee relations.

CULAR 204  5.0 units
Introduction to Baking
2.0 hours lecture, 9.0 hours laboratory
Grading: letter grade
Basic preparatory skills for a baker, including use of tools, equipment and materials, the basic characteristics of ingredients, the fundamentals of baking breads, rolls, doughnuts and related icings, toppings and fillings.

CULAR 205  5.0 units
Baking and Pastry I
2.0 hours lecture, 9.0 hours laboratory
Prerequisite: FDSRV 204
Grading: letter grade
Includes two major areas: Pies and cakes/specialties.

CULAR 206  5.0 units
Baking and Pastry II
2.0 hours lecture, 9.0 hours laboratory
Prerequisite: FDSRV 204
Grading: letter grade
Includes puff pastries and other exotic baked goods.

CULAR 207  5.0 units
Commercial Cake Decorating
5.0 hours lecture, 20.0 hour laboratory
Grading: letter grade
Design and arrangements, figure piping, tube writing and lettering, icing preparation and coloring, setting pre-cast decorator figures, cake borders and basic texture patterns are covered. Practice cake decorating.

CULAR 213A  11.5 units
Food Preparation 1
5.0 hours lecture, 20.0 hour laboratory
Grading: letter grade
Emphasizes food service careers, weights, measures, and safety. Also includes instruction in professionalism, equipment identification, salads & dressings, soups, cold & hot appetizers, charcuterie, buffet, baking, yeast breads, quick breads, cakes, pastry dough, cookies, icing/dessert sauces, creams, and ice creams.

CULAR 213B  11.5 units
Food Preparation 2
5.0 hours lecture, 20.0 hour laboratory
Prerequisite: FDSRV 213A
Grading: letter grade
Emphasizes instruction in fruits, vegetables, herb preparation, dairy products, egg purchasing and cooking, dry goods, stocks, sauces, grilling, baking, broiling, roasting, sautéing, pan frying, deep frying, steaming, simmering, submersion cooking, braising and stewing techniques.

CULAR 213C  11.5 units
Food Preparation 3
5.0 hours lecture, 20.0 hour laboratory
Prerequisite: FDSRV 213B
Grading: letter grade
Courses of Instruction

Emphasizes instruction in menu development, nutrition and safety. Identification, fabrication and preparation of meats, poultry, fish and shellfish. Preparation and identification of vegetables, herbs, starches and spices.

**CULAR 214** 2.0 units
**Professional Gourmet Cooking**
6.0 hours laboratory
Grading: letter grade
Emphasizes a comprehensive study of the complex artistry of chefs in California’s leading hotels and restaurants. Specialized equipment, tools, formulas and techniques are presented by Los Angeles’ top chefs.

**CULAR 215** 2.0 units
**Commercial Formal Buffet**
6.0 hours laboratory
Grading: letter grade
Emphasizes a comprehensive study of the complex artistry of chefs in California’s leading hotels and restaurants. Specialized equipment, tools, formulas and techniques are presented by Los Angeles’ top chefs.

**CULAR 271AD** 2.0 units
**Work Experience: Food Services**
1.0 hour lecture, 4.2 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
Vocational learning experiences through employment directly related to the industry.

**CULAR 272AD** 3.0 units
**Work Experience: Food Services**
1.0 hour lecture, 8.3 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
Vocational learning experiences through employment directly related to the industry.

**CULAR 273AD** 4.0 units
**Work Experience: Food Services**
1.0 hour lecture, 12.5 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
Vocational learning experiences through employment directly related to the industry.

**DANCE (DANCE)**

**DANCE 1** 3.0 units
**Dance Forms Through the Ages**
3.0 hours lecture
Grading: letter grade or credit/no credit
An historical survey of dance, including its role in culture, its development through history and the theatrical dance forms in contemporary America.
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**DANCE 2** 1.0 unit
**Introduction to Dance**
1.0 hour lecture, 2.0 hours laboratory
Grading: letter grade or credit/no credit
Introduces the basic dance techniques of ballet, modern, jazz and ethnic dance. Recommended for students with no dance experience.

**DANCE 3AD** 1.0 unit
**Musical Theatre Dance**
1.0 hour lecture, 2.0 hours laboratory
Grading: letter grade or credit/no credit
Introduces musical theatre dance styles from the 1940’s to present. Includes the study of ballet, jazz and tap techniques to prepare students for performance in musical theatre.
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**DANCE 5AB** 1.0 unit
**Beginning Tap**
1.0 hour lecture, 2.0 hours laboratory
Grading: letter grade or credit/no credit
The study of basic tap dance techniques. Provides the opportunity to develop coordination, rhythm and performance skills. Some history of tap will be included.
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**DANCE 6AB** 1.0 unit
**Intermediate Tap Dance**
1.0 hour lecture, 2.0 hours laboratory
Recommended Preparation: DANCE 5AB
Grading: letter grade or credit/no credit
Continuing study of tap dance skills, emphasizing the intermediate level of dance. Includes the study of terminology, tap history and tap styles.
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**DANCE 8AD** 1.0 unit
**Stretch and Relaxation**
1.0 hour lecture, 2.0 hours laboratory
Grading: letter grade or credit/no credit
The study and practice of stretching and breathing principles for increased flexibility, reduction of stress and improved mental and physical health.
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**DANCE 10AB** 1.0 unit
**Fundamentals of Ballet**
1.0 hour lecture, 2.0 hours laboratory
Grading: letter grade or credit/no credit
The study and execution of fundamental ballet techniques. Appreciation of ballet as an art form through the study of its history, current trends and terminology.
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**DANCE 11AB** 1.0 unit
**Intermediate Ballet**
1.0 hour lecture, 2.0 hours laboratory
Prerequisite: DANCE 10AB
Grading: letter grade or credit/no credit
Continuing study of ballet techniques. Increased emphasis on body alignment, musicality, strength and flexibility.
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**DANCE 12AD** 1.0 unit
**Conditioning for Dance-Pilates Technique**
1.0 hour lecture, 2.0 hours laboratory
Grading: letter grade or credit/no credit
Courses of Instruction

Physical and mental conditioning program for dancers involving exercises performed on a mat and on an apparatus called the universal reformer. Designed to enhance dance techniques and performance and prevent injuries. Lectures focus on correct execution of mat and apparatus exercises. Lab involves individual practice of lecture material.

Transfer Status: Transferable to CSU, see counselor for limitations.

DANCE 13AD 1.0 unit
Turns
1.0 hour lecture, 2.0 hours laboratory
Prerequisite: DANCE 10AB, 20AB or 14AB
Grading: letter grade or credit/no credit
The practice and study of beginning to advanced turns for modern, ballet and jazz dance.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

DANCE 14AB 1.0 unit
Beginning Modern Dance
1.0 hour lecture, 2.0 hours laboratory
Grading: letter grade or credit/no credit
Emphasizes techniques, composition and aesthetic judgment. Relationship of dance with music and sound explored.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

DANCE 15AB 1.0 unit
Beg Contemporary Dance Technique
1.0 hour lecture, 2.0 hours laboratory
Grading: letter grade or credit/no credit
Techniques for the concert stage emphasizing body alignment, strength, flexibility and coordination. Includes study of improvisation, composition skills and contemporary choreographers’ styles.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

DANCE 16AB 1.0 unit
Int. Contemporary Dance Technique
1.0 hour lecture, 2.0 hours laboratory
Recommended Preparation: DANCE 15AB
Grading: letter grade or credit/no credit
Continuing study for the concert stage involving intermediate combinations. Increased emphasis on body alignment, strength, coordination, contemporary choreographers’ styles, improvisation and composition.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

DANCE 17AB 1.0 unit
Intermediate Modern Dance
1.0 hour lecture, 2.0 hours laboratory
Recommended Preparation: DANCE 14AB
Grading: letter grade or credit/no credit
Continuing study of techniques for the concert stage encompassing more complicated combinations taught at a quicker pace. Emphasizes movement expression and a comparison of modern styles and choreographers.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

DANCE 18AD 1.0 unit
Folk and Ethnic Dance
1.0 hour lecture, 2.0 hours laboratory
Grading: letter grade or credit/no credit
Introduces dances from selected cultures using character barre exercises for strength, flexibility and coordination.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

DANCE 20AB 1.0 unit
Beginning Jazz Dance
1.0 hour lecture, 2.0 hours laboratory
Grading: letter grade or credit/no credit
Intro to the movement skills used in jazz dance, the use of dynamics in rhythm, sustained and percussive tension and dramatic focus unique to jazz.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

DANCE 21AB 1.0 unit
Intermediate Jazz Dance
1.0 hour lecture, 2.0 hours laboratory
Prerequisite: DANCE 20AB or Audition
Grading: letter grade or credit/no credit
A study of the movement skills that require an intermediate knowledge of jazz dance techniques. Emphasis is on executing movement with a sense of performance, use of long movement patterns with a focus on dynamics in rhythm, sustained and percussive tension and dramatic focus that are unique to jazz.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

DANCE 31AB 1.0 unit
Solo Choreography
1.0 hour lecture, 2.0 hours laboratory
Prerequisite: One semester of DANCE 20AB, 10AB, 14AB or Audition
Grading: letter grade or credit/no credit
The study of creating movement for the solo dancer focusing on discovering inventive movement, a personal style of expression and aesthetic judgment.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

DANCE 32AB 1.0 unit
Group Choreography
1.0 hour lecture, 2.0 hours laboratory
Recommended Preparation: One semester of DANCE 31AB
Grading: letter grade or credit/no credit
The study of choreography for a group of dancers focusing on the use of design in space to create dances of significant form. Includes an intro of computer skills to design a dance and work in a collaborative environment teaching choreography to workshop participants.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

DANCE 33AB 1.0 unit
Dance Choreography Workshop
1.0 hour lecture, 2.0 hours laboratory
Grading: letter grade or credit/no credit
A collaborative workshop environment in which class participants work with student choreographers in the creation of dances of significant form and content.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

DANCE 41/1 0.5 unit
Dance Performance
2.0 hours laboratory
Corequisite: DANCE 10AB, 11AB, 12AD, 14AB, 17AB or 20AB.
### DANCE 41/2 1.0 unit

**Dance Performance**
4.0 hours laboratory
Corequisite: DANCE 10AB, 11AB, 12AD, 14AB, 17AB or 20AB
Recommended Preparation: Audition
Grading: letter grade or credit/no credit
The application of choreographic concepts and skills through rehearsal and performance of dance projects for public performance. The appropriate class section in this sequence is assigned following skills assessment at initial class meeting.

*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

### DANCE 41/3 1.5 units

**Dance Performance**
6.0 hours laboratory
Corequisite: DANCE 10AB, 11AB, 12AD, 14AB, 17AB or 20AB
Recommended Preparation: Audition
Grading: letter grade or credit/no credit
The application of choreographic concepts and skills through rehearsal and performance of dance projects for public performance. The appropriate class section in this sequence is assigned following skills assessment at initial class meeting.

*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

### DANCE 41AD 2.0 units

**Dance Performance**
8.0 hours laboratory
Corequisite: DANCE 10AB, 11AB, 12AD, 14AB, 17AB or 20AB
Recommended Preparation: Audition
Grading: letter grade or credit/no credit
The application of choreographic concepts and skills through rehearsal and performance of dance projects for public performance. The appropriate class section in this sequence is assigned following skills assessment at initial class meeting.

*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

### DANCE 60AD 1.0 unit

**Special Projects in Dance**
3.0 hours laboratory
Grading: letter grade or credit/no credit
Permits lower division students with a generalized background in dance to explore in-depth a specific aspect of dance in both theory and execution.

*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

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**DIAGNOSTIC MEDICAL IMAGING (DMI)**

### DMI 10 3.0 units

**Introduction of Radiologic Technology**
3.0 hours lecture
Prerequisite: ANAT 41 and AH 60
Grading: letter grade
A study of the history and basic principles of medical radiography, the structure of film, mechanics of exposure, chemistry of processing the latent image and evaluation of the finished radiograph.

*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

### DMI 11 1.0 unit

**Radiographic Techniques**
1.0 hour lecture
Prerequisite: RT 20
Grading: letter grade
A study of the criteria required to select x-ray machine settings to produce diagnostic quality radiographs.

*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

### DMI 12 3.0 units

**Contrast Fluoroscope/Radiographic Procedures**
3.0 hours lecture
Corequisite: RT 11
Grading: letter grade
A study of the preparation and administration of radiographic contrast media, including specific procedures, accessories and techniques. The management and organization of a radiologic services department are outlined and discussed.

*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

### DMI 14 3.0 units

**Trends and Self-Assessment in Radiology**
3.0 hours lecture
Prerequisite: RT 15 or current C.R.T. (Certified Radiologic Technologist).
Grading: letter grade
Current developments in radiologic technology equipment, quality control devices, computer applications, ultrasound and special procedures are discussed. Students are assisted with self-assessment of the knowledge and skills required of the successful radiologic technologist.

*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

### DMI 15 3.0 units

**Computer Applications in Radiology**
3.0 hours lecture
Prerequisite: RT 24
Grading: letter grade
A study of computer systems hardware and software uses in radiology: CT, digital imaging, MRI, ultrasonography, nuclear medicine and automated radiology management systems.

*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

### DMI 20 3.0 units

**Introduction to Radiologic Physics**
3.0 hours lecture
Prerequisite: RT 10
Courses of Instruction

DMI 21
Applied Radiological Physics
2.0 units
1.0 hour lecture, 3.0 hours laboratory
Prerequisite: RT 20
Grading: letter grade
A study of the application of basic radiologic physics to the interaction of radiation with matter, radionuclide production, behavior and use and radiation therapy. Also includes practical applications for diagnostic radiology. Transfer Status: Transferable to CSU, see counselor for limitations.

DMI 30
Positioning for General Diagnostic Radiology
3.0 units
2.0 hours lecture, 3.0 hours laboratory
Recommended Preparation: RT 11
Grading: letter grade
A study of the knowledge and skills required to accurately position patients and align equipment and film to produce diagnostic quality radiographs of the trunk and extremities. Transfer Status: Transferable to CSU, see counselor for limitations.

DMI 31
Positioning for Cranial Radiography
3.0 units
2.0 hours lecture, 3.0 hours laboratory
Prerequisite: RT 30
Grading: letter grade
A study of the positioning for general and specialized radiologic exams of the cranium and its contents. Develop skill in positioning the patient, film and x-ray tube and select appropriate techniques to produce quality radiographs. Transfer Status: Transferable to CSU, see counselor for limitations.

DMI 40A
Clinical Radiology
2.5 units
8.0 hours laboratory
Prerequisite: RT 10 and 20 and health evaluation.
Grading: letter grade
The clinical application of theoretical knowledge to the practice of radiologic technology, correlation of clinical experiences, training and career goals, interpersonal relations, job oriented problems and film quality control. Includes an assignment to a radiology department in an accredited hospital for clinical experience. Transfer Status: Transferable to CSU, see counselor for limitations.

DMI 40B
Clinical Radiology
6.0 units
1.0 hour lecture, 23.0 hours laboratory
Prerequisite: RT 40A
Grading: letter grade
The clinical application of theoretical knowledge to the practice of radiologic technology, correlation of clinical experiences, training and career goals, interpersonal relations, job oriented problems and film quality control. Includes an assignment to a radiology department in an accredited hospital for clinical experience. Designed for students who are full-time in the Diagnostic Medical Imaging program. Transfer Status: Transferable to CSU, see counselor for limitations.

DMI 40C
Clinical Radiology
6.0 units
1.0 hour lecture, 13.0 hours laboratory
Prerequisite: RT 40B
Grading: letter grade
The clinical application of theoretical knowledge to the practice of radiologic technology, correlation of clinical experiences, training and career goals, interpersonal relations, job oriented problems and film quality control. Includes an assignment to a radiology department in an accredited hospital for clinical experience. Typically offered for twelve weeks during the summer. Designed for students who are full-time in the Diagnostic Medical Imaging program. Transfer Status: Transferable to CSU, see counselor for limitations.

DMI 40D
Clinical Radiology
11.0 units
1.0 hour lecture, 31.0 hours laboratory
Prerequisite: RT 40C
Grading: letter grade
The clinical application of theoretical knowledge to the practice of radiologic technology, correlation of clinical experiences, training and career goals, interpersonal relations, job oriented problems and film quality control. Includes an assignment to a radiology department in an accredited hospital for clinical experience. Designed for students who are full-time in the Diagnostic Medical Imaging program. Transfer Status: Transferable to CSU, see counselor for limitations.

DMI 40E
Clinical Radiology
11.0 units
1.0 hour lecture, 31.0 hours laboratory
Prerequisite: RT 40D
Grading: letter grade
The clinical application of theoretical knowledge to the practice of radiologic technology, correlation of clinical experiences, training and career goals, interpersonal relations, job oriented problems and film quality control. Includes an assignment to a radiology department in an accredited hospital for clinical experience. Transfer Status: Transferable to CSU, see counselor for limitations.

DMI 60
Radiologic Pathology
3.0 units
3.0 hours lecture
Prerequisite: ANAT 41 and RT 11
Grading: letter grade
An intro to the study of disease as it relates to radiologic technology. Includes causes, signs, symptoms and radiographic demonstration of common human diseases. Acquaints the student with various pathologic conditions and their impact on the radiographic process. *Transfer Status: Transferable to CSU, see counselor for limitations.*

**DMI 61 2.0 units**

**Fluoroscopy**
2.0 hours lecture, 1.0 hour laboratory
Prerequisite: Current C.R.T. (Certified Radiologic Technologies) certification card. Corequisite: RT 14
Grading: letter grade
Principles of radiation protection, fluoroscopy and viewing equipment, recording systems, quality control, patient positioning and regulatory provisions associated with fluoroscopy. Prepares students to obtain a Department of Health Services Fluoroscopy permit. *Transfer Status: Transferable to CSU, see counselor for limitations.*

**DMI 62 3.5 units**

**Mammography**
3.0 hours lecture, 1.5 hours laboratory
Prerequisite: Current C.R.T. (Certified Radiologic Technologies) certification card. RT40C.
Grading: letter grade
Prepares students to obtain the Department of Health Services Mammography license. Includes: principles of components of dedicated mammography equipment, radiation protection legislation, quality assurance regulations and mammographic positioning. *Transfer Status: Transferable to CSU, see counselor for limitations.*

**DIESEL MECHANICS (DIESL)**

**DIESL 281 10.0 units**

**Diesel Two-Cycle Engine**
5.0 hours lecture, 15.0 hours laboratory
Grading: letter grade or credit/no credit
Learn safety, engine testing, problem evaluation, tuning diesel engines, intro to two-cycle (Detroit) engine. Disassemble, inspect and reassemble two-cycle engines. Intro to alternative fuels and problem analysis are covered.

**DIESL 282 10.0 units**

**Diesel Four-Cycle Engine**
5.0 hours lecture, 15.0 hours laboratory
Grading: letter grade or credit/no credit
Learn safety, engine testing, problem analysis, troubleshooting, repair procedures, tuning diesel engine, disassembly and reassembly of the four-cycle engine. Intro to spark ignited engines (Cummins), as well as special repair procedures and equipment.

**DIESL 283 10.0 units**

**Powered Systems**
5.0 hours lecture, 15.0 hours laboratory
Prerequisite: DIESL 281 or 282
Grading: letter grade or credit/no credit
Safety, engine testing, problem analysis, intro to inframe overhaul of two- and four-cycle engines. Maintenance and adjustment of reconditioned engines.

**DIESL 284 10.0 units**

**Highway Transport**
5.0 hours lecture, 15.0 hours laboratory
Recommended Preparation: DIESL 282
Grading: letter grade or credit/no credit
Safety, troubleshooting, repair of all components that are used on a diesel engine. Maintenance of the total engine and service operations will be highlighted. Intro to spark ignited engines.

**DIESL 287 10.0 units**

**Diesel Fuel Injection Systems**
5.0 hours lecture, 15.0 hours laboratory
Grading: letter grade or credit/no credit
Learn safety, history of fuel injection, current types of fuel systems and function of a fuel injection system, as well as equipment testing procedures-disassemble and reassemble pump and injectors in Cummins fuel systems.

**DIESL 288 10.0 units**

**Diesel Engine Chassis**
5.0 hours lecture, 15.0 hours laboratory
Grading: letter grade or credit/no credit
Learn safety, troubleshooting, repair of all components that are used on a diesel truck. Maintenance of the total chassis and service operations will be highlighted.

**DIESL 289 10.0 units**

**Caterpillar 3406 and 3116 Engine**
5.0 hours lecture, 15.0 hours laboratory
Grading: letter grade or credit/no credit
Covers safety, engine testing, problem conditions, troubleshooting, repair procedures, tuning, disassembling and reassembling the Caterpillar 3406 engine. The new designs in the 3116 caterpillar engine are reviewed.

**DIESL 290 10.0 units**

**C.A.T. Transmissions and Final Drive**
5.0 hours lecture, 15.0 hours laboratory
Grading: letter grade or credit/no credit
Covers steering, clutches, brakes, transmissions and final drive units for Caterpillar heavy equipment intended for off-highway use.

**DIESL 291 10.0 units**

**C.A.T. Hydraulics**
5.0 hours lecture, 15.0 hours laboratory
Grading: letter grade or credit/no credit
Covers hydraulics system.

**DIESL 292 10.0 units**

**C.A.T. Chassis & Electrical**
5.0 hours lecture, 15.0 hours laboratory
Grading: letter grade or credit/no credit
Covers suspension, under carriage, tires, tracks and air conditioning.

**DIESL 293AD 4.0 units**

**General Engines**
3.0 hours lecture, 3.0 hours laboratory
Grading: letter grade
Tool and equipment; operation and maintenance of various types of diesel and spark ignited engines, including injection, fuel pump systems, governors and safety practice.
Courses of Instruction

DISEL 492 3.0 units
Air and Hydraulic Brakes
2.0 hours lecture, 3.0 hours laboratory
Grading: letter grade
Learn brake theory and fundamentals, basic brake systems, components, piping systems, interrelationship of components, accessories, safety devices and troubleshooting techniques.

DRAFTING AND MECHANICAL DESIGN (DRAFT)

DRAFT 51A 3.0 units
Industrial Drafting I
2.0 hours lecture, 4.0 hours laboratory
Prerequisite: DRAFT 201
Grading: letter grade
Covers orthographic projection, dimensioning, freehand sketching, auxiliary views, sections, shop methods and drafting room practices. Use AutoCAD 2004 for 2D and 3D applications.
Transfer Status: Transferable to CSU, see counselor for limitations.

DRAFT 51B 3.0 units
Industrial Drafting II
2.0 hours lecture, 4.0 hours laboratory
Prerequisite: DRAFT 51A
Grading: letter grade
Covers advanced dimensioning, surface quality, welding drawings, screw threads, fasteners, keys, keyways, springs, gears,cams and bearings. Uses AutoCAD 2004 for 2D and 3D applications.
Transfer Status: Transferable to CSU, see counselor for limitations.

DRAFT 52A 3.0 units
Advanced Industrial Drafting
2.0 hours lecture, 4.0 hours laboratory
Prerequisite: DRAFT 51B
Grading: letter grade
Working piping, electrical, structural drawings, tools and dies, jig and fixture design, charts, graphs, diagrams, applied math, engineering materials, heat treatment, parts listings and products design fundamentals are addressed.
Transfer Status: Transferable to CSU, see counselor for limitations.

DRAFT 52B 3.0 units
Descriptive Geometry
2.0 hours lecture, 4.0 hours laboratory
Prerequisite: DRAFT 52A
Grading: letter grade
Fundamentals of descriptive geometry, point, edge, normal views, point and straight line, straight line and planes relationships, curved lines and surfaces, surface intersections and developments, vector geometry and graphic solutions are addressed.
Transfer Status: Transferable to CSU, see counselor for limitations.

DRAFT 60 3.0 units
Geometric Dimensioning and Tolerancing
3.0 hours lecture
Prerequisite: DRAFT 201
Recommended Preparation: DRAFT 201 or DRAFT 51A
Grading: letter grade
Review of Industry Standard ANSI-Y14.5-1982. Three plane concept, true position dimensioning and tolerancing, total indicator readings, modifiers RFS and MMC, converting coordinate errors and tolerances of form are discussed.
Transfer Status: Transferable to CSU, see counselor for limitations.

DRAFT 201 4.0 units
Introduction to Drafting
3.0 hours lecture, 3.0 hours laboratory
Grading: letter grade
An entry-level course offered as a preparation for architectural design, mechanical drafting and interior design students with no previous graphic training. Provides instruction in the fundamental principles and techniques of traditional drafting and computer aided drafting (CAD). Includes drafting equipment (manual and CAD), sketching, lettering, line type and line weight, orthographic projection, isometrics and dimensioning. CAD training will utilize AutoCAD software in the Windows environment. Introduces CAD fundamentals: user interface, basic draw and edit commands, template drawings, dimensioning, electronic drawing sheets, file management, printing and plotting and the Windows operating system for CAD users. Exercises cover drawings for both mechanical and architectural applications.

DRAFT 202 4.0 units
AutoCAD I, Fundamentals
3.0 hours lecture, 3.0 hours laboratory
Recommended Preparation: DRAFT 201
Grading: letter grade
An entry-level course primarily aimed at individuals with drafting background employed in engineering, architecture, interior design and other related fields who wish to upgrade their skills in the area of Computer Aided Drafting (CAD). Training will utilize AutoCAD Software. Topics cover the basics of CAD: user interface, draw and edit commands, template drawings, dimensioning, model space/paper space electronic drawing sheets, file management, printing and plotting and the Windows Operating System for CAD users. Projects include CAD 2D drawings for both mechanical and architectural applications incorporating fundamental drafting skills and techniques with an introduction to 3D and the elements of design. Course completers qualify for a Certificate of Completion - CAD Fundamentals. First in a series of three courses.

DRAFT 203 4.0 units
AutoCAD II, Advanced Concepts
3.0 hours lecture, 3.0 hours laboratory
Prerequisite: DRAFT 202
Grading: letter grade
An intermediate-level course primarily aimed at individuals with drafting background employed in engineering, architecture, interior design and other related fields who wish to upgrade their skills in the area of Computer Aided Drafting (CAD). Training will utilize AutoCAD Software. Topics cover advanced 2D topics and intermediate level 3D modeling: user interface, advanced draw, edit and query commands, template drawings, dimensioning styles, model space/paper space electronic drawing sheets, external reference styles, file management and the WEB, plotting styles, blocks and attributes and 3D modeling techniques. Projects include CAD 2D and 3D drawings.
for both mechanical and architectural applications incorporating intermediate drafting skills and techniques with an emphasis on the elements of design. Course completers qualify for a Certificate of Completion- CAD Professional. Second in a series of three courses.

**DRAFT 204** 4.0 units

3D Visualization/Animation
3.0 hours lecture, 3.0 hours laboratory
Prerequisite: DRAFT 203
Grading: letter grade or credit/no credit
An advanced-level course primarily aimed at individuals with drafting background employed in engineering, architecture, interior design and other related fields who wish to upgrade their skills in the area of Computer Aided Drafting (CAD), Visualization, Rendering and Animation. Training will utilize AutoCAD and one or more of the following: Architectural Desktop, Mechanical Desktop, and 3D Studio Viz Software. Digital non-linear editing is introduced. Advanced 3D modeling and rendering concepts are explored: user interface, coordinate systems, surface and solids modeling commands, rendering and animation. Projects cover both mechanical and architectural applications. Course completers qualify for a Certificate of Completion- CAD Professional, Architectural or Mechanical Applications. Third in a series of three courses.

**DRAFT 251** 4.0 units

Modeling with 3D Studio Max
3.0 hours lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
Modeling with 3D Studio Max is one of 3 certificate courses emphasizing the modeling skills needed for a career in Technical Illustration, Architecture, Drafting, Product Design, Feature Films, and Games. Topics include importing AutoCAD models, surface with sub divisions, modeling with patches and splines, applying smoothing groups, assigning texture coordinates, animating objects, and basic rendering techniques.

**DRAFT 252** 4.0 units

Textures & Lighting with 3D Studio Max
3.0 hours lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
Textures and Lighting with 3D Studio Max is one of 3 certificate courses emphasizing the rendering skills needed for a career in Technical Illustration, Architecture, Drafting, Product Design, Feature Films, and Games. Topics include importing AutoCAD models, surfacing with sub divisions, modeling with patches and splines, applying smoothing groups, assigning texture coordinates, animating objects, and basic rendering techniques.

**DRAFT 253** 4.0 units

Animation with 3D Studio Max
3.0 hours lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
Animation with 3D Studio Max is one of 3 certificate courses emphasizing the animation skills needed for a career in Technical Illustration, Architecture, Drafting, Product Design, Feature Films, and Games. Topics include importing AutoCAD models, surfacing with sub divisions, modeling with patches and splines, applying smoothing groups, assigning texture coordinates, animating objects, and basic rendering techniques.

**ECONOMICS (ECON)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1A (CAN ECON 2)</td>
<td>Macro Economic Analysis</td>
<td>3.0</td>
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<tr>
<td></td>
<td>3.0 hours lecture</td>
<td></td>
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<tr>
<td></td>
<td>Grading: letter grade or credit/no credit</td>
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<tr>
<td></td>
<td>Emphasizes the functioning of a mixed enterprise system, business organization, the economic role of government, determination of national income, banking system, deposit creation and the Federal Reserve policy (primarily macro).</td>
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<td>Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
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<tr>
<td>ECON 1AH</td>
<td>Honors Macro Economic Analysis</td>
<td>3.0</td>
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<tr>
<td></td>
<td>3.0 hours lecture</td>
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<tr>
<td></td>
<td>Prerequisite: Qualification for the Honors Program</td>
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</tr>
<tr>
<td></td>
<td>Emphasizes the functioning of a mixed enterprise system, business organization, the economic role of government, determination of national income, banking system, deposit creation and the Federal Reserve policy (primarily macro).</td>
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<td></td>
<td>Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
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</tr>
<tr>
<td>ECON 1B (CAN ECON 4)</td>
<td>Micro Economic Analysis</td>
<td>3.0</td>
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<tr>
<td></td>
<td>3.0 hours lecture</td>
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<td></td>
<td>Grading: letter grade or credit/no credit</td>
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<tr>
<td></td>
<td>Concentrates on price theory, distribution, resource allocation, foreign trade and comparative economic systems (primarily micro).</td>
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<td>Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
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<tr>
<td>ECON 4</td>
<td>Contemporary Economic Issues</td>
<td>3.0</td>
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<tr>
<td></td>
<td>3.0 hours lecture</td>
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<tr>
<td></td>
<td>Grading: letter grade or credit/no credit</td>
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<tr>
<td></td>
<td>This course offers an economics analysis of contemporary questions including environmental, institutional, and multicultural issues. The class will determine the role of economies, as a social science, assisting in understanding cause, effects, and possible polices for current problems. The instructional emphasis is on the relationship of basic tools of economic analysis and their application to current economic problems.</td>
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<td>Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
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<tr>
<td>ECON 5</td>
<td>Economic Geography</td>
<td>3.0</td>
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<tr>
<td></td>
<td>3.0 hours lecture</td>
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<td></td>
<td>Grading: letter grade or credit/no credit</td>
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<tr>
<td></td>
<td>Studies the location and organization of the world’s major economic activities, including the primary, secondary and tertiary sectors. Not open for credit to students registered in or with credit in GEOG 5.</td>
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<td>Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
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</tr>
</tbody>
</table>

**ELECTRICITY (ELECT)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELECT 200A</td>
<td>First Semester Industrial Electricity</td>
<td>8.0</td>
</tr>
<tr>
<td></td>
<td>6.0 hours lecture, 6.0 hours laboratory</td>
<td></td>
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<tr>
<td></td>
<td>Grading: letter grade</td>
<td></td>
</tr>
</tbody>
</table>
An intro to direct current theory, practices and applications. A study of nomenclature and components for students beginning electrical studies for occupational goals, continuing university education or for increasing skill level. Includes formulas used in electrical theory, offering a review and application of various functions; principles of magnetism and electromagnetism applicable to electrical components; information regarding proper use and selection of tools, materials and wiring as practiced in the electrical maintenance and construction industry are emphasized. Lab work includes the fundamentals of DC electricity, electromagnetism, wiring and hand tools.

ELECT 200B 8.0 units
Second Semester Industrial Electricity
6.0 hours lecture, 6.0 hours laboratory
Prerequisite: ELECT 200A
Grading: letter grade
An intro to AC theory, practices and applications. A study of nomenclature and components. An advanced course featuring lab work associated with the fundamentals of AC electricity, AC principles and practices, as well as fundamentals of DC motors and generators.

ELECT 200C 8.0 units
Third Semester Industrial Electricity
6.0 hours lecture, 6.0 hours laboratory
Prerequisite: ELECT 200B
Grading: letter grade
Operational theory and practices associated with motors and generators. Lab work associated with motor controls and circuit diagrams, including wiring practices in the electrical maintenance and construction industry.

ELECT 200D 8.0 units
Fourth Semester Industrial Electricity
6.0 hours lecture, 6.0 hours laboratory
Prerequisite: ELECT 200C
Grading: letter grade
An advanced course that requires knowledge of AC basic circuitry. Covers principle of alternating current, installation of devices in AC circuits and response of circuits to AC excitation. Lab work includes electrical measuring instruments, motors, transformers, basic industrial electronics and solid devices.

ELECT 202 3.0 units
Electrical Mathematics
3.0 hours lecture
Grading: letter grade
A study of formulas used in electrical elementary theory, offering a review and application of various functions.

ELECT 204 3.0 units
First Semester “Fundamentals of DC Electricity”
3.0 hours lecture
Grading: letter grade
An intro to direct current theory, practices and applications. A study of nomenclature and components for students beginning electrical studies for occupational goals, continuing university education or for increasing their skill level.

ELECT 209 3.0 units
Second Sem “Fund of Motors/Generators”
3.0 hours lecture
Prerequisite: ELECT 204
Grading: letter grade
Operational theory and practices as associated with direct current motors and generators.

ELECT 210A 1.0 unit
Laboratory Practices
3.0 hours laboratory
Corequisite: ELECT 204
Grading: letter grade
Lab work associated with the fundamentals of DC electricity, electromagnetism, wiring, practice and hand tools.

ELECT 210B 1.0 unit
Laboratory Practices
3.0 hours laboratory
Prerequisite: ELECT 210A
Corequisite: ELECT 209
Grading: letter grade
Lab work associated with the fundamentals of AC electricity, AC principles and practices, as well as fundamentals of DC motors and generators.

ELECT 210C 1.0 unit
Laboratory Practices
3.0 hours laboratory
Prerequisite: ELECT 210B
Corequisite: ELECT 209
Grading: letter grade
Lab work associated with electrical measuring instruments, motors and transformers.

ELECT 210D 1.0 unit
Laboratory Practices
3.0 hours laboratory
Prerequisite: ELECT 210C
Corequisite: ELECT 212
Grading: letter grade
Lab work associated with motor controls and circuit diagrams.

ELECT 212 3.0 units
Third Semester “Fund of AC Electricity”
3.0 hours lecture
Prerequisite: ELECT 209
Grading: letter grade
An intro to AC theory, practices and applications. A study of nomenclature and components in an advanced course that requires previous DC coursework plus math.

ELECT 214 3.0 units
Fourth Semester “AC Principles & Pract”
3.0 hours lecture
Recommended Preparation: ELECT 212
Grading: letter grade
An advanced course that requires knowledge of AC basic circuitry. Teaches principle of alternating current, installation of devices in AC circuits, response of circuits to AC excitation.

ELECT 224 3.0 units
Electrical Motors and Transformers
3.0 hours lecture
Grading: letter grade
Theory and applications of single and poly phase motors and transformers, testing and connection methods, troubleshooting and maintenance.

ELECT 226 3.0 units
Solid State Fundamentals for Electrician
3.0 hours lecture
Courses of Instruction

Recommended Preparation: ELECT 212
Grading: letter grade
Comprehensive overview of solid state devices and systems, including fiber optics, integrated circuits and light activated components as utilized in the electrical industry.

**ELECT 240**  3.0 units
Electrical Code-Residential
3.0 hours lecture
Grading: letter grade
Familiarity with the use of electrical materials and codes used for residential wiring.

**ELECT 242**  1.5 units
Electrical Code-Grounding
1.5 hours lecture
Recommended Preparation: ELECT 240
Grading: letter grade
Intended for individuals involved with or working within the electrical industry and who have a knowledge of the NEC (National Electric Code).

**ELECT 245**  3.0 units
Electrical Code-Commercial
3.0 hours lecture
Recommended Preparation: ELECT 240
Grading: letter grade
Intended as an intro to the use of electrical code and for individuals interested in commercial, office and light industrial wiring.

**ELECT 250**  3.0 units
Electrical Code-Advanced
3.0 hours lecture
Recommended Preparation: ELECT 245
Grading: letter grade
Intended for individuals having a working knowledge of the code and those who are working or intending to work with heavy industrial applications, life, safety and hazardous systems.

**ELECT 271**  3.0 units
Electrical Cost Estimating I
3.0 hours lecture
Grading: letter grade
Intro to electrical cost estimating, including take-off and listing procedures, for students preparing to enter electrical estimating occupations or associated fields of interest.

**ELECT 275**  0.5 unit
Electrical Pipe Bending (A)
0.3 hour lecture, 0.7 hour laboratory
Grading: letter grade
Learn to layout and bend electrical metallic tubing correctly.

**ELECT 276**  0.5 unit
Electrical Pipe Bending (B)
0.3 hour lecture, 0.6 hour laboratory
Grading: letter grade
Learn to layout and bend rigid conduit correctly.

**ELECT 277**  3.0 units
Blueprint Reading for Electricians
3.0 hours lecture
Grading: letter grade
Learn to read blueprints used in the electrical industry.

**ELECT 280**  3.0 units
Traffic Signal Systems I
2.5 hours lecture, 1.5 hours laboratory
Recommended Preparation: ELECT 204
Grading: letter grade
This is the first course in Traffic Signal Systems covering copper wiring, controller, pole and signal head installation, controller theory. CalTrans and NEC standards and requirements are covered. Hands-on course including the building and wiring of a working intersection.

**ELECT 283**  3.0 units
Traffic Systems Communications
2.5 hours lecture, 1.5 hours laboratory
Recommended Preparation: ELECT 204
Grading: letter grade
This course is designed for the instruction in Traffic Signal Communications Systems. The course content will cover communications theory, microwave, VHF/UHF radios, vision monitoring and detection, antenna systems. This hands-on course will further include the testing and troubleshooting of communication systems.

**ELECT 284**  3.0 units
Traffic Signal Controllers & Digital Systems
2.5 hours lecture, 1.5 hours laboratory
Recommended Preparation: ELECT 204
Grading: letter grade
This is a course in Digital Logic and Microprocessor Controls as applied to Traffic Signal Systems. This hands-on course will include troubleshooting of digital traffic controllers. Course topics will include, but are not limited to interface logic, electronics and theory of system operation.

**ELECT 435A**  2.0 units
Electric Motor Control
2.0 hours lecture, 1.0 hour laboratory
Recommended Preparation: ELECT 212
Grading: letter grade
Theoretical and practical principles involving the control of direct and alternating current electric motors. Mandatory safety awareness assessment will be conducted early in the course.

**ELECT 435B**  2.0 units
Electric Motor Control
2.0 hours lecture, 1.0 hour laboratory
Prerequisite: ELECT 435A
Grading: letter grade
Theoretical and practical principles involving the control of direct and alternating current electric motors.

**ELECTRONICS (ELTC)**

**ELTC 40**  2.0 units
Technology & Mathematics Applications
2.0 hours lecture
Grading: letter grade
A study of technology applications and the influence on professional activities and society. Includes the solution of practical technology problems utilizing applied mathematics.

Transfer Status: Transferable to CSU, see counselor for limitations.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ELTC 41</td>
<td>2.0</td>
</tr>
<tr>
<td>Technical Applications of Minicomputers</td>
<td>1.0 hour lecture, 3.0 hours laboratory</td>
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<tr>
<td>Grading: letter grade</td>
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<tr>
<td>Teaches fundamental applications and functions of a minicomputer in technical fields including architectural and mechanical design and drafting, electricity and electronics. Utilizes BASIC as the primary learning language.</td>
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<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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<tr>
<td>ELTC 50</td>
<td>3.0</td>
</tr>
<tr>
<td>Intro to Electricity &amp; Electronics</td>
<td>3.0 hours lecture</td>
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<tr>
<td>Grading: credit/no credit</td>
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<tr>
<td>A survey of the principles of operation of a wide range of electronics equipment designed for business, military, industrial, medical and citizen consumer applications. Includes an intro to the fundamental electronic and electric circuit theory.</td>
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<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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<tr>
<td>ELTC 52</td>
<td>6.0</td>
</tr>
<tr>
<td>Electronics Technology II</td>
<td>6.0 hours lecture</td>
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<tr>
<td>Prerequisite: ELTC 51 or 51B</td>
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<tr>
<td>Grading: letter grade</td>
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<tr>
<td>Covers theoretical and practical essentials of AC series circuits and mathematical circuit analysis. Not open to students registered in or with credit in ELTC 52B.</td>
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<tr>
<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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<tr>
<td>ELTC 52A</td>
<td>3.0</td>
</tr>
<tr>
<td>Electronics Technology II</td>
<td>3.0 hours lecture</td>
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<tr>
<td>Prerequisite: ELTC 51 or 51B</td>
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<tr>
<td>Grading: letter grade</td>
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<tr>
<td>Covers theoretical and practical essentials of AC series circuits and math circuit analysis. Not open to students registered in or with credit in ELTC 52.</td>
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<tr>
<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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<tr>
<td>ELTC 52B</td>
<td>3.0</td>
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<tr>
<td>Electronics Technology II</td>
<td>3.0 hours lecture</td>
</tr>
<tr>
<td>Prerequisite: ELTC 52A</td>
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<tr>
<td>Grading: letter grade</td>
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<tr>
<td>Covers the theoretical and practical essentials of AC parallel and complex circuits, mathematical circuit analysis, power supplies and solid-state devices.</td>
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<tr>
<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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<tr>
<td>ELTC 52L</td>
<td>2.0</td>
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<tr>
<td>Electronics Technology II Laboratory</td>
<td>6.0 hours laboratory</td>
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<tr>
<td>Corequisite: ELTC 52</td>
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<tr>
<td>Grading: letter grade</td>
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<tr>
<td>Covers experiments and demonstrations selected to clarify the principles developed in ELTC 52.</td>
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<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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<tr>
<td>ELTC 52LA</td>
<td>1.0</td>
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<tr>
<td>Electronics Technology II Laboratory</td>
<td>3.0 hours laboratory</td>
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<tr>
<td>Corequisite: ELTC 52A</td>
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<tr>
<td>Grading: letter grade</td>
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<tr>
<td>Covers experiments and demonstrations selected to clarify the principles developed in ELTC 52A.</td>
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<tr>
<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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<tr>
<td>ELTC 52LB</td>
<td>1.0</td>
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<tr>
<td>Electronics Technology II Laboratory</td>
<td>3.0 hours laboratory</td>
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<tr>
<td>Corequisite: ELTC 52B</td>
<td></td>
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<tr>
<td>Grading: letter grade</td>
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<tr>
<td>Covers experiments and demonstrations selected to clarify the principles developed in ELTC 52B.</td>
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<tr>
<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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</tr>
<tr>
<td>ELTC 53</td>
<td>6.0</td>
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<tr>
<td>Solid-State Circuits</td>
<td>6.0 hours lecture</td>
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<tr>
<td>Prerequisite: ELTC 52 or 52B</td>
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<tr>
<td>Grading: letter grade</td>
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<tr>
<td>Covers theoretical and practical essentials of solid-state devices and circuits and an analysis of radio frequency (RF) circuits. Not open to students registered in or with credit in ELTC 53B.</td>
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<tr>
<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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<tr>
<td>ELTC 53A</td>
<td>3.0</td>
</tr>
<tr>
<td>Solid-State Circuits</td>
<td>3.0 hours lecture</td>
</tr>
<tr>
<td>Prerequisite: ELTC 52 or 52B</td>
<td></td>
</tr>
<tr>
<td>Grading: letter grade</td>
<td></td>
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<tr>
<td>Covers theoretical and practical essentials of solid-state devices and circuits and an analysis of radio frequency (RF) circuits. Not open to students registered in or with credit in ELTC 53.</td>
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<tr>
<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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<tr>
<td>ELTC 53B</td>
<td>3.0</td>
</tr>
<tr>
<td>Solid-State Circuits</td>
<td>3.0 hours lecture</td>
</tr>
<tr>
<td>Prerequisite: ELTC 53A</td>
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<tr>
<td>Grading: letter grade</td>
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<tr>
<td>Covers the theoretical and practical essentials of integrated circuit amplifiers, AM transmission and reception and an intro to digital integrated circuits.</td>
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<tr>
<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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<tr>
<td>ELTC 53L</td>
<td>2.0</td>
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<tr>
<td>Solid-State Circuits Laboratory</td>
<td>6.0 hours laboratory</td>
</tr>
<tr>
<td>Corequisite: ELTC 53</td>
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<tr>
<td>Grading: letter grade</td>
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<tr>
<td>Covers experiments and demonstrations selected to clarify the principles developed in ELTC 53.</td>
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<tr>
<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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<tr>
<td>ELTC 53LA</td>
<td>1.0</td>
</tr>
<tr>
<td>Solid-State Circuits Laboratory</td>
<td>3.0 hours laboratory</td>
</tr>
<tr>
<td>Prerequisite: ELTC 52 or 52B</td>
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<tr>
<td>Corequisite: ELTC 53A</td>
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<tr>
<td>Grading: letter grade</td>
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<tr>
<td>Experiments and demonstrations selected to clarify the principles developed in ELTC 53A.</td>
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</tbody>
</table>
### Courses of Instruction

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Title</th>
<th>Hours</th>
<th>Preparations</th>
<th>Grading</th>
<th>Description</th>
</tr>
</thead>
</table>
| ELTC 53LB   | 1.0     | Solid-State Circuits Laboratory            | 3.0   | ELTC 53B                                         | letter grade | Experiments and demonstrations selected to clarify the principles developed in ELTC 53B.  
Transfer Status: Transferable to CSU, see counselor for limitations.                       |
| ELTC 54     | 6.0     | Digital/Telecommunications Circuits        | 6.0   | ELTC 53 or 53B                                   | letter grade | Theoretical and practical essentials of digital electronic circuits and an analysis of telecommunication circuits.  
Not open to students registered in or with credit in ELTC 54B.  
Transfer Status: Transferable to CSU, see counselor for limitations.                      |
| ELTC 54A    | 3.0     | Digital/Telecommunications Circuits        | 3.0   | ELTC 54A                                         | letter grade | Theoretical and practical essentials of digital electronic circuits and an analysis of telecommunication circuits.  
Not open to students registered in or with credit in ELTC 54.  
Transfer Status: Transferable to CSU, see counselor for limitations.                      |
| ELTC 54B    | 3.0     | Digital/Telecommunications Circuits        | 3.0   | ELTC 54B                                         | letter grade | Theoretical and practical essentials of digital electronic subsystems, FM transmission and reception and an intro to microprocessors.  
Transfer Status: Transferable to CSU, see counselor for limitations.                      |
| ELTC 54L    | 2.0     | Digital/Telecommunications Laboratory      | 6.0   | ELTC 54                                          | letter grade | Through experiments and demonstrations, clarifies principles developed in ELTC 54.  
Transfer Status: Transferable to CSU, see counselor for limitations.                      |
| ELTC 54LA   | 1.0     | Digital/Telecommunications Laboratory      | 3.0   | ELTC 54A                                         | letter grade | Covers experiments and demonstrations selected to clarify the principles developed in ELTC 54A.  
Transfer Status: Transferable to CSU, see counselor for limitations.                      |
| ELTC 55     | 6.0     | Microcomputer/Introduction to Robotics     | 6.0   | ELTC 54 or 54B                                   | letter grade | Covers the theoretical and practical essentials of microprocessors and digital communication circuits.  
Not open to students registered in or with credit in ELTC 55B.  
Transfer Status: Transferable to CSU, see counselor for limitations.                      |
| ELTC 55A    | 3.0     | Microcomputer/Introduction to Robotics     | 3.0   | ELTC 55A                                         | letter grade | Covers the theoretical and practical essentials of microprocessors and digital communication circuits.  
Not open to students registered in or with credit in ELTC 55B.  
Transfer Status: Transferable to CSU, see counselor for limitations.                      |
| ELTC 55B    | 3.0     | Microcomputer/Introduction to Robotics     | 3.0   | ELTC 55A                                         | letter grade | Covers theoretical and practical essentials of microcomputers, interfacing devices and system troubleshooting.  
Transfer Status: Transferable to CSU, see counselor for limitations.                      |
| ELTC 55L    | 2.0     | Microcomputer/Intro to Robotics Lab        | 6.0   | ELTC 55                                          | letter grade | Through experiments and demonstrations, clarifies principles developed in ELTC 55.  
Transfer Status: Transferable to CSU, see counselor for limitations.                      |
| ELTC 55LA   | 1.0     | Microcomputer/Intro to Robotics Lab        | 3.0   | ELTC 55A                                         | letter grade | Through experiments and demonstrations, clarifies principles developed in ELTC 55A.  
Transfer Status: Transferable to CSU, see counselor for limitations.                      |
| ELTC 55LB   | 1.0     | Microcomputer/Intro to Robotics Lab        | 3.0   | ELTC 55B                                         | letter grade | Through experiments and demonstrations, clarifies principles developed in ELTC 55B.  
Transfer Status: Transferable to CSU, see counselor for limitations.                      |
Through experiments and demonstrations, clarifies principles developed in ELTC 55B.  
Transfer Status: Transferable to CSU, see counselor for limitations.

**ELTC 56A**  
2.0 units  
Robotics Technology  
2.0 hours lecture  
Grading: letter grade  
Covers the theoretical and practical essentials of robotics technology, including AC/DC power and positioning, hydraulic and pneumatic systems, microprocessor fundamentals and programming, voice synthesis and robot interfacing circuitry.  
Transfer Status: Transferable to CSU, see counselor for limitations.

**ELTC 56B**  
2.0 units  
Robotics Technology  
2.0 hours lecture  
Grading: letter grade  
Covers the theoretical and practical essentials of robotics technology, including AC/DC power and positioning, hydraulic and pneumatic systems, microprocessor fundamentals and programming, voice synthesis and robot interfacing circuitry.  
Transfer Status: Transferable to CSU, see counselor for limitations.

**ELTC 56C**  
2.0 units  
Robotics Technology  
2.0 hours lecture  
Grading: letter grade  
Covers the theoretical and practical essentials of robotics technology, including AC/DC power and positioning, hydraulic and pneumatic systems, microprocessor fundamentals and programming, voice synthesis and robot interfacing circuitry.  
Transfer Status: Transferable to CSU, see counselor for limitations.

**ELTC 56LA**  
1.0 unit  
Robotics Technology Laboratory  
3.0 hours laboratory  
Corequisite: ELTC 56A  
Grading: letter grade  
Covers experiments and demonstrations selected to clarify the principles developed in ELTC 56.  
Transfer Status: Transferable to CSU, see counselor for limitations.

**ELTC 56LB**  
1.0 unit  
Robotics Technology Laboratory  
3.0 hours laboratory  
Corequisite: ELTC 56B  
Grading: letter grade  
Covers experiments and demonstrations selected to clarify the principles developed in ELTC 56.  
Transfer Status: Transferable to CSU, see counselor for limitations.

**ELTC 56LC**  
1.0 unit  
Robotics Technology Laboratory  
3.0 hours laboratory  
Corequisite: ELTC 56C  
Grading: letter grade  
Covers experiments and demonstrations selected to clarify the principles developed in ELTC 56.  
Transfer Status: Transferable to CSU, see counselor for limitations.

**ELTC 201**  
2.0 units  
Electronics I Laboratory  
1.0 hour lecture, 3.0 hours laboratory  
Grading: credit/no credit  
Designed for beginning electronics technology majors who wish to gain additional insight into the operational analysis and testing of DC electronic circuits.

**ELTC 202**  
2.0 units  
Electronics II Laboratory  
1.0 hour lecture, 3.0 hours laboratory  
Grading: credit/no credit  
For electronic technology students who wish to gain additional insight into the operational analysis and testing of AC electronic circuits.

**ELTC 203**  
2.0 units  
Electronics Circuits Laboratory  
1.0 hour lecture, 3.0 hours laboratory  
Grading: credit/no credit  
For electronics technology students who wish to gain additional insight into the operation and testing of integrated circuits and the calibration, testing and troubleshooting of AM transceivers and antenna systems.

**ELTC 204**  
2.0 units  
Telecommunications I Laboratory  
1.0 hour lecture, 3.0 hours laboratory  
Grading: credit/no credit  
For electronic technology students who wish to gain additional insight into the operation, calibration, testing and troubleshooting of AM, FM, CB and SSB transceivers, antenna systems and transmission lines.

**ELTC 205A**  
2.0 units  
Telecommunications II Laboratory  
1.0 hour lecture, 3.0 hours laboratory  
Grading: credit/no credit  
For electronic technology majors who wish to gain additional insight into the operation, calibration, testing and troubleshooting of telecommunication systems including microcomputers, video image displays, digital printers, microwave and radar transmission and reception.

**ELTC 205B**  
2.0 units  
Telecommunications II Laboratory  
1.0 hour lecture, 3.0 hours laboratory  
Grading: credit/no credit  
For electronic technology majors who wish to gain additional insight into the operation, calibration, testing and troubleshooting of telecommunication systems including microcomputers, video image displays, digital printers, microwave and radar transmission and reception.

**ELTC 225**  
4.0 units  
Algebra and Trigonometry for Technicians  
4.0 hours lecture  
Prerequisite: Qualification through the Math assessment process or MATH 805 or MATH 815 or ELTC 40 or ELECT 202  
Grading: letter grade  
Formerly MATH 225. Covers basic algebra and trigonometry and their application to the solution of practical problems in technical fields. Not open for credit to students registered in or with credit in MATH 225, 220, 230, 110 and 150.
ELTC 250 1.0 unit
Network Wiring Installation
0.5 hour lecture, 1.5 hours laboratory
Grading: credit/no credit
Learn the basic skills and knowledge to qualify for employment as a network wiring installer. Includes use of tools, copper based cable systems and the National Electrical Code as it applies to network wiring. Students qualify for entry positions in the networking industry.

ELTC 251 3.0 units
Cisco Networking I, Introduction
2.5 hours lecture, 1.5 hours laboratory
Grading: letter grade
First course in a sequence of four to prepare students to pass the certification test required to become a Cisco Certified Networking Associate (CCNA). Intro to networking, devices, IP Addressing, ARP/RARP, media and design, topology, cabling, electricity, electronics and management. Instruction is based on Cisco curriculum.

ELTC 252 3.0 units
Cisco Networking II, Routers
2.5 hours lecture, 1.5 hours laboratory
Prerequisite: ELTC 251
Grading: letter grade
Second course in a sequence of four to prepare students to pass the certification test required to become a Cisco Certified Networking Associate (CCNA). OSI layers 1-7, WANs, routing, using routers, router components and configuration, IOS, TCP/IP, IP addressing and routing protocols. Instruction is based on Cisco curriculum.

ELTC 253 3.0 units
Cisco Networking III, LAN
2.5 hours lecture, 1.5 hours laboratory
Prerequisite: ELTC 252
Grading: letter grade
Third course in a sequence of four to prepare students to pass the certification test required to become a Cisco Certified Networking Associate (CCNA). LAN switching, VLAN, LAN design, IGRP, access lists, Novell IPX. Instruction is based on Cisco curriculum.

ELTC 254 3.0 units
Cisco Networking IV, WAN
2.5 hours lecture, 1.5 hours laboratory
Prerequisite: ELTC 253
Grading: letter grade
Fourth course in a sequence of four to prepare students to pass the certification test required to become a Cisco Certified Networking Associate (CCNA). Wan, WAN design, PPP, ISDN and Frame relay. Instruction is based on Cisco curriculum.

EMERGENCY MEDICAL TECHNOLOGY (EMT)

EMT 251 3.0 units
Emergency Medical Technician
3.0 hours lecture
Recommended Preparation: AH 60
Grading: letter grade
Develop basic skills in the assessment, rescue, immediate treatment and transport of the urgently ill or injured client. Emphasizes identifying and correcting life-threatening conditions, identifying rescue activities and developing a systematic approach to the care of the client and the performance of rescue activities. Relevant information on traumatic injuries, medical emergencies, environmental hazards, rescue techniques and equipment will be integrated.

EMT 251L 1.5 units
Emergency Medical Technician Laboratory
4.5 hours laboratory
Corequisite: EMT 251
Recommended Preparation: AH 60
Grading: credit/no credit
Lab application to develop basic skills in the assessment, rescue, immediate treatment and transport of the urgently ill or injured client. Emphasizes identifying and correcting life-threatening conditions, identifying rescue activities and developing a systematic approach to the care of the client and the performance of rescue activities. Technique practice for the care of traumatic injuries, medical emergencies, environmental hazards, rescue techniques and equipment will be integrated.

EMT 252AD 1.0 unit
Emergency Medical Tech I Refresher
1.0 hour lecture, 0.5 hour laboratory
Prerequisite: Current EMT — 1 Certification.
Grading: letter grade
Must have certification that is current or not expired more than six months. Review and update life support measures, CPR and use of emergency medical equipment and supplies for the certified EMT-I.

ENGINEERING (ENGR)

ENGR 3A 3.0 units
Engineering Graphics
2.0 hours lecture, 4.0 hours laboratory
Prerequisite: MATH 120 or one year High School Geometry.
Recommended Preparation: One semester of DRAFT201 or high school mechanical drawing or drafting.
Grading: letter grade
Review the methods of graphic expression common to the various fields of engineering. Follow engineering drafting standards and procedures through working drawings. Learn to solve engineering space problems by orthographic methods.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ENGR 3B 3.0 units
Engineering Graphics
2.0 hours lecture, 4.0 hours laboratory
Prerequisite: ENGR 3A and MATH 40
Grading: letter grade
Review the principles of graphic expression through working drawings. Expand the principles of descriptive geometry as studied in ENGR 3A. Charts, diagrams and graphic solutions are discussed.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ENGR 17 (CAN ENGR 12) 3.0 units
Electrical Engineering Circuits
3.0 hours lecture
Prerequisite: MATH 70 and PHYS 3B
Grading: letter grade
Intro to electrical circuit analysis including mesh and node equations, controlled sources, Thevenin and Norton equivalencies, step response of RLC circuits, phasor analysis and other topics.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ENGR 17L (CAN ENGR 6) 1.0 unit**

Electrical Engineering Circuits Lab

3.0 hours laboratory

Prerequisite: ENGR 17 (may be taken concurrently)

Grading: letter grade

Lab study of electrical circuits and instrumentation.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ENGR 35 (CAN ENGR 8) 3.0 units**

Statics

3.0 hours lecture

Prerequisite: PHYS 3A and MATH 70

Grading: letter grade

Equilibrium of two- and three-dimensional force systems employing free-body diagrams. Analytical and graphical solution of problems involving structures and machines. Friction, energy methods and moments of inertia are discussed.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ENGR 50 1.0 unit**

Introduction to Engineering

1.0 hour lecture

Grading: credit/no credit

Intro to engineering concepts, practicing engineers and the various branches of engineering.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ENGR 54 3.0 units**

Computer Methods

3.0 hours lecture

Prerequisite: MATH 60 (may be taken concurrently)

Grading: letter grade or credit/no credit

Learn the nature of computers, algorithms and problem solving procedures and programming. Discuss the applications to problems from engineering, computer science, physical sciences and math areas. C++ is the primary programming language. Not open for credit to students registered in or with credit in MATH 64.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ENGLISH (ENGL)**

**ENGL 1 (CAN ENGL 2) 3.0 units**

Reading and Composition

4.0 hours lecture

Prerequisite: Qualify through the English assessment process or ENGL 105 or ESL 34.

Grading: letter grade

Expository and persuasive writing based on college-level reading, research and critical thinking.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ENGL 1H 3.0 units**

Honors Reading and Composition

4.0 hours lecture

Prerequisite: Qualification for the Honors Program.

Qualify through the English assessment process, or ENGL 105 or ESL 34.

Grading: letter grade

Expository and persuasive writing based on college-level reading, research and critical thinking. Eligibility for the Honors program is required for enrollment.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ENGL 2 (CAN ENGL 4) 3.0 units**

Introduction to Literature/Composition

3.0 hours lecture

Prerequisite: ENGL 1 or 1H

Grading: letter grade or credit/no credit

An intro to literature and composition which places its emphasis on genre, such as short stories, poetry and drama. Writing assignments emphasize expository analysis of the reading material.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ENGL 3 4.0 units**

Argumentative and Critical Writing

4.0 hours lecture

Prerequisite: ENGL 1

Grading: letter grade or credit/no credit

An intro to the elements and uses of critical thinking and writing. Analytical, persuasive, evaluative and argumentative writing will be emphasized.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ENGL 3H 4.0 units**

Honors Argumentative & Critical Writing

4.0 hours lecture

Prerequisite: Qualification for the Honors Program and ENGL 1.

Grading: letter grade or credit/no credit

An intro to the elements and uses of critical thinking and writing. Analytical, persuasive, argumentative and evaluative writing will be emphasized, as well as the evaluation and use of both electronic and conventional sources.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ENGL 6AD 3.0 units**

Production of Literary Publications

2.0 hours lecture, 3.0 hours laboratory

Grading: letter grade or credit/no credit

Study the principles and practice involved in editing and producing complete literary publications ranging in size and complexity from small pamphlets to books. Use computers in the production process.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ENGL 7 3.0 units**

Editing a Literary Review

3.0 hours lecture

Grading: letter grade or credit/no credit

Students interested in editorial work will examine contemporary literary journals, reviews and creative publications and analyze the basic philosophy in editing a journal. Also, they will have hands-on experience
analyzing, considering and choosing manuscripts appropriate to the standards of a literary journal.  

*Transfer Status: Transferable to CSU, see counselor for limitations.*

**ENGL 18  **

**Detective and Crime Fiction**  
3.0 units  
3.0 hours lecture  
Prerequisite: Eligibility for ENGL 1.  
Grading: letter grade or credit/no credit  
Examine the origins and development of detective and crime fiction. Read and discuss the works of major 19th and 20th century writers in the genre.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**ENGL 24  **

**College Grammar**  
3.0 units  
3.0 hours lecture  
Grading: letter grade or credit/no credit  
Theory and practice in grammar, usage and the mechanics. Recommended for students who wish to strengthen their knowledge of grammar and to improve their skill in writing and speaking in English. Also recommended for people who need a strong knowledge of grammar, usage and mechanics for professional purposes.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**ENGL 26  **

**Creative Writing 1**  
3.0 hours lecture  
Prerequisite: Eligibility for ENGL 1.  
Grading: letter grade or credit/no credit  
Practical, supervised experience in the fundamentals of writing fiction and poetry.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**ENGL 27A  **

**Creative Writing 2: Poetry**  
3.0 hours lecture  
Prerequisite: ENGL 26  
Grading: letter grade or credit/no credit  
Offers advanced, practical experience in writing, appreciating and analyzing poetry.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**ENGL 27B  **

**Creative Writing 2: Fiction**  
3.0 hours lecture  
Prerequisite: ENGL 26  
Grading: letter grade or credit/no credit  
Offers advanced, practical experience in writing, appreciating and analyzing fiction.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**ENGL 27C  **

**Creative Writing 2: Bio/Autobiography**  
3.0 hours lecture  
Prerequisite: ENGL 26  
Grading: letter grade or credit/no credit  
An advanced course motivating students to investigate autobiographical and biographical material for use in narrative sketches, including family history and the journal.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**ENGL 27D  **

**Creative Writing 2: Stage/Screen Writing**  
3.0 hours lecture  
Prerequisite: ENGL 26  
Grading: letter grade or credit/no credit  
An advanced course providing practical, supervised experience in the fundamentals of writing drama for stage, radio, television and/or film. Not open to students registered in or with credit in TART 32.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**ENGL 27E  **

**Creative Writing 2: The Novel**  
3.0 hours lecture  
Prerequisite: ENGL 26  
Grading: letter grade or credit/no credit  
Gives an intensive workshop atmosphere in which to write an original work of book-length fiction. Focuses on theory, technique and practical discipline of writing fiction. Examine models from various genres (literary classics, historical fiction, detective fiction, romance, science fiction and others), discuss the techniques of storytelling and present manuscripts of one's own work for critical discussion.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**ENGL 30  **

**Horror and Terror Fiction**  
3.0 hours lecture  
Prerequisite: Eligibility for ENGL 1.  
Grading: letter grade  
This course examines some of the best works in horror and terror fiction in both novel and short story forms. Beginning with origins in England, in the mid 18th century, discussions will move historically through the romantic movement and the Victorian era and into the modern era, covering such authors as Radcliffe, Poe, Lovecraft, James, King, Koontz, and Straub.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**ENGL 32  **

**Masterpieces/Asian Literature (in English)**  
3.0 hours lecture  
Prerequisite: Eligibility for ENGL 1.  
Grading: letter grade  
Intro to Asian literature (in translation), with an emphasis on major literary works of India, China and Japan. For students with a general interest in diverse literatures and for those who seek to understand the workings of the eastern mind in its unique historical, cultural and philosophical context.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**ENGL 33  **

**Mythology**  
3.0 hours lecture  
Prerequisite: Eligibility for ENGL 1.  
Grading: letter grade or credit/no credit  
A study of myths of various nations and archetypal mythic patterns. The reading and analysis of literature is based on these myths and patterns.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*
ENGL 35 3.0 units
Interpreting the Short Story
3.0 hours lecture
Prerequisite: Eligibility for ENGL 1.
Grading: letter grade or credit/no credit
Learn to interpret the short story and apply meanings found in short stories to real-life situations through class discussion and writing assignments.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ENGL 36 3.0 units
The Novel
3.0 hours lecture
Prerequisite: Eligibility for ENGL 1.
Grading: letter grade or credit/no credit
Read, discuss and analyze representative English, American and Continental novels.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ENGL 37 3.0 units
Science Fiction, Fantasy and Horror
3.0 hours lecture
Prerequisite: Eligibility for ENGL 1.
Grading: letter grade or credit/no credit
A survey of the major works of speculative fiction with an emphasis on major themes, as well as the relationships with psychology, religion, anthropology, sociology, literary traditions, art and ethics.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ENGL 38 3.0 units
The Bible as Lit: The Old Testament
3.0 hours lecture
Prerequisite: Eligibility for ENGL 1.
Grading: letter grade or credit/no credit
An examination and analysis of the narratives, poetry, essays and teachings of the Old Testament, emphasizing a literary point of view.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ENGL 39 3.0 units
The Bible as Lit: Apocrypha/New Testament
3.0 hours lecture
Prerequisite: Eligibility for ENGL 1.
Grading: letter grade or credit/no credit
An examination and analysis of the narratives, poetry, essays and teachings of the New Testament and Apocrypha, emphasizing a literary point of view.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ENGL 41 3.0 units
American Literature I
3.0 hours lecture
Prerequisite: Eligibility for ENGL 1.
Grading: letter grade or credit/no credit
A survey of American literature from the colonial period to the Civil War.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ENGL 42 3.0 units
American Literature II
3.0 hours lecture
Prerequisite: Eligibility for ENGL 1.
Grading: letter grade or credit/no credit
A survey of American literature from the Civil War to the present.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ENGL 43A 3.0 units
Introduction to Shakespeare
3.0 hours lecture
Prerequisite: Eligibility for ENGL 1.
Grading: letter grade or credit/no credit
Reading, discussion and analysis of seven plays and selected poems. Presentation of Shakespeare as a major literary figure in the context of the Elizabethan period and the history of English literature.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ENGL 43B 3.0 units
Introduction to Shakespeare
3.0 hours lecture
Prerequisite: Eligibility for ENGL 1.
Grading: letter grade or credit/no credit
Reading, discussion and analysis of seven plays and selected poems. Presentation of Shakespeare as a major literary figure in the context of the Elizabethan period and the history of English literature.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ENGL 44 3.0 units
Literature of the Western World I
3.0 hours lecture
Prerequisite: Eligibility for ENGL 1.
Grading: letter grade or credit/no credit
A survey of the historical development of western literature from classical times to the Renaissance, reflecting philosophical, political and artistic changes in the western culture.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ENGL 44H 3.0 units
Honors Lit of the Western World I
3.0 hours lecture
Prerequisite: Qualification for the Honors Program and Eligibility for ENGL 1.
Grading: letter grade or credit/no credit
A survey of the historical development of European literature from Classical times to the Renaissance, emphasizing the application for the aesthetic, philosophical and cultural concepts.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ENGL 45 3.0 units
Literature of the Western World II
3.0 hours lecture
Prerequisite: Eligibility for ENGL 1.
Grading: letter grade or credit/no credit
Readings in literature of the Western World, emphasizing European literature in translation. Covers the works from the Renaissance to contemporary times and emphasizes the appreciation of aesthetic, philosophical and cultural concepts.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ENGL 45H 3.0 units
Honors Lit of the Western World II
3.0 hours lecture
Courses of Instruction

Prerequisite: Qualification for the Honors Program and Eligibility for ENGL 1.
Grading: letter grade or credit/no credit
Readings in literature of the Western World, emphasizing European literature in translation. Covers the works from the Renaissance to contemporary times and the appreciation of aesthetic, philosophical and cultural concepts. Satisfactory honors writing sample required before or at entry into the class.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ENGL 46 (Part of CAN ENGL SEQUENCE B) 3.0 units
Survey of English Literature I
3.0 hours lecture
Prerequisite: Eligibility for ENGL 1.
Grading: letter grade or credit/no credit
A study of English literature from Anglo-Saxon times to 18th Century.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ENGL 47 (Part of CAN ENGL SEQUENCE B) 3.0 units
Survey of English Literature II
3.0 hours lecture
Prerequisite: Eligibility for ENGL 1.
Grading: letter grade or credit/no credit
A study of English literature from the pre-romantic period to modern times.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ENGL 48 3.0 units
Modern & Contemporary Literature
3.0 hours lecture
Prerequisite: Eligibility for ENGL 1.
Grading: letter grade or credit/no credit
The literature of the modern era and the writers and thinkers who have influenced contemporary attitudes and ideas. For students interested in literature generally and for those who seek a better understanding of today’s world.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ENGL 48H 3.0 units
Honors Modern/Contemporary Literature
3.0 hours lecture
Prerequisite: Qualification for the Honors Program and Eligibility for ENGL 1.
Grading: letter grade or credit/no credit
The study of imaginative literature written from the late 19th century until the 1990s. Writers chosen will represent world literature and generally will be those who have exerted a strong influence on contemporary attitudes, ideas, aesthetics and values. Explores the revolutionary ways of writing and seeing that are peculiar to major artists of our century. A satisfactory honors writing sample is required before or at entry into the class.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ENGL 79 3.0 units
Literature of Diversity
3.0 hours lecture
Prerequisite: Eligibility for ENGL 1.
Grading: letter grade or credit/no credit
An intro study of literature—emphasizing but not confined to twentieth century fiction, poetry, drama and nonfiction prose—by writers representing such diverse and often non-canonical groups as Blacks, women, Asian-Americans, Chicanos/Latinos, Native-Americans and gays and lesbians. Explores the revolutionary ways in which writers from various backgrounds—as artists, activists and intellectuals—have changed the ways in which we create, read and analyze literature. Writers chosen will have exerted a strong influence on contemporary attitudes, ideas and values. May be repeated for credit as topics vary.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ENGL 97AD 3.0 units
Writers Workshop
3.0 hours lecture
Prerequisite: ENGL 27A, 27B, 27C, 27D or 27E
Grading: letter grade or credit/no credit
A creative writing workshop for students who wish to learn additional skills in writing fiction, poetry, drama, biography or family history.
Transfer Status: Transferable to CSU, see counselor for limitations.

ENGL 105 4.0 units
Fundamentals of Writing
4.0 hours lecture
Prerequisite: Qualify through the English assessment process, or ENGL 801B.
Grading: credit/no credit
The study and performance of writing to enable the student to express ideas clearly in essay form, using standard written English. Meets composition requirements for the AA and AS Degrees and may prepare students for entrance into ENGL 1.

ENGL 600 0.0 unit
Great Works of Literature
3.0 hours lecture
Grading: LBCC Non-Graded Course
An intro to literature emphasizing both the reading of major works of literature and training in written expression. Designed for senior citizens.

ENGL 627 0.0 unit
Writing for Publication or Pleasure
3.0 hours lecture
Grading: LBCC Non-Graded Course
Experience the creative and critical processes in creative writing. Primarily designed for senior citizens.

ENGL 801A 4.0 units
College English Skills I
4.0 hours lecture
Prerequisite: Qualification through the English assessment process.
Grading: credit/no credit
An intro to the basic forms of composition—the paragraph and the essay—with a focus on the development of standard written English skills. Prepares students for either ENGL 801B or 105.

ENGL 801B 4.0 units
College English Skills II
4.0 hours lecture
Prerequisite: ENGL 801A
Grading: credit/no credit
Practice in the basic forms of composition—the paragraph and the essay—with a focus on further developing standard written English skills. Prepares students for ENGL 105.

ENGLISH, READING (READ)

READ 82 3.0 units
Proficient Reading
3.0 hours lecture
Prerequisite: Qualification through Reading assessment process or ENGL 882B or READ 883.
Grading: letter grade or credit/no credit
Instruction in strategies necessary for college reading with an emphasis on the application of comprehension, vocabulary and critical reading skills to academic and technical reading assignments. Helps students gain efficiency with the challenges of college reading.
Transfer Status: Transferable to CSU, see counselor for limitations.

READ 83 3.0 units
Power Reading
3.0 hours lecture
Prerequisite: Qualification through Reading assessment process or READ 883.
Grading: letter grade or credit/no credit
Power reading strategies, analysis of written discourse and application of flexible reading techniques to personal, professional and academic reading. For those with strong comprehension skills.
Transfer Status: Transferable to CSU, see counselor for limitations.

READ 84 3.0 units
Analytical Reading of Contemporary Prose
3.0 hours lecture
Grading: letter grade or credit/no credit
A close examination of contemporary reading materials with the purpose of increasing comprehension through the improvement of analytical and critical reading skills.
Transfer Status: Transferable to CSU, see counselor for limitations.

READ 85 3.0 units
Vocabulary Building
3.0 hours lecture
Grading: letter grade or credit/no credit
A study of methods to expand general word knowledge and build academic vocabulary emphasizing conceptual development and effective communication. Specifically designed to increase personal vocabulary skills and stimulate appreciation of the English language.
Transfer Status: Transferable to CSU, see counselor for limitations.

READ 880 3.0 units
Reading Basics
3.0 hours lecture
Grading: credit/no credit
An initiation to the world of reading for emergent readers. Focuses on creating pathways to literacy through an intro to decoding, word recognition skills, building of vocabulary skills and the development of a foundation for comprehension strategies.

READ 881 3.0 units
Reading Essentials
3.0 hours lecture
Prerequisite: Qualification through Reading assessment process or READ 880.
Grading: credit/no credit
Familiarization with essential reading skills through exposure to various types of expository and narrative passages. Encouragement of reading fluency and continued expansion of vocabulary skills.

READ 882 3.0 units
Reading Development
3.0 hours lecture
Prerequisite: Qualification through Reading assessment process or READ 881.
Grading: credit/no credit
Development of essential reading concepts. Focus on literal and inferential comprehension strategies with continued building of vocabulary skills. Exposure to longer text selections which will provide opportunities for applying academic reading skills.

READ 883 3.0 units
Reading Improvement
3.0 hours lecture
Prerequisite: Qualification through Reading assessment process or ENGL 882A or READ 882.
Grading: credit/no credit
Reinforces instruction in reading improvement strategies and vocabulary enrichment, emphasizing the development of critical comprehension. For students who have previously acquired essential reading skills and need developmental instruction. Focus continues to be on comprehension strategies, mainly the activation of prior knowledge, setting of purposes, making predictions and creating new learning from text. Exposure to longer selections that will provide additional opportunities for note taking, summarizing and outlining, the use of critical thinking skills and the recognition of patterns and organizations in selected literature.

ENGLISH, WRITING READING CENTER (EWRC)

EWRC 886AD 0.5 unit
Reading Adjunct
0.2 hour lecture, 0.9 hour laboratory
Grading: credit/no credit
An individualized study with a reading specialist to supplement instruction in the regular reading and vocabulary classes in which the student is enrolled.

EWRC 887AD 0.5 unit
Academic Reading
0.2 hour lecture, 0.9 hour laboratory
Grading: credit/no credit
An individualized study with a reading specialist which emphasizes reading skills required in college courses. Learn comprehension, vocabulary, study skills, critical reading and/or the rate of reading. Intended to help students effectively read materials assigned in transfer level courses.

EWRC 890 0.5 unit
Sentence Structure
0.2 hour lecture, 0.9 hour laboratory
Grading: credit/no credit
An intro to a variety of sentence-structure skills. Activities include using complete sentences, correct sentences and varying the structure in a text. For students
who want individualized instruction to help them become more fluent writers.

**Courses of Instruction**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>EWRC 891AD</td>
<td>Spelling Principles</td>
<td>0.5 unit</td>
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<tr>
<td>EWRC 892AB</td>
<td>Phonics/Reading Fundamentals</td>
<td>0.5 unit</td>
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<tr>
<td>EWRC 893AC</td>
<td>Punctuation</td>
<td>0.5 unit</td>
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<tr>
<td>EWRC 895AB</td>
<td>Functional Writing</td>
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<td>EWRC 896AD</td>
<td>Writing Adjunct</td>
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<td>EWRC 897AD</td>
<td>Developmental Writing</td>
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<tr>
<td>EWRC 899AD</td>
<td>English Adjunct</td>
<td>0.5 unit</td>
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<tr>
<td>ESL 33</td>
<td>College English for ESL Students</td>
<td>5.0 units</td>
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<tr>
<td>ESL 33X</td>
<td>College English with Computers for ESL</td>
<td>5.0 units</td>
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<tr>
<td>ESL 34</td>
<td>College English for ESL Students</td>
<td>5.0 units</td>
</tr>
<tr>
<td>ESL 34X</td>
<td>College English/Computers for ESL Students</td>
<td>5.0 units</td>
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**ENGLISH AS A SECOND LANGUAGE (ESL)**

**ESL 33**
College English for ESL Students
6.0 hours lecture
Prerequisite: Placement by the college assessment process or ESL 56 or ESL 56X.
Grading: letter grade
An intensive course in reading and writing English focusing on academic language skills needed for the AA and AS degrees; skills to include expository essay writing, summarizing, paraphrasing, reading comprehension and critical analysis. Prepares students for ESL 34.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ESL 33X**
College English with Computers for ESL
6.0 hours lecture
Prerequisite: Placement by the college assessment process or ESL 56 or ESL 56X.
Grading: letter grade
An intensive course in reading and writing English focusing on academic language skills needed for the AA and AS degrees; skills to include expository essay writing, summarizing, paraphrasing, reading comprehension and critical analysis. Use personal computers to complete the writing assignments. Preparation for entrance into ESL 34 or 34X.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ESL 34**
College English for ESL Students
6.0 hours lecture
Prerequisite: Placement by the college assessment process or ESL 33 or ESL 33X.
Grading: letter grade
An intensive course in reading and writing focusing on academic language skills needed for the AA and AS degrees and for entrance into ENGL 1; skills to include expository and argumentative essay writing, summarization of academic readings and current events, critical analysis of readings in literature, research and documentation.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ESL 34X**
College English/Computers for ESL Students
6.0 hours lecture
Prerequisite: Placement by the college assessment process or ESL 33 or ESL 33X.
Grading: letter grade
An intensive course in reading and writing focusing on academic language skills needed for the AA and AS degrees and for entrance into ENGL 1; skills to include expository and argumentative essay writing, summarization of academic readings and current events, critical analysis of readings in literature, research and documentation. Personal computers are used to complete assignments.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.
ESL 54 4.0 units
Effective Writing for ESL
6.0 hours lecture
Prerequisite: Placement by the college assessment process or one semester of ESL 147AB.
Grading: letter grade or credit/no credit
Intensive sentence structure practice with an emphasis on coordination and subordination leading to composition of coherent paragraphs, incorporating the use of transitional devices.
Transfer Status: Transferable to CSU, see counselor for limitations.

ESL 54X 4.0 units
Effective Writing with Computers for ESL
6.0 hours lecture
Prerequisite: Placement by the college assessment process or one semester of ESL 147AB.
Grading: letter grade or credit/no credit
Intensive sentence structure practice with emphasis on coordination and subordination, leading to composition of coherent paragraphs incorporating the use of transitional devices. Writing assignments will be prepared using personal computers.
Transfer Status: Transferable to CSU, see counselor for limitations.

ESL 56 4.0 units
College Writing for ESL
6.0 hours lecture
Prerequisite: Placement by the college assessment process or ESL 147AB or ESL 54.
Grading: letter grade or credit/no credit
Intensive summarizing, paraphrasing and development of conceptual paragraphs incorporating elements of cohesion, unity and audience. Rhetorical modes to include narration, description, explanation and persuasion. Part of a sequence.
Transfer Status: Transferable to CSU, see counselor for limitations.

ESL 56X 4.0 units
College Writing with Computers for ESL
6.0 hours lecture
Prerequisite: Placement by the college assessment process or ESL 147AB or ESL 54.
Grading: letter grade or credit/no credit
Intensive summarizing, paraphrasing and development of conceptual paragraphs incorporating elements of cohesion, unity and audience. Rhetorical modes to include narration, description, explanation and persuasion. Complete writing assignments using a personal computer.
Transfer Status: Transferable to CSU, see counselor for limitations.

ESL 63 4.0 units
Effective Reading for ESL Students
6.0 hours lecture
Prerequisite: One semester of ESL 147AB and qualification through the ESL Department reading assessment process.
Grading: letter grade or credit/no credit
College-level ESL reading designed to improve student ability to comprehend written English. Focuses on using lexical and grammatical clues to derive sentence meaning, develop vocabulary, extract the main ideas, extrapolate information, draw conclusions, recognize basic written discourse conventions, interpret charts, timelines and tables and interact with text through writing. Application primarily to academic prose and fiction (short stories). (Part of a sequence; not required for entry into ESL 65 except for individual cases.)
Transfer Status: Transferable to CSU, see counselor for limitations.

ESL 65 4.0 units
College Read/Listen for ESL Students
6.0 hours lecture
Prerequisite: ESL 63, 54 or placement by the college assessment process.
Grading: letter grade or credit/no credit
College-level ESL power reading and listening. Emphasizes strategies for reading and lecture comprehension, enhancement of critical reading, listening and note taking, the use of context, stems, affixes and dictionary to determine word meanings and interacting with text through writing. Intensive and extensive application primarily to academic oral and written text and to fiction (a novel). (Part of a sequence.)
Transfer Status: Transferable to CSU, see counselor for limitations.

ESL 146AB 2.0 units
Comprehensive Grammar I
6.0 hours lecture
Prerequisite: ESL 645 or one semester of 845AB or placement by the College English or ESL assessment process.
Recommended Preparation: One semester of ESL 812AB
Grading: letter grade or credit/no credit
The first of two courses which together constitute a comprehensive review of the basic grammar of English in its entirety, together with the presentation of more complex grammatical features and troublesome exceptions, for students who have mastered or nearly mastered the fundamentals of English. Provides an in-depth study of the grammatical features and basic sentence patterns of English which students must command in order to succeed in academic, college-level courses. Also includes the writing of multi-clause sentences and working with a variety of English idioms.

ESL 147AB 2.0 units
Comprehensive Grammar II
6.0 hours lecture
Prerequisite: One semester ESL 146AB.
Recommended Preparation: One semester of ESL 814AB
Grading: letter grade or credit/no credit
Second in a series of two courses which together constitute a comprehensive review of the basic grammar of English in its entirety, together with the presentation of more complex grammatical features and troublesome exceptions, for students who have mastered or nearly mastered the fundamentals of English. Provides an in-depth study of the grammatical features and basic sentence patterns of English which students must command in order to succeed in academic, college-level courses. Also includes the writing of short, coherent, organized paragraphs and the writing of multi-clause sentences. Work with a variety of English idioms.

ESL 640 0.0 unit
English for Everyday 0
6.0 hours lecture
Grading: LBCC Non-Graded Course
First of a six-course series in the basics of English structure, with an emphasis on mastery of productive grammatical features, accurate pronunciation and comprehension of spoken English and correct written expression. Brings beginners up to basic college-level in the language and prepares them for success in academic and vocational programs offered by the college.

ESL 641 0.0 unit
English for Everyday 1
6.0 hours lecture
Prerequisite: Equivalent skills as determined by ESL assessment process or ESL 640.
Grading: LBCC Non-Graded Course
Second of a six-course series in the basics of English structure, with an emphasis on the mastery of productive grammatical features, accurate pronunciation and comprehension of spoken English and correct written expression. Brings beginners up to basic college-level in the language and prepares them for success in academic and vocational programs offered by the college.

ESL 642 0.0 unit
English for Everyday 2
6.0 hours lecture
Prerequisite: Equivalent skills as determined by ESL assessment process or ESL 641.
Grading: LBCC Non-Graded Course
Third in a six-course series in the basics of English structure, with an emphasis on the mastery of productive grammatical features, accurate pronunciation and comprehension of spoken English and correct written expression. Brings beginners up to basic college-level in the language and prepares them for success in academic and vocational programs offered by the college.

ESL 643 0.0 unit
English for Everyday 3
6.0 hours lecture
Prerequisite: One semester of ESL 642/842AB.
Grading: LBCC Non-Graded Course
Fourth of a six-course series in the basics of English structure, with an emphasis on the mastery of productive grammatical features, accurate pronunciation and comprehension of spoken English and correct written expression. Brings beginners up to basic college-level in the language and prepares them for success in academic and vocational programs offered by the college.

ESL 644 0.0 unit
English for Everyday 4
6.0 hours lecture
Prerequisite: ESL 643 or one semester of ESL 843AB or equivalent skills as determined by ESL assessment process.
Grading: LBCC Non-Graded Course
Fifth of a six-course series in the basics of English structure, with an emphasis on the mastery of productive grammatical features, accurate pronunciation and comprehension of spoken English and correct written expression. Brings beginners up to basic college-level in the language and prepares them for success in academic and vocational programs offered by the college.

ESL 645 0.0 unit
English for Everyday 5
6.0 hours lecture
Prerequisite: ESL 644 or equivalent skills as determined by ESL placement process.
Grading: LBCC Non-Graded Course
Sixth of a six-course series in the basics of English structure, with an emphasis on the mastery of productive grammatical features, accurate pronunciation and comprehension of spoken English and correct written expression. Brings beginners up to basic college-level in the language and prepares them for success in academic and vocational programs offered by the college.

ESL 800AB 0.5 unit
Basic ESL Reading
1.5 hours lecture
Grading: credit/no credit
Learn to read and comprehend words, sentences, paragraphs and passages or texts without the dependency on a dictionary. Learn the rules for morphology, spelling and reading to assist in vocabulary building, pronunciation and comprehension. Develop the necessary skills to find facts, details and the main idea of the passage.

ESL 801AB 0.5 unit
Reading Skills for ESL Students
1.5 hours lecture
Prerequisite: One semester of ESL 800AB.
Grading: credit/no credit
Learn to read and comprehend words, sentences, paragraphs and passages or texts without the dependency on a dictionary. Learn the rules for morphology, spelling and reading to assist in vocabulary building, pronunciation and comprehension. Develop the necessary skills to find facts, details and the main idea of the passage.

ESL 802AB 0.5 unit
Reading Skills for ESL Students
1.5 hours lecture
Prerequisite: One semester of ESL 801AB.
Grading: credit/no credit
Learn to read and comprehend words, sentences, paragraphs and passages or texts without the dependency on a dictionary. Learn the rules for morphology, spelling and reading to assist in vocabulary building, pronunciation and comprehension. Develop the necessary skills to find facts, details and the main idea of the passage.

ESL 803AB 0.5 unit
Reading Skills for ESL Students
1.5 hours lecture
Prerequisite: One semester of ESL 802AB
Grading: credit/no credit
Learn to read and comprehend words, sentences, paragraphs and passages or texts without the dependency on a dictionary. Learn the rules for morphology, spelling and reading to assist in vocabulary building, pronunciation and comprehension. Develop the necessary skills to find facts, details and the main idea of a passage.

ESL 804AB 0.5 unit
Reading Skills for ESL Students
1.5 hours lecture
Prerequisite: One semester of ESL 803AB
Grading: credit/no credit
Learn to read and comprehend words, sentences, paragraphs and passages or texts without the dependency on a dictionary. Learn the rules for morphology, spelling and reading to assist in vocabulary building, pronunciation and comprehension. Develop
Courses of Instruction

the necessary skills to find facts, details and the main idea of a passage.

**ESL 805AB**  
Reading Skills for ESL Students  
1.5 hours lecture  
Prerequisite: One semester of ESL 804AB  
Grading: credit/no credit  
Learn to read and comprehend words, sentences, paragraphs and passages or texts without the dependency on a dictionary. Learn the rules for morphology, spelling and reading to assist in vocabulary building, pronunciation and comprehension. Develop the necessary skills to find facts, details and the main idea of a passage.

**ESL 806AB**  
Reading Skills for ESL Students  
1.5 hours lecture  
Prerequisite: One semester of ESL 805AB  
Grading: credit/no credit  
Learn to read and comprehend words, sentences, paragraphs and passages or texts without the dependency on a dictionary. Learn the rules for morphology, spelling and reading to assist in vocabulary building, pronunciation and comprehension. Develop the necessary skills to find facts, details and the main idea of a passage.

**ESL 810AB**  
Fundamentals of English Grammar  
3.0 hours lecture  
Prerequisite: ESL 645 or one semester of ESL 845AB  
Grading: credit/no credit  
ESL 810 (Grammar) introduces grammatical terminology and helps intermediate-level ESL students to master specific grammatical patterns. Emphasis is on the use of verb tenses and on agreement between subject and verb, article and noun, and verb and adverbial.

**ESL 812AB**  
Reading for Information and Pleasure  
1.5 hours lecture  
Prerequisite: ESL 645 or one semester of ESL 845AB  
Grading: credit/no credit  
Extracting essential information from passages of expository prose and/or learning to understand and appreciate prose works of English literature.

**ESL 813AB**  
Conversation 2  
1.5 hours lecture  
Prerequisite: ESL 645 or one semester of ESL 845AB  
Grading: credit/no credit  
Conversational practice through group discussions of current topics, practice in expressing feelings, opinions and ideas.

**ESL 814AB**  
Composition for ESL Students  
1.5 hours lecture  
Prerequisite: ESL 645 or one semester of ESL 845AB  
Grading: credit/no credit  
ESL 814 (Composition) offers intermediate-level ESL students systematic instruction and practice in the construction of short connected series of sentences which state an opinion, describe a process, give information or instructions, or report an experience. Students learn to identify and write topic and supporting sentences and to organize their ideas.

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**ESL 815AB**  
Improvement of Pronunciation 1  
3.0 hours lecture  
Prerequisite: ESL 645 or one semester of ESL 845AB  
Grading: credit/no credit  
This first, semester-long pronunciation course is designed to improve the intermediate student’s mastery of individual sounds, words and phrases in American English.

**ESL 816AB**  
Preparation for College Classes  
1.5 hours lecture  
Prerequisite: ESL 645 or one semester of ESL 845AB  
Grading: credit/no credit  
Includes college study techniques, college orientation and opportunities for further study.

**ESL 817AB**  
Improvement of Pronunciation 2  
3.0 hours lecture  
Prerequisite: ESL 815AB  
Grading: credit/no credit  
This second semester-long pronunciation class is designed to improve the intonation, rhythm and melody of spoken English for the high-intermediate/advanced ESL student.

**ESL 818AB**  
Vocabulary Development  
0.5 unit  
Grading: credit/no credit  
Prerequisite: ESL 645 or one semester of ESL 845AB  
Vocabulary Development increases the English vocabulary range of students who do not speak English as their mother tongue.

**ESL 819A**  
Conversation at Crossroads Cafe  
0.5 unit  
Grading: credit/no credit  
Prerequisite: Qualify through the ESL placement exam or ESL 641 or one semester of ESL 841AB. Recommended Preparation: Eligibility for ESL 842 or equivalent skills as determined by placement exam. This six-part, multi-level conversation course using the “Crossroads Cafe” video series as the focus for conversation practice, vocabulary building, basic grammar and idiomatic expressions. Covers getting and giving personal information, finding jobs, making introductions, family traditions, comparing US immigration over time, expressing wants, apologizing and career changes.

**ESL 819B**  
Conversation at Crossroads Cafe  
0.5 unit  
Grading: credit/no credit  
Prerequisite: Qualify through the ESL placement exam or ESL 641 or one semester of ESL 841AB. Recommended Preparation: Eligibility for ESL 842 or equivalent skills as determined by placement exam. A six-part, multi-level conversation course using the “Crossroads Cafe” video series as the focus for conversation practice, vocabulary building, basic grammar and idiomatic expression. Covers giving directions, neighbors working together to prevent crime, making suggestions, attitudes about time, describing past experiences, single parenting, making offers and adjusting to a new culture.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Unit</th>
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<tbody>
<tr>
<td>ESL 819C</td>
<td>Conversation at Crossroads Cafe</td>
<td>0.5 unit</td>
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<tr>
<td>6.0 hours lecture</td>
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<tr>
<td>Prerequisite: Qualify through the ESL placement process or ESL 641 or one semester of ESL 841AB. Recommended Preparation: Eligibility for ESL 842 or equivalent skills as determined by placement exam. Grading: credit/no credit</td>
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<tr>
<td>A six-part, multi-level conversation course using the “Crossroads Cafe” video series as the focus for conversation practice, vocabulary building, basic grammar and idiomatic expressions. Covers describing people, roles of a police officer, giving and responding to compliments, consumer scams, asking for clarification, discrimination, talking about possibilities and solutions to gang problems.</td>
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<td>ESL 819D</td>
<td>Conversation at Crossroads Cafe</td>
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<td>1.5 hours lecture</td>
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<td>Prerequisite: Qualify through the ESL placement process or ESL 641 or one semester of ESL 841AB. Recommended Preparation: Eligibility for ESL 842 or equivalent skills as determined by placement exam. Grading: credit/no credit</td>
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<tr>
<td>A six-part, multi-level conversation course using the “Crossroads Cafe” video series as the focus for conversation practice, vocabulary building, basic grammar and idiomatic expressions. Covers talking about abilities, roles couples choose, describing things, hospitals, intercultural relations, talking about likes and dislikes, reporting information and aging.</td>
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<td>ESL 819E</td>
<td>Conversation at Crossroads Cafe</td>
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<td>1.5 hours lecture</td>
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<tr>
<td>Prerequisite: Qualify through the ESL placement process or ESL 641 or one semester of ESL 841AB. Recommended Preparation: Eligibility for ESL 842 or equivalent skills as determined by placement exam. Grading: credit/no credit</td>
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<tr>
<td>A six-part, multi-level conversation course using the “Crossroads Cafe” video series as the focus for conversation practice, vocabulary building, basic grammar and idiomatic expressions. Covers talking about making complaints, tenants and landlord rights and responsibilities, comparing things, worker safety, making promises, local government, giving advice and raising children.</td>
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<tr>
<td>ESL 819F</td>
<td>Conversation at Crossroads Cafe</td>
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<td>1.5 hours lecture</td>
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<tr>
<td>Prerequisite: Qualify through the ESL placement process or ESL 641 or one semester of ESL 841AB. Grading: credit/no credit</td>
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<tr>
<td>A six-part multi-level conversation course using the “Crossroads Cafe” video series as the focus for conversation practice, vocabulary building, basic grammar and idiomatic expressions. Covers talking about asking for and offering help, becoming a citizen, financial difficulties, asking for and giving permission, making invitations, taxes, talking about the future and wedding customs.</td>
<td></td>
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</tr>
<tr>
<td>ESL 840AB</td>
<td>Introduction to College English 0</td>
<td>0.5 unit</td>
</tr>
<tr>
<td>6.0 hours lecture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grading: credit/no credit</td>
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</tr>
</tbody>
</table>

First of a six-course program in the basics of English structure, emphasizing the mastery of productive grammatical features, accurate pronunciation and comprehension of spoken English and correct written expression. Brings beginners up to basic college-level in the language and prepares them for success in academic and vocational programs offered by the college. Meets the citizenship requirement.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL 841AB</td>
<td>Introduction to College English 1</td>
<td>0.5 unit</td>
</tr>
<tr>
<td>6.0 hours lecture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prerequisite: Qualify through the ESL placement process or ESL 640 or one semester of ESL 840AB. Grading: credit/no credit</td>
<td></td>
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</tr>
<tr>
<td>Second of a six-course program in the basics of English structure, emphasizing the mastery of productive grammatical features, accurate pronunciation and comprehension of spoken English and correct written expression. Brings beginners up to basic college-level in the language and prepares them for success in academic and vocational programs offered by the college. Meets the citizenship requirements.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ESL 842AB</td>
<td>Introduction to College English 2</td>
<td>1.0 unit</td>
</tr>
<tr>
<td>6.0 hours lecture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prerequisite: Qualify through the ESL placement process or ESL 641 or one semester of ESL 841AB. Grading: credit/no credit</td>
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</tr>
<tr>
<td>Third in a six-course series in the basics of English structure, emphasizing the mastery of productive grammatical features, accurate pronunciation and comprehension of spoken English and correct written expression. Brings beginners up to basic college-level in the language and prepares them for success in academic and vocational programs offered by the college. Meets the citizenship requirement.</td>
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</tr>
<tr>
<td>ESL 843AB</td>
<td>Introduction to College English 3</td>
<td>1.0 unit</td>
</tr>
<tr>
<td>6.0 hours lecture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prerequisite: One semester of ESL 642/842AB. Grading: credit/no credit</td>
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</tr>
<tr>
<td>Fourth of a six-course series in the basics of English structure, emphasizing the mastery of productive grammatical features, accurate pronunciation and comprehension of spoken English and correct written expression. Brings beginners up to basic college-level in the language and prepares them for success in academic and vocational programs offered by the college. Meets the citizenship requirement.</td>
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</tr>
<tr>
<td>ESL 844AB</td>
<td>Introduction to College English 4</td>
<td>1.0 unit</td>
</tr>
<tr>
<td>6.0 hours lecture</td>
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</tr>
<tr>
<td>Prerequisite: ESL 643 or one semester of ESL 843AB or equivalent skills as determined by ESL assessment process. Grading: credit/no credit</td>
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</tr>
<tr>
<td>Fifth of a six-course series in the basics of English structure, emphasizing the mastery of productive grammatical features, accurate pronunciation and comprehension of spoken English and correct written expression. Brings beginners up to basic college-level in the language and prepares them for success in academic and vocational programs offered by the college. Meets the citizenship requirements.</td>
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</tr>
</tbody>
</table>
**ESL 845AB** 1.0 unit
*Introduction to College English*
6.0 hours lecture
Prerequisite: One semester of ESL 644/844AB
Grading: credit/no credit
Sixth of a six-course series in the basics of English structure, emphasizing the mastery of productive grammatical features, accurate pronunciation and comprehension of spoken English and correct written expression. Brings beginners up to basic college-level in the language and prepares them for success in academic and vocational programs offered by the college. Meets the citizenship requirements.

**ENGLISH AS A SECOND LANGUAGE, LEARNING CENTER**

**ESLLC 699** 0.0 unit
*Basic Skills for ESL Students*
3.0 hours laboratory
Grading: LBCC Non-Graded Course
Individualized programmed instruction or tutoring for non-native speakers of English who are enrolled in courses and need to improve their mastery of English as a Second Language; who are enrolled in ESL courses but need additional assistance in building or improving literary or communicative skills.

**ENGLISH AS A SECOND LANGUAGE, POWERPACK (ESLP)**

**ESLP 1** 2.0 units
*ESLP Powerpack 1*
Prerequisite: ESL 645 or one semester of ESL 845AB
Grading: letter grade or credit/no credit
Intensive practice in conversation, pronunciation, reading and vocabulary with an emphasis on strengthening the oral communication skills necessary for success in college courses. This course gives credit for ESL 812AB, 814AB, 815AB and 818AB.

**ENGLISH AS A SECOND LANGUAGE, VOCATIONAL (ESLV)**

**ESLV 270** 2.0 units
*Intercultural Communication*
6.0 hours lecture
Prerequisite: Equivalent skills as determined by ESL placement process or ESL 645 or one semester of ESL 845AB.
Grading: letter grade or credit/no credit
An intermediate level course to help the intermediate student who encounters language difficulties in everyday life situations. The functions of language and idiomatic expressions will be emphasized.

**ESLV 272** 2.0 units
*Occupational Communication Skills*
6.0 hours lecture
Prerequisite: Equivalent skills as determined by ESL placement process or ESL 645 or one semester of ESL 845AB.
Grading: letter grade or credit/no credit
An intermediate level communication course to aid ESL students who encounter job-related language difficulties. Cultural information, language for interviewing, understanding work-related policies and procedures will be taught.

**ESLV 273** 2.0 units
*Grammar Skills*
6.0 hours lecture
Prerequisite: Equivalent skills as determined by ESL placement process or ESL 645 or one semester of ESL 845AB.
Grading: letter grade or credit/no credit
A life-skills course for intermediate ESL students who have studied the basic grammatical concepts of the English language. Grammar is taught in communicative context with an emphasis on idiomatic language and useful expressions.

**ESLV 274** 2.0 units
*Reading Skills*
6.0 hours lecture
Prerequisite: Equivalent skills as determined by ESL placement process or ESL 645 or one semester of ESL 845AB.
Grading: letter grade or credit/no credit
Acquaints intermediate students with various cultural aspects of life in the United States. Read and discuss narratives, general information articles from journals, excerpts from popular magazines and American short stories.

**ESLV 275** 2.0 units
*Occupational Writing Skills*
6.0 hours lecture
Prerequisite: Equivalent skills as determined by ESL placement process or ESL 645 or one semester of ESL 845AB.
Grading: letter grade or credit/no credit
An intermediate level life-skills course to help students who encounter writing difficulties on the job. Memos, cover letters, general business letters, resumes and job applications will be emphasized.

**ESLV 275X** 2.0 units
*Occupational Writing Skills with Computers*
6.0 hours lecture
Prerequisite: Equivalent skills as determined by ESL placement process or ESL 645 or one semester of ESL 845AB.
Grading: letter grade or credit/no credit
An intermediate level life-skills course designed to help students who encounter writing difficulties on the job. Memos, cover letters, general business letters, resumes and job applications will be emphasized. Use personal computers to complete writing assignments.
## ENGLISH AS A SECOND LANGUAGE, VOCATIONAL SURVIVAL

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLVS 620</td>
<td>0.0</td>
<td>Voc English for Beginning ESL Students 1 10.0 hour lecture Grading: LBCC Non-Graded Course For students who lack basic reading and writing and/or general academic skills. Reading and writing will be developed within a generalized vocational context.</td>
</tr>
<tr>
<td>ESLVS 621</td>
<td>0.0</td>
<td>Voc English for Beginning ESL Students 2 10.0 hour lecture Prerequisite: ESLVS 620 Grading: LBCC Non-Graded Course For those who lack basic reading and writing and/or general academic skills. Reading and writing will be developed within a generalized vocational context.</td>
</tr>
<tr>
<td>ESLVS 622</td>
<td>0.0</td>
<td>Voc English for Beginning ESL Students 3 10.0 hour lecture Prerequisite: ESLVS 621 Grading: LBCC Non-Graded Course For those who lack basic reading and writing and/or general academic skills and are unable to make the transition from ESL 621 to ESL 623 without further development of their oral and written language skills. Language development will take place within a generalized vocational context.</td>
</tr>
<tr>
<td>ESLVS 623</td>
<td>0.0</td>
<td>Voc English for ESL Students 1 10.0 hour lecture Prerequisite: ESLVS 622 Grading: LBCC Non-Graded Course For those whose basic reading and writing and/or general academic skills are limited. Reading and writing will be developed within a generalized vocational context in order to prepare the student for vocational instruction and/or employment.</td>
</tr>
<tr>
<td>ESLVS 624</td>
<td>0.0</td>
<td>Voc English for ESL Students 2 10.0 hour lecture Prerequisite: ESLVS 623 Grading: LBCC Non-Graded Course A more advanced course to prepare for enrollment in specific pre-vocational English or vocational training courses. Reading and writing will be developed within a generalized vocational context in order to prepare for eventual employment.</td>
</tr>
<tr>
<td>ESLVS 625</td>
<td>0.0</td>
<td>On-the-Job English For ESL Students 10.0 hour lecture Prerequisite: ESLVS 624 Grading: LBCC Non-Graded Course An advanced course to aid the working student who encounters language difficulties on the job site. Reading, writing and speaking will be developed within a generalized vocational context and then applied to specific problems that students experience.</td>
</tr>
</tbody>
</table>

## ENVIRONMENTAL SCIENCE (ENVRS)

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<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVRS 1</td>
<td>3.0</td>
<td>Energy for the Future 3.0 hours lecture Grading: letter grade or credit/no credit An intro course which will familiarize the student with the fundamental principles of environmental systems and discuss current environmental issues. Interpretation of data in drawing a conclusion is stressed, along with the ability to criticize methods of data collection and experimentation. Topics include energy production and consumption, scarcity of resources, conservation, pollution and governmental regulation. Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
</tbody>
</table>

## FAMILY AND CONSUMER STUDIES (FACS)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACS 50</td>
<td>3.0</td>
<td>Consumer Awareness 3.0 hours lecture Grading: letter grade or credit/no credit Designed to help the student function effectively as a consumer in today’s marketplace. Included are wise use of credit, money management, advertising, automotive buying and repair, landlord-tenant, warranties and consumer recourse. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>FACS 64</td>
<td>3.0</td>
<td>Life Management 3.0 hours lecture Grading: letter grade or credit/no credit Develop the abilities, skills and attitudes needed in planning and managing for today’s living. Topics include decision-making, time management, energy conservation and dealing with change. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>FACS 211A</td>
<td>3.0</td>
<td>College &amp; Career Opportunities for Women 3.0 hours lecture Grading: letter grade or credit/no credit A study of women’s roles examining personal development and the educational and career opportunities available will be discussed.</td>
</tr>
<tr>
<td>FACS 211B</td>
<td>3.0</td>
<td>College &amp; Career Opportunities for Women 3.0 hours lecture Grading: letter grade or credit/no credit A study of women’s roles examining personal development and the educational and career opportunities available will be discussed.</td>
</tr>
<tr>
<td>FACS 607</td>
<td>0.0</td>
<td>Living Skills for/Mentally Challenged 4.0 hours laboratory Grading: LBCC Non-Graded Course Develop skills and attitudes necessary to function as an active member of the community. Stresses development of social skills, leisure time activities and personal hygiene.</td>
</tr>
</tbody>
</table>
### Courses of Instruction

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Hours</th>
<th>Title</th>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FACS 650</strong></td>
<td>0.0</td>
<td>Special Topics in Consumer Education</td>
<td>LBCC Non-Graded Course</td>
<td>Helps senior citizens function effectively as a consumer in today’s marketplace. Topics include wise use of credit, money management, advertising, automotive buying and repair, landlord-tenant, warranties and consumer recourse.</td>
</tr>
<tr>
<td><strong>FACS 664</strong></td>
<td>0.0</td>
<td>Life Management</td>
<td>LBCC Non-Graded Course</td>
<td>Helps senior citizens develop the abilities, skills and attitudes needed in planning and managing for today’s living. Topics include decision-making, time management, energy conservation and dealing with change.</td>
</tr>
<tr>
<td><strong>FACS 691</strong></td>
<td>0.0</td>
<td>Basic Home Living Skills</td>
<td>LBCC Non-Graded Course</td>
<td>Provides fundamentals of food preparation and service, nutrition, safety, sewing and related activities, personal hygiene and leisure-time activities.</td>
</tr>
<tr>
<td><strong>FACS 864</strong></td>
<td>3.0</td>
<td>Introduction to Life Management</td>
<td>credit/no credit</td>
<td>An intro to life management skills including values clarification, goal setting, decision-making and time management. Offered as part of a learning community focusing on improving the student’s level of basic skills.</td>
</tr>
</tbody>
</table>

**FASHION DESIGN (FD)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Hours</th>
<th>Title</th>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FD 3</strong></td>
<td>2.0</td>
<td>Intro to Careers in Design/Merchandising</td>
<td>letter grade</td>
<td>A survey of the fashion industry and related occupations. Emphasizes employment opportunities, personal qualifications and skills required for employment. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td><strong>FD 5</strong></td>
<td>2.0</td>
<td>Intro/Manufacturing for Design/Merch</td>
<td>letter grade</td>
<td>An intro to garment manufacturing in the apparel industry. From the design concept through sourcing and pricing to the production of a clothing line. Required for fashion design and fashion merchandising majors. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td><strong>FD 9</strong></td>
<td>3.0</td>
<td>Clothing Selection</td>
<td>letter grade</td>
<td>Apparel selection for the individual and family based on aesthetic guidelines, cultural influences and consumer needs. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td><strong>FD 10</strong></td>
<td>3.0</td>
<td>Textile Fibers and Fabrics</td>
<td>letter grade</td>
<td>A study of textile fibers and fabrics, their selection, use and care of wearing apparel and home furnishings. Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td><strong>FD 20</strong> (CAN HEC 22)</td>
<td>3.0</td>
<td>Introduction to Fashion Merchandising</td>
<td>letter grade</td>
<td>Explains and illustrates the scope of the fashion industry, its value, development and its job potential. An overview of curriculum content and the inter-relationship of the courses involved. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td><strong>FD 22A</strong></td>
<td>1.5</td>
<td>Merchandising for Profit I</td>
<td>letter grade</td>
<td>Covers the calculation, interpretation and analysis of the profit and loss statement. Discusses basic pricing and repricing of merchandise and explains the importance of markup to profitable merchandising. Typically offered for 9 weeks. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td><strong>FD 22B</strong></td>
<td>1.5</td>
<td>Merchandising for Profit II</td>
<td>letter grade</td>
<td>Emphasizes quantitative merchandising techniques as applied to inventory and dollar control, discounts, dating procedures and shipping terms. Typically offered for 9 weeks. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td><strong>FD 23</strong></td>
<td>3.0</td>
<td>Fashion/Merchandise Buying</td>
<td>letter grade</td>
<td>Designed to provide the knowledge of the functions of buying merchandise for retail or wholesale businesses. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td><strong>FD 24AB</strong></td>
<td>1.5</td>
<td>Beginning Sewing</td>
<td>letter grade</td>
<td>Covers the construction of simple woven and knit garments, correct pattern size, selection of appropriate patterns and fabrics. Student projects are selected in accordance with skill level and interest. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td><strong>FD 25AB</strong></td>
<td>1.5</td>
<td>Intermediate Sewing</td>
<td>letter grade</td>
<td></td>
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</tbody>
</table>
Intermediate clothing construction techniques as they apply to both woven and knit fabrics. Typical projects include a tailored shirt or blouse, fitted slacks with a waistband and knit shirts with neckline variations. Transfer Status: Transferable to CSU, see counselor for limitations.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
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<tbody>
<tr>
<td>FD 26AB</td>
<td>2.0</td>
</tr>
<tr>
<td>Advanced Sewing</td>
<td></td>
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<tr>
<td>1.0 hour lecture, 3.0 hours laboratory</td>
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<tr>
<td>Grading: letter grade or credit/no credit</td>
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</tr>
<tr>
<td>Advanced construction techniques using complex patterns and difficult fabrics. Consumer considerations for selection of design, fabric and equipment for professional clothing construction. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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</tbody>
</table>

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<tr>
<th>Course Code</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>FD 27AB</td>
<td>1.5</td>
</tr>
<tr>
<td>Production Sewing</td>
<td></td>
</tr>
<tr>
<td>1.0 hour lecture, 2.0 hours laboratory</td>
<td></td>
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<tr>
<td>Grading: letter grade or credit/no credit</td>
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</tr>
<tr>
<td>Principles and methods of stitching and garment construction on power machines as applied to the production methods of the garment manufacturing industry. Occupational certificate is awarded upon completion of eight units. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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</tbody>
</table>

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<tr>
<th>Course Code</th>
<th>Units</th>
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<tbody>
<tr>
<td>FD 29AB</td>
<td>2.0</td>
</tr>
<tr>
<td>Tailoring</td>
<td></td>
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<tr>
<td>1.0 hour lecture, 3.0 hours laboratory</td>
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<tr>
<td>Grading: letter grade or credit/no credit</td>
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<tr>
<td>Principles of tailoring techniques and finishes as applied to men’s or women’s clothing. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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<tr>
<th>Course Code</th>
<th>Units</th>
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<tbody>
<tr>
<td>FD 32</td>
<td>3.0</td>
</tr>
<tr>
<td>History of Fashion</td>
<td></td>
</tr>
<tr>
<td>3.0 hours lecture</td>
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<tr>
<td>Grading: letter grade or credit/no credit</td>
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<tr>
<td>A survey of the evolution of clothing styles from the ancient Egyptian to the present time period. The importance of the costume as a social record and its influence on present styles is emphasized. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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<tr>
<th>Course Code</th>
<th>Units</th>
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<tbody>
<tr>
<td>FD 36A</td>
<td>1.5</td>
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<tr>
<td>Pattern Drafting I: Basic Block</td>
<td></td>
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<tr>
<td>1.0 hour lecture, 1.5 hours laboratory</td>
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<tr>
<td>Grading: letter grade or credit/no credit</td>
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<tr>
<td>A beginning course in pattern drafting. Develop a basic block pattern for the commercial dress form or individual figure. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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<tr>
<th>Course Code</th>
<th>Units</th>
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<tbody>
<tr>
<td>FD 36B</td>
<td>1.5</td>
</tr>
<tr>
<td>Pattern Drafting II: Pattern Manipulation</td>
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<tr>
<td>1.0 hour lecture, 1.5 hours laboratory</td>
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<tr>
<td>Recommended Preparation: FD 36A</td>
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<tr>
<td>Grading: letter grade or credit/no credit</td>
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<tr>
<td>An intermediate course in the manipulation of the basic blocks drafted for commercial dress forms or individual figure. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>FD 37A</td>
<td>1.5</td>
</tr>
<tr>
<td>Pattern Draping I: Basic Sloper</td>
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<tr>
<td>1.0 hour lecture, 1.5 hours laboratory</td>
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<tr>
<td>Grading: letter grade or credit/no credit</td>
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<tr>
<td>An intermediate course which includes freehand methods of pattern making and creating the basic sloper in muslin on dress forms or live models. Each muslin is turned into a paper pattern, cut and constructed to produce the finished garment. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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<tr>
<th>Course Code</th>
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</thead>
<tbody>
<tr>
<td>FD 37B</td>
<td>1.5</td>
</tr>
<tr>
<td>Pattern Draping II: Sloper Manipulations</td>
<td></td>
</tr>
<tr>
<td>1.0 hour lecture, 1.5 hours laboratory</td>
<td></td>
</tr>
<tr>
<td>Recommended Preparation: FD 37A</td>
<td></td>
</tr>
<tr>
<td>Grading: letter grade or credit/no credit</td>
<td></td>
</tr>
<tr>
<td>An intermediate course in the freehand methods of manipulating a basic sloper to create finished designs. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>FD 38A</td>
<td>3.0</td>
</tr>
<tr>
<td>Fashion Design I</td>
<td></td>
</tr>
<tr>
<td>2.0 hours lecture, 3.0 hours laboratory</td>
<td></td>
</tr>
<tr>
<td>Recommended Preparation: FD 38B and one semester of 214AB or 215AB (may be taken concurrently)</td>
<td></td>
</tr>
<tr>
<td>Grading: letter grade or credit/no credit</td>
<td></td>
</tr>
<tr>
<td>An advanced course that provides the opportunity to design, illustrate, draft and construct sample full-scale designs for a portfolio or fashion showing. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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</tbody>
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<tr>
<th>Course Code</th>
<th>Units</th>
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<tbody>
<tr>
<td>FD 38B</td>
<td>3.0</td>
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<tr>
<td>Fashion Design II</td>
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<tr>
<td>2.0 hours lecture, 3.0 hours laboratory</td>
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<tr>
<td>Recommended Preparation: FD 37B or one semester of 214AB or 215AB (may be taken concurrently)</td>
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<tr>
<td>Grading: letter grade or credit/no credit</td>
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<tr>
<td>An advanced course that provides an opportunity to design, illustrate, draft and construct sample full-scale designs for a portfolio or fashion showing. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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<tr>
<th>Course Code</th>
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<tr>
<td>FD 38C</td>
<td>3.0</td>
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<tr>
<td>Fashion Design III</td>
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<tr>
<td>2.0 hours lecture, 3.0 hours laboratory</td>
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<tr>
<td>Recommended Preparation: FD 38B</td>
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<tr>
<td>Grading: letter grade or credit/no credit</td>
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<tr>
<td>An advanced course that provides an opportunity to design, illustrate, draft, drape and construct sample full-scale designs for a portfolio or fashion showing. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>FD 38D</td>
<td>3.0</td>
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<tr>
<td>Fashion Design IV</td>
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<tr>
<td>2.0 hours lecture, 3.0 hours laboratory</td>
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<td>Grading: letter grade or credit/no credit</td>
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<tr>
<td>An advanced course that provides an opportunity to design a complete line for a given season and classification (i.e., sportswear, junior market). Produce a line presentation price range, production patterns, cost sheets and three toiles with the first garment from the line. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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</tr>
</tbody>
</table>
FD 39A 1.0 unit
Pattern Grading
0.5 hour lecture, 1.5 hours laboratory
Grading: letter grade or credit/no credit
An intermediate course in sizing commercial and individual patterns for the adult run of sizes. Covers grading ruler, grading machine and computer grading. Typically offered for nine weeks.
Transfer Status: Transferable to CSU, see counselor for limitations.

FD 40AB 1.0 unit
Advanced and Production Pattern Drafting
0.5 hour lecture, 1.5 hours laboratory
Recommended Preparation: FD 36B
Grading: letter grade or credit/no credit
A survey of the problems of the advanced pattern manipulation and production pattern as related to developing a commercial fit for original designs. Also covered are techniques of industrial procedures found in the garment industry.
Transfer Status: Transferable to CSU, see counselor for limitations.

FD 41AD 2.5 units
Fashion Show Production
2.0 hours lecture, 2.0 hours laboratory
Grading: letter grade or credit/no credit
Learn to plan and implement a professional fashion production. Information on the details of planning, budgeting and producing fashion oriented events, plus the opportunity for “hands-on” experience in producing an actual event will be provided.
Transfer Status: Transferable to CSU, see counselor for limitations.

FD 70AD 1.0 unit
Work Experience Issues-Fashion Design
1.0 hour lecture
Corequisite: Enrollment in at least seven units including FD 71AD, 72AD or 73AD and 70AD.
Grading: letter grade or credit/no credit
Seminar related to work experience. Discussion of work experience objectives, career goals, employment search, communication skills and problem solving.
Transfer Status: Transferable to CSU, see counselor for limitations.

FD 71AD 1.0 unit
Work Experience-Fashion Design
4.1 hours laboratory
Corequisite: Enrollment in at least seven units including FD 71AD and 70AD.
Grading: letter grade or credit/no credit
Vocational learning experiences through employment directly related to the industry.
Transfer Status: Transferable to CSU, see counselor for limitations.

FD 72AD 2.0 units
Work Experience-Fashion Design
8.3 hours laboratory
Corequisite: Enrollment in at least seven units including FD 72AD and 70AD.
Grading: letter grade or credit/no credit
Vocational learning experiences through employment directly related to the industry.
Transfer Status: Transferable to CSU, see counselor for limitations.

FD 73AD 3.0 units
Work Experience-Fashion Design
12.5 hours laboratory
Corequisite: Enrollment in at least seven units including FD 73AD and 70AD.
Grading: letter grade or credit/no credit
Vocational learning experiences through employment directly related to the industry.
Transfer Status: Transferable to CSU, see counselor for limitations.

FD 200 1.0 unit
Fashion Prediction/Promotion: Crit View
1.0 hour lecture
Grading: letter grade or credit/no credit

FD 211AB 1.0 unit
Textile Design: Beading
0.5 hour lecture, 1.5 hours laboratory
Grading: letter grade or credit/no credit
Various specialty techniques in hand beading.

FD 212AB 1.0 unit
Textile Design: Airbrush
0.5 hour lecture, 1.5 hours laboratory
Grading: letter grade or credit/no credit
Various specialty airbrush techniques in textile design.

FD 213AB 1.0 unit
Textile Design: Hand Painting
0.5 hour lecture, 1.5 hours laboratory
Grading: letter grade or credit/no credit
Various specialty techniques in hand painting on textiles.

FD 214AB 2.0 units
Quick Sketch Croquis Drawing
1.0 hour lecture, 3.0 hours laboratory
Recommended Preparation: One semester of FD 214AB or FD 215AB
Grading: letter grade or credit/no credit
Beginning sketch course focusing on skills necessary for the fashion industry. Learn to draw all aspects of garments on the figure and in flat technical drawings using a croquis (template). Render fabrics in color using marker techniques. Develop updated fashion figure proportion. Focus on layout of line presentation boards.

FD 215AB 2.0 units
Fashion Sketching I
1.0 hour lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
A beginning class for both design and merchandising students stressing the basic proportions of the female and male fashion figure. Proportion, body movement, action poses, head, hand and leg studies, drawing styles and media for expressing the fashion figure will be covered.

FD 216AB 2.0 units
Fashion Sketch Board/Portfolio Presentation
1.0 hour lecture, 3.0 hours laboratory
Recommended Preparation: One semester of FD 214AB or FD 215AB
Grading: letter grade or credit/no credit
An advanced course emphasizing drawing the fashion figure in detailed proportion using different media. Also covers fabric rendering, advertising illustration and preparing the student for portfolio presentation.

FD 230AD 0.5 unit
Fashion Design Laboratory
1.5 hours laboratory
Corequisite: Concurrent enrollment in a fashion design course.
Grading: letter grade or credit/no credit
Provides the student enrolled in a fashion design course an opportunity for additional hours. Lab time is assigned on a space available basis. Students completing 27 hours of lab work during the semester will receive .5 unit of credit.

FD 231AB 0.5 unit
Fabric Crafts
0.5 hour lecture, 1.0 hour laboratory
Grading: letter grade or credit/no credit
Techniques for fabric crafts with the possibility of employment opportunities.

FD 232AB 0.5 unit
Specialized Sewing Tech: Christmas Craft
0.5 hour lecture, 1.0 hour laboratory
Grading: letter grade or credit/no credit
Sewing and fitting of garments using appropriate techniques for specific fabrics and functions. Provides the necessary skills for employment in the apparel trades.

FD 233AB 0.5 unit
Specialized Sewing Tech: Lingerie Const
0.5 hour lecture, 1.0 hour laboratory
Grading: letter grade or credit/no credit
Sewing and fitting of garments using appropriate techniques for specific fabrics and functions. Provides the necessary skills for employment in the apparel trades.

FD 234AB 0.5 unit
Specialized Sewing Tech: Winter Sports
0.5 hour lecture, 1.0 hour laboratory
Grading: letter grade or credit/no credit
Sewing and fitting of garments using appropriate techniques for specific fabrics and functions. Provides the necessary skills for employment in the apparel trades.

FD 235AB 0.5 unit
Specialized Sewing Tech: Quick Sew
0.5 hour lecture, 1.0 hour laboratory
Grading: letter grade or credit/no credit
Sewing and fitting of garments using appropriate techniques for specific fabrics and functions. Provides the necessary skills for employment in the apparel trades.

FD 236AB 0.5 unit
Specialized Sewing Tech: Couture Finish
0.5 hour lecture, 1.0 hour laboratory
Grading: letter grade or credit/no credit
Sewing and fitting of garments using appropriate techniques for specific fabrics and functions. Provides the necessary skills for employment in the apparel trades.

FD 242AD 2.0 units
Introduction to Fashion Modeling
1.0 hour lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
An intro to modeling as a career option in the fashion industry and includes types of modeling, body analysis, make-up application, wardrobe analysis, physical fitness, photography, fashion show techniques, speech development, hairstyling, poise and posture. Development of the model portfolio and agency selection are included.

FD 245AD 1.0 unit
Computer Applications in Fashion
1.0 hour lecture, 1.0 hour laboratory
Grading: letter grade or credit/no credit

FD 246AB 1.0 unit
Computer Pattern Design/Manipulation
0.5 hour lecture, 1.5 hours laboratory
Recommended Preparation: One semester of FD 245AB
Grading: letter grade or credit/no credit
An intermediate to advanced class in computer pattern design. Allows students to develop a more intensive knowledge and ability to produce accurate patterns and perform manipulations. Typically offered for six weeks.

FD 258AD 1.0 unit
Swimwear
0.5 hour lecture, 1.5 hours laboratory
Grading: letter grade or credit/no credit
Instruction in the sewing techniques for the construction of swim suits. Special emphasis on patterns, stretch fabrics and bra construction.

FILM (FILM)

FILM 1 3.0 units
Introduction to Film
3.0 hours lecture
Grading: letter grade or credit/no credit
Evaluation of film as an art form through an analysis and appreciation of its aesthetics, history, literature, creative techniques and expression of its societies’ cultures, together with its influence on twentieth century values. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

FILM 10A 3.0 units
Explorations in Film 1
3.0 hours lecture
Grading: letter grade or credit/no credit
Survey and critical analysis of the gangster genre and/or the western genre and/or film noir and/or neo-noir films within the American film industry. Lecture, film viewing, possible guest lecturers and possible field trips will be included. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

FILM 10B 3.0 units
Explorations in Film 2
3.0 hours lecture
Grading: letter grade or credit/no credit
Survey and critical analysis of the comedy and/or the melodrama and/or the musical films genre within the American film industry. Lecture, film viewing, possible guest lecturers and possible field trips will be included.
Courses of Instruction

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**FILM 10C** 3.0 units

*Explorations in Film 3*

3.0 hours lecture
Grading: letter grade or credit/no credit
Survey and critical analysis of the adventure and/or war films genre within the American film industry. Lecture, film viewing, possible guest lecturers and possible field trips will be included.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**FILM 10D** 3.0 units

*Explorations in Film 4*

3.0 hours lecture
Grading: letter grade or credit/no credit
Survey and critical analysis of the horror and/or science fiction film genre within the American film industry. Lecture, film viewing, possible guest lecturers and possible field trips will be included.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**FILM 11A** 3.0 units

*Film Art and Artists 1*

3.0 hours lecture
Grading: letter grade or credit/no credit
Survey and critical analysis of the work of various film directors within the International Film Industry focusing on film content: plot, theme, characterization and tone. Lecture, film viewing, possible guest lecturers and possible field trips will be included.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**FILM 11B** 3.0 units

*Film Art and Artists 2*

3.0 hours lecture
Grading: letter grade or credit/no credit
Survey and critical analysis of film focusing on cinematic form: visual design, screenplay, cinematography, color, sound, musical score, editing and special effects. Lecture, film viewing, possible guest lecturers and possible field trips will be included.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**FILM 11C** 3.0 units

*Film Art and Artists 3*

3.0 hours lecture
Grading: letter grade or credit/no credit
Survey and critical analysis of cinematic genres. Focus is on adaptations, genres, social problem films and censorship. Lecture, film viewing, possible guest lecturers and possible field trips will be included.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**FILM 11D** 3.0 units

*Film Art and Artists 4*

3.0 hours lecture
Grading: letter grade or credit/no credit
Survey and critical analysis of content and form of films expressing cultures other than the United States. Lecture, film viewing, possible guest lecturers and possible field trips will be included.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**FILM 20AB** 3.0 units

*Fundamentals of Film Production*

2.0 hours lecture, 4.0 hours laboratory
Prerequisite: FILM 1 (may be taken concurrently)
Grading: letter grade or credit/no credit
Basic principles of film production, including operation of equipment and details involved in making a film from idea development to final production. Lecture, lab workshop and individual projects are covered.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**FILM 21AB** 3.0 units

*Intermediate Film Production*

2.0 hours lecture, 4.0 hours laboratory
Prerequisite: One semester of FILM 20AB
Grading: letter grade or credit/no credit
Provides intermediate film production experiences for the transfer film major. Includes editing, directing, scripting and producing, with special emphasis on pre- and post-production considerations.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**FILM 35AD** 4.0 units

*Film Production Workshop*

3.0 hours lecture, 4.5 hours laboratory
Prerequisite: One semester of FILM 20AB
Grading: letter grade or credit/no credit
An intensive course in the complete experience of filmmaking. In a concentrated six-week format, students will create their own films putting to practical application the fundamental techniques in all phases of Super 8 and video production, including the creation of a story idea and script, camera operation, the use of sound, the editorial process, techniques of picture and sound production.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**FILM 60AD** 1.0 unit

*Special Projects in Film*

3.0 hours laboratory
Prerequisite: One semester of FILM 20AB
Grading: letter grade or credit/no credit
Permits lower division students with generalized background in cinema to explore in depth a specific aspect of cinema in theory and execution.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**FIRE**

**FIRE 1** 3.0 units

*Fire Protection Organization*

3.0 hours lecture
Grading: letter grade
Included are: an intro to fire protection, career opportunities in fire protection and related fields, philosophy and history of fire protection, fire loss analysis, organization and functions of public and private fire protection services, fire departments as part of local government, laws and regulations affecting the fire service, fire service nomenclature, specific fire protection functions, basic fire chemistry and physics, an intro to fire protection systems and an intro to fire strategy and tactics.
Transfer Status: Transferable to CSU, see counselor for limitations.
<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>FIRE 2</td>
<td>3.0</td>
<td>Fire Prevention Technology</td>
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<tr>
<td></td>
<td></td>
<td>3.0 hours lecture</td>
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<td>Grading: letter grade</td>
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<td>Learn about the history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use of fire codes, identification and correction of fire hazards and the relationship of fire prevention with fire safety education and detection and suppression systems.</td>
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<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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<tr>
<td>FIRE 3</td>
<td>3.0</td>
<td>Fire Protection Equipment and Systems</td>
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<td>3.0 hours lecture</td>
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<td>Provides info relating to the features and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection and portable fire extinguishers.</td>
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<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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<td>FIRE 4</td>
<td>3.0</td>
<td>Building Construction</td>
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<td>3.0 hours lecture</td>
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<td>Grading: letter grade</td>
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<td>The study of the components of building construction that relate to fire safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations and operating at fires. The development and evolution of building and fire codes will be studied in relation to past fires in residential, commercial and industrial occupancies.</td>
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<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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<tr>
<td>FIRE 5</td>
<td>3.0</td>
<td>Fire Behavior and Combustion</td>
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<td>3.0 hours lecture</td>
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<td>Grading: letter grade</td>
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<td>The theory and fundamentals of how and why fires start, spread and are controlled, an in-depth study of fire chemistry and physics, fire characteristics of materials, extinguishing agents and fire control techniques are discussed.</td>
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<tr>
<td>FIRE 6A</td>
<td>2.0</td>
<td>Fire Command 1A</td>
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<td>2.2 hours lecture</td>
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<td>Grading: letter grade</td>
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<td>A seminar for certified fire officer candidates. The first in a series of State Board Fire Services accredited courses in fire command. Provides fire company officers with information and experience in command and control techniques. Emphasizes decision making, command authority, preplanning and training requirements for effective performance as an officer. One of eight courses required for certification as a fire officer.</td>
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<td>FIRE 6B</td>
<td>2.0</td>
<td>Fire Command 1B</td>
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<td>2.2 hours lecture</td>
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<td>Grading: letter grade</td>
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<td>The second in a series of State Board of Fire Services accredited courses in fire command. Provides fire company officers with information and experience in command and control techniques used at the scene of a hazardous material emergency. Emphasizes decision making, command authority and the preplanning and training requirements for effective performance as an officer. One of eight courses required for certification as a fire officer. Must attend each day and pass a test for course credit.</td>
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<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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<tr>
<td>FIRE 7A</td>
<td>2.0</td>
<td>Fire Prevention Officer 1A</td>
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<td>2.2 hours lecture</td>
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<td>Grading: letter grade</td>
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<td></td>
<td>A seminar for certified fire fighters. Provides information on fire prevention organization, laws, regulations and standards, inspection procedures and fire hazards. Meets the Fire Officer 1 requirements established by the State Board of Fire Services.</td>
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<td>FIRE 7B</td>
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<td>Fire Prevention Officer 1B</td>
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<td>2.2 hours lecture</td>
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<td>Covers the Uniform Fire Code, fire prevention aspects associated with hazardous chemicals, compressed gases and combustible solids, explosives and blasting agents, flammable and combustible liquids, utility of fire protection systems and appliances. Meets the Fire Officer 1 requirements established by the State Board of Fire Services.</td>
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<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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<tr>
<td>FIRE 7C</td>
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<td>Fire Prevention Officer 1C</td>
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<td>2.2 hours lecture</td>
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<td>Grading: letter grade</td>
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<td>An exam of the physical properties of flammable liquids and gases; the outside storage and handling of bulk flammables and gases; regulations and procedures for the installation of storage tanks and containers. Regulations relative to the transportation of flammable liquids and gases; and procedures for controlling compressed and liquefied gas leaks. (Applies to Fire Prevention Officer 1 Certification.)</td>
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<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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<tr>
<td>FIRE 10A</td>
<td>2.0</td>
<td>Fire Instructor 1A</td>
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<td>2.2 hours lecture</td>
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<td>Grading: letter grade</td>
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<td>An intro to fire service training methods emphasizing the use of occupational analysis, identifying training needs and training others to perform manipulative skills. Meets Fire Officer 1 requirements established by the State Board of Fire Services.</td>
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<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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</table>
Courses of Instruction

FIRE 10B 2.0 units
Fire Instructor 1B
2.2 hours lecture
Grading: letter grade
A seminar on fire service training techniques, emphasizing how to teach technical skills and evaluate teaching. Meets Fire Officer 1 requirements established by the State Board of Fire Services.
Transfer Status: Transferable to CSU, see counselor for limitations.

FIRE 16A 2.0 units
Fire Investigator 1A
2.2 hours lecture
Grading: letter grade
A seminar for certified fire fighters. Provides information on fire origin and cause, evidence preservation, prosecution of arson cases, maintaining records and dealing with special arson and investigation problems. Meets Fire Officer 1 requirements established by the State Board of Fire Services.
Transfer Status: Transferable to CSU, see counselor for limitations.

FIRE 16B 2.0 units
Fire Investigator 1B
2.2 hours lecture
Grading: letter grade
A seminar for certified fire fighters. Provides a summary of state laws, legal principles, terms, codes and methods relative to fire investigations. Provides information necessary to conduct an investigation and present a case in court. Meets Fire Officer 1 requirements established by the State Board of Fire Services.
Transfer Status: Transferable to CSU, see counselor for limitations.

FIRE 26A 2.0 units
Fire Command 2A
2.2 hours lecture
Grading: letter grade
Prepares the officer to use management techniques and the Incident Command System when commanding multiple alarms or large suppression forces.
Transfer Status: Transferable to CSU, see counselor for limitations.

FIRE 26B 2.0 units
Fire Command 2B
2.2 hours lecture
Grading: letter grade
Prepares officers to manage a serious hazardous materials incident. Includes areas of discussion on information and data bases; organizations, agencies and institutions involved in hazardous materials response and research; planning for a community’s hazardous materials problems; legislation, litigation and liabilities of hazardous materials responses.
Transfer Status: Transferable to CSU, see counselor for limitations.

FIRE 26C 2.0 units
Fire Command 2C
2.2 hours lecture
Grading: letter grade
Approached from a system basis and applied to both small and large high-rise buildings. Includes prefire planning, building inventory, problem identification, ventilation methods, water supply, life safety, strategy and tactics, application of the ICS and specific responsibilities. Case studies and simulations are used. Applicable to both large and small departments.
Transfer Status: Transferable to CSU, see counselor for limitations.

FIRE 26D 2.0 units
Fire Command 2D
2.2 hours lecture
Grading: letter grade
Key topics include: principles of disaster planning and management, fire service emergency plans, emergency operations centers, case studies of various natural and man-made disasters, roles of local, state and federal OES and emergency management agencies, discussion of multihazard and ICS planning techniques and principles of exercising emergency management staffs.
Transfer Status: Transferable to CSU, see counselor for limitations.

FIRE 26E 2.0 units
Fire Command 2E
2.2 hours lecture
Grading: letter grade
Includes: California wild land fire problems, wild land fire safety, weather effects, wild land fuels, wild land fire behavior, initial attack methods using support equipment, using topographic maps, strategy and tactics and air attack operations. Involves participation and simulation.
Transfer Status: Transferable to CSU, see counselor for limitations.

FIRE 40 2.0 units
Fire Management 1
2.2 hours lecture
Grading: letter grade
Covers the role of the fire manager, proper application of management skills, organizational behavior and management concepts. Meets Fire Officer 1 requirements established by the State Board of Fire Service.
Transfer Status: Transferable to CSU, see counselor for limitations.

FIRE 42A 2.0 units
Fire Management 2A
2.2 hours lecture
Grading: letter grade
Provides information on how to make the transition from supervisor to manager. It offers sound management principles in preparation for more intensified training in specific discipline. Topics of discussion include internal and external influences, personality traits of fire fighters, managing human relations, group dynamics, conflict solution and more.
Transfer Status: Transferable to CSU, see counselor for limitations.

FIRE 42B 2.0 units
Fire Management 2B
2.2 hours lecture
Grading: letter grade
Designed to provide insight into the cyclical nature of budgeting and financial management. Become familiar with essential elements of financial planning, budget preparation, budget justification and budget controls.
Transfer Status: Transferable to CSU, see counselor for limitations.
<table>
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<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
<th>Hours</th>
<th>Grading</th>
<th>Description</th>
<th>Transfer Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE 42D</td>
<td>2.0</td>
<td>Fire Management 2D</td>
<td>2.2</td>
<td>lecture</td>
<td>Provides information and discussion centering around program planning, master planning, forecasting, system analysis, system design, policy analysis and others.</td>
<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>FIRE 42E</td>
<td>2.0</td>
<td>Fire Management 2E</td>
<td>2.2</td>
<td>lecture</td>
<td>Provides an overview of contemporary management issues and concepts. Key topics include: governmental relations, changing settings/policy formation, program management, personnel, labor relations and legal environment.</td>
<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>FIRE 53</td>
<td>3.0</td>
<td>Fire Hydraulics</td>
<td>3.0</td>
<td>lecture</td>
<td>A review of applied math, hydraulics laws as applied to the fire service, application of formulas and mental calculation to hydraulics and water supply problems.</td>
<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>FIRE 54</td>
<td>3.0</td>
<td>Hazardous Materials 1</td>
<td>3.0</td>
<td>lecture</td>
<td>An intro to basic fire chemistry and physics, problems of flammability encountered by firefighters when dealing with fuels and oxidizers and elementary fire-fighting practices pertaining to hazardous materials in storage and transit.</td>
<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>FIRE 57</td>
<td>3.0</td>
<td>Introduction to Fire Tactics &amp; Strategy</td>
<td>3.0</td>
<td>lecture</td>
<td>Outlines the principles of fire control through the utilization of manpower, equipment and extinguishing agents on the fire grounds.</td>
<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>FIRE 58</td>
<td>3.0</td>
<td>Intro to Fire Company Administration</td>
<td>3.0</td>
<td>lecture</td>
<td>A review of fire department organization. Learn planning, organizing and supervising to meet the needs of the fire department, with an emphasis on the company officer’s role.</td>
<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>FIRE 60</td>
<td>3.0</td>
<td>Fire Investigation 1</td>
<td>3.0</td>
<td>lecture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FIRE 61</td>
<td>3.0</td>
<td>Rescue Practices</td>
<td>3.0</td>
<td>lecture</td>
<td>Learn about rescue problems and techniques, use of emergency rescue equipment, toxic gases, chemicals and disease, radiation hazards, care of victims, emergency childbirth, respiration and resuscitation, extrication and other emergency conditions.</td>
<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>FIRE 62</td>
<td>3.0</td>
<td>Fire Apparatus and Equipment</td>
<td>3.0</td>
<td>lecture</td>
<td>A study of mobile and fixed fire apparatus design, a review of construction specifications and performance capabilities and the effective deployment, utilization and performance of equipment under emergency conditions.</td>
<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>FIRE 64</td>
<td>3.0</td>
<td>Hazardous Materials 2</td>
<td>3.0</td>
<td>lecture</td>
<td>A second semester course in hazardous materials covering the identification, handling and fire-fighting practices with explosives, toxic substances and radioactive materials in storage or transit.</td>
<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>FIRE 65</td>
<td>3.0</td>
<td>Fundamentals of Fire Safety</td>
<td>3.0</td>
<td>lecture</td>
<td>Provides paid or volunteer firefighters with information on current techniques in the prevention of injuries and the promotion of safety while conducting routine and emergency fire operations.</td>
<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>FIRE 66</td>
<td>3.0</td>
<td>Intro to Related Codes &amp; Ordinances</td>
<td>3.0</td>
<td>lecture</td>
<td>Familiarization and interpretation of national, state and local codes and ordinances which influence the field of fire prevention.</td>
<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>FIRE 240AD</td>
<td>0.5</td>
<td>Firefighter I Physical Agility</td>
<td>0.2</td>
<td>lecture , 0.9 hour laboratory</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Courses of Instruction

Designed to assess physical agility requirements for the fire service. A review of nutritional facts and physical training principles. Meets statewide standards of the Calchiefs organization.

FIRE 242C 2.0 units
Fire Management 2C
2.2 hours lecture
Grading: letter grade
Designed to provide insight into personnel and labor relations. Meets state fire marshal certification requirements. Designed as service training for fire professionals.

FIRE 245 2.0 units
Marine Safety Academy
2.0 hours lecture, 3.5 hours laboratory
Grading: letter grade
This is a basic training program for non-career lifeguards that is approved by the United States Lifesaving Association (USLA). Candidates must qualify for entrance by competing in a rigorous testing process which includes swimming, run-swim-run, and an oral interview. The academy prepares candidates to become Non-career Ocean Lifeguards and includes topics and training in lifeguard tactics, operations, first aid, First Responder, Hazardous Materials, cardiopulmonary resuscitation, mechanical resuscitators, resuscitators, rescue buoys, rescue boards, physical training in timed swims, runs and paddling.

FIRE 250 9.0 units
Basic Fire Service Training
15.5 hours lecture, 7.7 hours laboratory
Grading: credit/no credit
Orientation in fire service organization, practices, procedures, tactics and duties, basic training in the use of fire suppression equipment, first aid and fire prevention procedures. Typically offered for seven weeks.

FIRE 271AD 2.0 units
Work Experience — Fire Science
1.0 hour lecture, 4.1 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
An extension of vocational learning through employment related to the fire service career of interest. One unit of credit shall be granted for every 75 hours per semester the student is employed.

FIRE 272AD 3.0 units
Work Experience — Fire Science
1.0 hour lecture, 8.3 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
An extension of vocational learning through employment related to the fire service career of interest. One unit of credit shall be granted for every 75 hours per semester the student is employed.

FIRE 273AD 4.0 units
Work Experience — Fire Science
1.0 hour lecture, 12.5 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
An extension of vocational learning through employment related to the fire service career of interest. One unit of credit shall be granted for every 75 hours per semester the student is employed.

FIRE 400A 1.0 unit
Special Topics in Fire Science
1.0 hour lecture, 1.0 hour laboratory
Grading: credit/no credit
A series of seminars designed to provide maintenance of basic skills learned or to update knowledge of new technology in the fire service expected of all fire service personnel. Topics will be offered to meet the interests and needs of fire protection specialists. Modules are designed to meet the criteria specified in NFPA standards. Repeated enrollment authorized.

FIRE 400B 2.0 units
Special Topics in Fire Science
2.0 hours lecture, 2.0 hours laboratory
Grading: credit/no credit
A series of seminars designed to provide maintenance of skills learned or to update knowledge of new technology in the fire service expected of selected fire service personnel, based on rank and station assignment. Topics will be offered to meet the interests and needs of fire personnel. Representative topics include: specialty areas of fire service, analyzing and evaluating fire operations and addressing personnel management issues. Modules are designed to meet criteria specified in NFPA standards. Repeated enrollment authorized.

FIRE 400C 3.0 units
Special Topics in Fire Science
3.0 hours lecture, 3.0 hours laboratory
Grading: credit/no credit
A series of seminars designed to provide maintenance of skills learned or to update knowledge of new technology in the fire service expected of selected fire service personnel, based on rank and station assignment. Topics will be offered to meet the interests and needs of fire personnel. Representative topics include: specialty areas of fire service, analyzing and evaluating fire operations and addressing personnel management issues. Modules are designed to meet criteria specified in NFPA standards. Repeated enrollment authorized.

FIRE 400D 3.0 units
Topics in Fire Service
2.0 hours lecture, 3.0 hours laboratory
Grading: credit/no credit
This is a series of seminars designed to provide a maintenance of skills learned or to update knowledge of new technology in the Fire Service expected of selected fire service personnel based on rank and station assignment. Topics will be offered to meet the interests and needs of fire, safety and marine personnel. Representative topics include: specialty areas of fire service, analyzing and evaluating fire, safety or marine operations and addressing personnel management issues. Modules are designed to meet criteria specified in NFPA standards. Repeated enrollment authorized.

FIRE 400E 3.5 units
Topics in Fire Service
2.0 hours lecture, 4.8 hours laboratory
Grading: credit/no credit
This is a series of seminars designed to provide a maintenance of skills learned or to update knowledge of new technology in the Fire Service expected of selected fire service personnel based on rank and station assignment.
assignment. Topics will be offered to meet the interests and needs of fire, safety and marine personnel. Representative topics include: specialty areas of fire service, analyzing and evaluating fire, safety or marine operations and addressing personnel management issues. Modules are designed to meet criteria specified in the National Fire Protection Association (NFPA) and the Marine Safety Association.

FIRE 400F  5.0 units
Topics in Fire Science
3.0 hours lecture, 6.4 hours laboratory
Grading: credit/no credit
This is a series of seminars designed to provide a maintenance of skills learned or to update knowledge of new technology in the Fire Service expected of selected fire service personnel based on rank and station assignment. Topics will be offered to meet the interests and needs of fire, safety and marine personnel. Representative topics include: specialty areas of fire service, analyzing and evaluating fire, safety or marine operations and addressing personnel management issues. Modules are designed to meet criteria specified in the National Fire Protection Association (NFPA) and the Marine Safety Association.

FOOD AND NUTRITION (F_N)

F_N 20 (CAN HEC 2)  3.0 units
Nutrition and Life
3.0 hours lecture
Grading: letter grade or credit/no credit
An intro to the basic physiological, psychological, social and biochemical principles related to human nutrition.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

F_N 21 (CAN HEC 8)  4.0 units
Food Selection and Meal Preparation
3.0 hours lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
The knowledge and skills related to food selection and preparation, food product standards and the factors contributing to the quality of prepared food.
Transfer Status: Transferable to CSU, see counselor for limitations.

F_N 26  1.0 unit
Nutrition for the Active Person
1.0 hour lecture
Grading: letter grade or credit/no credit
Designed to assist the athlete and the prospective athlete in examining his or her special nutritional needs based upon current research. Emphasizes the nutritional needs of the athlete versus the non-athlete, improving athletic performance through nutrition and how to evaluate athletic diets, such as high protein diets, carbohydrate loading and pre-game meal. Not open for credit to students registered in or with credit in PEPP 79A. Typically offered for nine weeks.
Transfer Status: Transferable to CSU, see counselor for limitations.

F_N 224  3.0 units
Sanitation, Safety and Equipment
3.0 hours lecture
Grading: letter grade or credit/no credit
The application of basic safety and sanitation principles for a food service operation, the criteria used to evaluate equipment design and how to write equipment specifications.

F_N 225  3.0 units
Intro to Food Service/Work Organizations
3.0 hours lecture
Grading: letter grade or credit/no credit
The scope and organization of a food service system operating within a health care, community care or school feeding program is presented. The education and experience necessary for employment are also discussed. Additional emphasis will be placed on motion economy, task analysis and method improvement.

F_N 227  3.0 units
Supervision and Training Techniques
3.0 hours lecture
Grading: letter grade or credit/no credit
Trains students for supervisor positions in food service operations related to health care facilities. Emphasis will include staff selection, training, presentation techniques, communication and staff development.

F_N 228  3.0 units
Food Production Management
3.0 hours lecture
Grading: letter grade or credit/no credit
Become familiar with management techniques related to food service operations. Production scheduling, equipment utilization, staffing and service systems are also covered.

F_N 230AC  2.0 units
Clinical Field Experience I
1.0 hour lecture, 5.0 hours laboratory
Grading: credit/no credit
Provides supervised clinical field experience in health care facilities for dietetic service supervisor and dietetic technician program students. Learn and practice the skills necessary to coordinate a health care food service facility.

F_N 231  3.0 units
Menu Planning and Food Purchasing
3.0 hours lecture
Grading: letter grade or credit/no credit
Covers the planning and design of health care institutional menus. Topics include: nutritional adequacy, psychological needs, types of operation, equipment and skill of personnel. Purchasing and costing of food, analysis of food quality, writing specifications, ordering, receiving and storing of food and supplies are also covered.

F_N 232  3.0 units
Medical Nutrition Therapy
3.0 hours lecture
Recommended Preparation: F_N 20 (may be taken concurrently)
Grading: letter grade or credit/no credit
Principles of and indication for diet therapy in the treatment of diseases and/or disorders. Geared for hospital, convalescent and extended care facility dietetic professionals.

F_N 233A  1.0 unit
Special Topics — Medical Charting
1.0 hour lecture
Courses of Instruction

Grading: letter grade or credit/no credit
Covers techniques of nutritional medical charting for dietary professionals in health care facilities. Problem-oriented records and the S.O.A.P. methods are discussed.

F_N 233B 1.0 unit
Special Topics — Diabetes Mellitus Trng
1.0 hour lecture
Grading: letter grade or credit/no credit
Covers diabetes training for dietary professionals in health care facilities or lay persons. The latest in diabetes management, diet adjustments, new resources and products are presented.

F_N 233C 1.0 unit
Special Topics — Modified Diets
1.0 hour lecture
Grading: letter grade or credit/no credit
Modified diet update. Emphasizes diet therapy for sodium, cholesterol, calories, protein, fat, soft, liquids and bland diet modifications.

F_N 233D 1.0 unit
Special Topics — Work Organizations
1.0 hour lecture
Grading: letter grade or credit/no credit
Covers work organization and efficiency techniques for health care and school food service personnel.

F_N 234 3.0 units
Advanced Nutrition Care
3.0 hours lecture
Prerequisite: F_N 232
Grading: letter grade or credit/no credit
A study of nutrition education principles and techniques for the individual, family and small groups in normal, modified and preventive nutrition care throughout the lifecycle. Computer applications and cultural implications are also covered.

F_N 235 3.0 units
Advanced Medical Nutrition Therapy
3.0 hours lecture
Recommended Preparation: F_N 232
Grading: letter grade or credit/no credit
Advanced study of therapeutic nutritional care with applications in diet counseling, menu modification, communication, documentation, education and appropriate food service delivery.

F_N 236 1.0 unit
Dietetic Seminar
1.0 hour lecture
Grading: letter grade or credit/no credit
An intro to the development of professionalism and a team concept in the dietetic health care system. Examines financing, planning and regulating health care services related to dietetics, as well as the standards of professional responsibility and standards of practice for the profession of dietetics.

F_N 240AC 2.0 units
Clinical Field Experience II
10.0 hour laboratory
Recommended Preparation: Two semesters of F_N 230AC
Grading: credit/no credit
Provides supervised clinical experience in health care facilities for Dietetic Technician Program students. Learn and practice skills necessary to provide nutritional care services to clients in health care settings.

F_N 250 2.0 units
Nutrition for Culinary Arts
2.0 hours lecture
Grading: letter grade or credit/no credit
A practical approach to the application of sound nutritional practices in the food service setting. Culinary arts students and professionals will be able to incorporate healthful nutritional knowledge in their personal and professional lives. Includes nutrition as it relates to health throughout the life cycle, menu/recipe design and modification, food product selection and current trends in consumer preference.

F_N 251 3.0 units
Applied Nutrition for Culinary Arts
2.0 hours lecture, 3.0 hours laboratory
Grading: letter grade
Techniques and applications of designing and producing healthy recipes and menus for the culinary industry with hands on lab experiences. Meets requirements for American Culinary Federation accreditation.

F_N 252AD 1.5 units
Cake Decorating and Sugar Cookery
1.0 hour lecture, 2.0 hours laboratory
Grading: letter grade or credit/no credit
This course teaches the student to create professional quality cake decorations. Materials and techniques covered include: Buttercream, regal, whipped cream and fondant icings, ceramic-like flowers, cake sculptures, gum paste, marzipan, gel run-sugar, and airbrush.

F_N 253 1.0 unit
Food Handler Certification
1.0 hour lecture
Grading: letter grade or credit/no credit
Covers the required standards of sanitation and safety in the handling, preparation and serving of food to protect the public’s health. Will receive a Food Handler Certificate after passing the food handler exam given at the conclusion of the course. Certificate required for those working in a food service establishment to meet the California State Health Code.

F_N 255A 1.0 unit
Nutrition Facts and Fallacies
1.0 hour lecture
Grading: letter grade or credit/no credit
Provides the most recent information in the specific areas of nutrition. Emphasizes nutritional facts and fallacies, life cycle nutrition (pregnancy, childhood, adolescence, adulthood) and the vegetarian lifestyle.

F_N 255B 1.0 unit
Nutrition/Pregnancy, Infants, Children
1.0 hour lecture
Grading: letter grade or credit/no credit
Provides the most recent information in the specific areas of nutrition. Emphasizes nutritional facts and fallacies, life cycle nutrition, (pregnancy, childhood, adolescence, adulthood) and the vegetarian lifestyle.

F_N 255C 1.0 unit
Nutrition for Adults and Aging
1.0 hour lecture
Courses of Instruction

Grading: letter grade or credit/no credit
Provides the most recent information in the specific areas of nutrition. Emphasizes nutritional facts and fallacies, life cycle nutrition (pregnancy, childhood, adolescence, adulthood) and the vegetarian lifestyle.

**F_N 255D**  
Vegetarian Lifestyle  
1.0 unit
1.0 hour lecture  
Grading: letter grade or credit/no credit  
Provides the knowledge to plan and practice a vegetarian lifestyle and maintain optimum nutrition. Topics will include the benefits and cautions of the vegetarian diet, variations of the diet and how to combine non-meat proteins. Typically offered for nine weeks.

**F_N 256**  
Weight Control & Energy Balance  
2.0 units
2.0 hours lecture  
Grading: letter grade or credit/no credit  
Designed to present techniques of weight control. Emphasizes the assessment of ideal body weight, techniques of diet behavior modification and reasons for emotional eating, principles of energy balance and long-term weight maintenance.

**F_N 260AD**  
Cultural Foods  
1.5 units
1.0 hour lecture, 2.0 hours laboratory  
Grading: letter grade or credit/no credit  
Explores the origins of foods, customs, nutrition and preparation of foods common to a variety of cultures. Food patterns and relationship to social customs and rituals are covered in addition to the nutrition assessment and the effects of changes of food habits.

**F_N 261AD**  
Modern Meals  
1.5 units
1.0 hour lecture, 2.0 hours laboratory  
Grading: letter grade or credit/no credit  
Provides the knowledge and skills required to plan, prepare and serve nutritious, varied, palatable, attractive meals within the limitations of time, energy, equipment and budget.

**F_N 262AD**  
Meal Preparation for 1 and 2 Persons  
1.5 units
1.0 hour lecture, 2.0 hours laboratory  
Grading: letter grade or credit/no credit  
Meal planning and food selection for the single person or couple. Emphasis is on economy, speed and attractiveness.

**FOREIGN STUDIES (FRSTU)**

**FRSTU 11A**  
Language & Cultures of Western Europe  
3.0 units
3.0 hours lecture  
Grading: letter grade or credit/no credit  
Intro to the study of the major languages and cultures of Western Europe. A survey of the historic sites, the customs and the habits of the present day European man. Study foreign expressions and concepts which are part of the American vocabulary. Designed for students interested in study or travel abroad, international relations, travel services, journalism or foreign service.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**FRSTU 11B**  
Language & Cultures of Western Europe  
3.0 units
3.0 hours lecture  
Grading: letter grade or credit/no credit  
Continuation of the study of the major languages and cultures of Western Europe. A survey of the historic sites, the customs and the habits of the present day European man. Study foreign expressions and concepts which are part of the American vocabulary. For students interested in study or travel abroad, international relations, travel services, journalism or foreign service.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**FORKLIFT (FORK)**

**FORK 801**  
Forklift Safety and Operation  
1.0 unit
0.8 hour lecture, 0.6 hour laboratory  
Grading: credit/no credit  
Covers safety and operation of the forklift, including basic lifting principles, load rating, stability and operation techniques.

**FREN (FREN)**

**FREN 1** (CAN FREN 2)  
Elementary French  
5.0 units
5.0 hours lecture, 1.0 hour laboratory  
Grading: letter grade or credit/no credit  
Intro to the French language, emphasizing listening, comprehension, conversation, reading and writing skills to develop control of the basic sounds, forms and structure of French. Topics for conversation are everyday life situations and issues in the French world. Not recommended for native speakers of French or students who have completed one year of high school French with a grade of B or better.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**FREN 1A** (CAN FREN 2)  
Elementary French 1A  
3.0 units
3.0 hours lecture  
Grading: letter grade or credit/no credit  
Intro to the French language, emphasizing listening, comprehension, conversation, reading and writing to develop control of the basic sounds, forms and structure of French. Topics for conversation are everyday life situations and issues in the French world. Not recommended for native speakers of French or students who have completed one year of high school French with a grade of B or better.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**FREN 1B** (CAN FREN 2)  
Elementary French 1B  
2.0 units
2.0 hours lecture, 1.0 hour laboratory  
Prerequisite: FREN 1A  
Grading: letter grade or credit/no credit  
Intro to the French language, emphasizing listening, comprehension, conversation, reading and writing to develop control of the basic sounds, forms and structure of French. Topics for conversation are everyday life situations and issues in the French world. Not recommended for native speakers of French or students who have completed one year of high school French with a grade of B or better.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*
Courses of Instruction

who have completed one year of high school French with a grade of B or better.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

FREN 2 (CAN FREN 4) 5.0 units
Elementary French
5.0 hours lecture, 1.0 hour laboratory
Prerequisite: FREN 1 or FREN 1A and 1B or recent completion of one year of High School French.
Grading: letter grade or credit/no credit
Continuation of the study of basic grammar forms, emphasizing listening and speaking, reading and writing, based on modern topical material.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

FREN 2A (CAN FREN 4) 3.0 units
Elementary French 2A
3.0 hours lecture
Prerequisite: FREN 1 or FREN 1A and 1B or recent completion of one year of High School French.
Grading: letter grade or credit/no credit
Continuation of the study of basic grammar forms, emphasizing listening and speaking. Reading and writing, based on modern topical materials are covered.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

FREN 2B (CAN FREN 4) 2.0 units
Elementary French 2B
2.0 hours lecture, 1.0 hour laboratory
Prerequisite: FREN 2A
Grading: letter grade or credit/no credit
Continuation of the study of basic grammar forms, emphasizing listening and speaking, as well as reading and writing, based on modern topical material.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

FREN 3 (CAN FREN 8) 5.0 units
Intermediate French
5.0 hours lecture
Prerequisite: FREN 2 or FREN 2A and 2B or recent completion of two years of High School French.
Grading: letter grade or credit/no credit
A review of French grammar. Intensive study of idiomatic expressions and vocabulary based on the reading of short stories and a variety of articles and situational dialogues which reflect the French culture. Development of reading and writing, based on the reading of material and personal experiences, is covered.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

FREN 4 (CAN FREN 10) 5.0 units
Intermediate French
5.0 hours lecture
Prerequisite: FREN 3 or recent completion of three years High School French.
Grading: letter grade or credit/no credit
Continuation of the review of French grammar, emphasizing a more advanced structure. Reading of short stories and literary selections by famous contemporary French authors, as well as extensive practice in comprehension, speaking, writing and reading are covered.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

FREN 8AD 2.0 units
Spoken French
3.0 hours lecture
Prerequisite: FREN 2 or 2A and 2B
Grading: letter grade or credit/no credit
An intensive study and practice in French conversation based on practical situations, the French culture and current events.
Transfer Status: Transferable to CSU, see counselor for limitations.

FREN 25A 3.0 units
Advanced French: Culture in Literature
3.0 hours lecture
Prerequisite: FREN 4
Grading: letter grade or credit/no credit
The study of the French culture in short stories, fables and biographies. Grammar review stressing oral and written composition. Practice for fluency. Emphasizes a career-related language with a choice of collateral readings relative to business, science or the humanities. Attention is given to developing vocabulary and standard forms appropriate to individual career objectives. Outside reading and reporting in the field of study are required.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

FREN 25B 3.0 units
Advanced French: History
3.0 hours lecture
Prerequisite: FREN 25A
Grading: letter grade or credit/no credit
Study the history of the French speaking countries from early to present time through texts from history books. Grammar review stressing oral and written composition. Practice for fluency. Emphasis is on a career-related language, with a choice of collateral readings relative to business, science or the humanities. Attention is given to developing vocabulary and standard forms appropriate to individual career objectives. Outside reading and reporting in the field of study are required.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

FREN 25C 3.0 units
Advanced French: Politics, Current Event
3.0 hours lecture
Prerequisite: FREN 25B
Grading: letter grade or credit/no credit
The study of political and other current events through newspaper and magazine articles. Grammar review stressing oral and written composition. Practice for fluency. Emphasis is on a career-related language with choice of collateral readings relative to business, science or the humanities. Attention is given to developing vocabulary and standard forms appropriate to individual career objectives. Outside reading and reporting in the field of study are required.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

FREN 25D 3.0 units
Advanced French: Literature
3.0 hours lecture
Prerequisite: FREN 25C
Grading: letter grade or credit/no credit
Study the different literary genres through short novels, fairy tales, poems, etc. Grammar review stressing oral and written composition. Practice for fluency.
Emphasizes a career-related language with a choice of collateral readings relative to business, science or the humanities. Attention is given to developing vocabulary and standard forms appropriate to individual career objectives. Outside reading and reporting in the field of study are required.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**GEOGRAPHY (GEOG)**

**GEOG 2 (CAN GEOG 4) 3.0 units**

Elements of Cultural Geography
3.0 hours lecture
Grading: letter grade or credit/no credit
Study the basic cultural elements of the earth, the peoples of the world and their settlement characteristics and the origins, historical dispersals and contemporary distribution of representative cultural patterns.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**GEOG 5 3.0 units**

Economic Geography
3.0 hours lecture
Grading: letter grade or credit/no credit
Study the location and organization of the world’s major types of production, including agriculture, mining, forest products, fisheries, manufacturing and associated service industries. Not open to students registered in or with credit in ECON 5.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**GEOG 10 3.0 units**

Intro to Geographic Information Systems
2.0 hours lecture, 3.0 hours laboratory
Recommended Preparation: Familiar with Internet or computer literacy.
Grading: letter grade
Introduces the theory and application of geographic information system (GIS) technology. Includes maps and cartography, GIS concepts, GIS software, GIS database concepts. Work with GIS data: input, transformation, storage, analysis and output. Also includes business aspects of GIS and careers in GIS.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**GEOG 40 3.0 units**

World Regional Geography
3.0 hours lecture
Grading: letter grade
The basic concepts and fundamentals of both physical and cultural geography are used for an interpretation of the geographic areas of North America, Africa, Europe, countries that comprised the former Soviet Union, Asia, the Middle East and the Pacific area.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**GEOG 48 3.0 units**

Geography of California
3.0 hours lecture
Grading: letter grade or credit/no credit
An intro to the diversity of the state of California through study of its cultural and social geography, regions, landscapes and resources. An investigation of the origins of California’s ethnic diversity, regional contrasts, resources and problems. The future of California is examined using spatial analysis and field investigations.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**GEOG 640 0.0 unit**

World Regional Geography
2.0 hours lecture
Grading: LBCC Non-Graded Course
A study of the physical and cultural characteristics of various world regions, emphasizing topography, major cities, customs and traditions. (Enrollment is designed for older adults residing in convalescent homes.)

**GEOGRAPHY, PHYSICAL (PGEOG)**

**PGEOG 1 3.0 units**

Earth Surface Study
3.0 hours lecture
Grading: letter grade or credit/no credit
The study of the three interrelated parts of the hemisphere: air, water and land.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**GEOLOGY (GEOL)**

**GEOL 1 4.0 units**

General Physical Geology
3.5 hours lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
Survey the materials and structure forming the earth and the processes by which it has been and is being changed. A general cultural course for liberal arts students and a beginning course for geology majors. One Saturday field trip is required.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**GEOL 1H 4.0 units**

Honors General Physical Geology
3.5 hours lecture, 3.0 hours laboratory
Prerequisite: Qualification for the Honors Program
Grading: letter grade or credit/no credit
Survey the materials and structure forming the earth and the processes by which it has been and is being changed. A general course for liberal arts students and a beginning course for geology majors. One Saturday field trip is required.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**GEOL 2 (CAN GEOL 2) 3.0 units**

General Geology, Physical
3.0 hours lecture
Grading: letter grade or credit/no credit
Survey the materials and structure forming the earth and the processes by which it has been and is being changed. A general course for liberal arts students and a beginning course for geology majors. One Saturday field trip is required.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**GEOL 2F 1.0 unit**

Geology Field Trips
1.3 hours lecture
Corequisite: GEOL 1 or 2
Grading: letter grade or credit/no credit
Three Saturday field trips, including the San Andreas Fault, Palos Verdes Hills and the Santa Ana Mountains-Dana Point, to acquaint students with local geology and associated environmental problems. Does not fulfill the requirement for a lab science.

Transfer Status: Transferable to UC/CSU; see counselor for limitations.

GEOL 2L (CAN GEO 2) 1.0 unit

General Geology, Physical Geology Lab
1.0 hour lecture, 2.0 hours laboratory
Prerequisite: GEO 2 (may be taken concurrently)
Grading: letter grade or credit/no credit
Provides lab exercises in identification of rocks and minerals, reading and interpretation of topographic maps and aerial photographs, study of rock structures and geomorphology, examination of specimens collected on field trips.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

GEOL 3 3.0 units

Historical Geology
3.0 hours lecture, 0.5 hour laboratory
Grading: letter grade or credit/no credit
A study of earth history through an analysis of the fossil and rock record. Examine the evidence for ancient climatic fluctuations in order to evaluate the theory of recent global warming. A general course for liberal arts students and a beginning course for geology majors. One Saturday field trip is required.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

GEOL 3H 4.0 units

Honors Historical Geology
4.0 hours lecture, 2.5 hours laboratory
Prerequisite: Qualification for the Honors Program
Grading: letter grade or credit/no credit
A study of earth history through an analysis of the fossil and rock record. Examine the evidence for ancient climatic fluctuations in order to evaluate the theory of recent global warming. A general course for liberal arts students and a beginning course for geology majors. One Saturday field trip is required.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

GEOL 4 2.0 units

Field Geology
1.5 hours lecture, 1.5 hours laboratory
Prerequisite: GEOL 1, 2L, 3, 3H or 5 (may be taken concurrently)
Grading: letter grade or credit/no credit
A field course to selected locations in the Owens Valley and Death Valley. Offered fall semester.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

GEOL 5 3.0 units

Environmental Geology
3.0 hours lecture
Grading: letter grade or credit/no credit
Learn about natural hazards affecting the greater Los Angeles area, how to assess danger from these hazards and what you can do to minimize personal damage. Explore environmental issues of the Los Angeles basin that are directly related to the earth, such as water supply, pollution and land use.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

GEOL 7AD 2.0 units

Field Studies: Western Environments
1.5 hours lecture, 1.5 hours laboratory
Recommended Preparation: GEOL 1, 2, 3 or 18 or concurrent enrollment.
Grading: letter grade or credit/no credit
A field studies course to geologically interesting areas of the west. Emphasis will be to identify clues in the rock and fossil record which indicate past environmental conditions in the Western United States.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

GEOL 16 3.0 units

Field Techniques/Geol: So Calif Deserts
2.0 hours lecture, 3.0 hours laboratory
Prerequisite: GEOL 1, 1H, 2 or 5 (may be taken concurrently)
Grading: letter grade or credit/no credit
A study of rock and mineral deposits, faults and other features found in Southern California’s deserts. Includes: map making, field and microscopic work. Two week-end field trips. Offered spring semester.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

GEOL 17 2.0 units

Geology of Southern California Deserts
1.5 hours lecture, 1.5 hours laboratory
Prerequisite: GEOL 1, 2, or 5 (may be taken concurrently)
Grading: letter grade or credit/no credit
Deals with the petrology, stratigraphy, structure and paleontology of Southern California deserts. Two weekend field trips. Offered spring semester. Not open to students with credit in GEOL 16.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

GEOL 18 3.0 units

Geology of California
3.0 hours lecture
Grading: letter grade or credit/no credit
Outlines the basic principles of geology and the features and history of California’s landscape through the exam of the rocks, minerals, fossils and tectonic events common in California.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

GERMAN (GER)

GER 1 (CAN GERM 2) 5.0 units

Elementary German
5.0 hours lecture, 1.0 hour laboratory
Grading: letter grade or credit/no credit
Intro to the German language, emphasizing listening, comprehension, conversation, reading and writing skills to develop control of the basic sounds, forms and structure of German. Topics for conversation are everyday life situations and issues in the German world. Not recommended for native speakers of German or students who have completed one year of high school German with a grade of B or better.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.
Courses of Instruction

GER 1A  3.0 units
Elementary German 1A
3.0 hours lecture
Grading: letter grade or credit/no credit
Intro to the German language, emphasizing listening, comprehension, conversation, reading and writing skills
to develop control of the basic sounds, forms and structure of German. Topics for conversation are
everyday life situations and issues in the German world.
Not recommended for native speakers of German or
students who have completed one year of high school
German with a grade of B or better.
Transfer Status: Transferable to UC/CSU, see counselor
for limitations.

GER 1B  2.0 units
Elementary German 1B
2.0 hours lecture, 1.0 hour laboratory
Prerequisite: GER 1A
Grading: letter grade or credit/no credit
Intro to the German language, emphasizing listening,
comprehension, conversation, reading and writing skills
to develop control of the basic sounds, forms and structure of German. Topics for conversation are
everyday life situations and issues in the German world.
Not recommended for native speakers of German or
students who have completed one year of high school
German with a grade of B or better.
Transfer Status: Transferable to UC/CSU, see counselor
for limitations.

GER 2 (CAN GERM 4)  5.0 units
Elementary German
5.0 hours lecture, 1.0 hour laboratory
Prerequisite: GER 1 or GER 1A and 1B or recent
completion of one year of High School German.
Grading: letter grade or credit/no credit
Continuation of the study of basic grammar forms.
Major emphasis is on listening and speaking. Reading
and writing based on modern topical material are
required.
Transfer Status: Transferable to UC/CSU, see counselor
for limitations.

GER 2A  3.0 units
Elementary German 2A
3.0 hours lecture
Prerequisite: GER 1 or GER 1A and 1B or recent
completion of one year of High School German.
Grading: letter grade or credit/no credit
Continuation of the study of basic grammar forms,
emphasizing listening and speaking, reading and
writing, based on modern topical material.
Transfer Status: Transferable to UC/CSU, see counselor
for limitations.

GER 2B  2.0 units
Elementary German 2B
2.0 hours lecture, 1.0 hour laboratory
Prerequisite: GER 2A
Grading: letter grade or credit/no credit
Continuation of the study of basic grammar forms.
Major emphasis is on listening and speaking. Reading
and writing based on modern topical material.
Transfer Status: Transferable to UC/CSU, see counselor
for limitations.

GER 3 (CAN GERM 8)  5.0 units
Intermediate German
5.0 hours lecture
Prerequisite: GER 2 or GER 2A and 2B or recent
completion of two years of High School German.
Grading: letter grade or credit/no credit
A review of German grammar. An intensive study of
idiomatic expressions and vocabulary based on the
reading of short stories and a variety of articles and
situational dialogues which reflect German culture.
Development of reading and writing based on reading
material and personal experiences.
Transfer Status: Transferable to UC/CSU, see counselor
for limitations.

GER 3H (CAN GERM 10)  5.0 units
Honors Intermediate German
5.0 hours lecture
Prerequisite: GER 2 or 2A and 2B or recent completion
of two years of High School German and Qualification
for the Honors Program.
Grading: letter grade or credit/no credit
An intensive study of the German culture, art and
language based on the reading of short stories, a variety
of articles, literary selections by famous authors, film
and the study of contemporary newspapers and
magazines. Development of reading and writing, a study
of German values in art and literature and a review of
German grammar based on reading material and
personal experiences.
Transfer Status: Transferable to UC/CSU, see counselor
for limitations.

GER 4 (CAN GERM 10)  5.0 units
Intermediate German
5.0 hours lecture
Prerequisite: GER 3 or recent completion of three years
of High School German.
Grading: letter grade or credit/no credit
Continuation of the review of German grammar,
emphasizing a more advanced structure. Reading of
short stories and literary selections by famous
contemporary German authors. Extensive practice in
comprehension, speaking, writing and reading.
Transfer Status: Transferable to UC/CSU, see coun-
 selor for limitations.

GER 4H (CAN GERM 10)  5.0 units
Honors Intermediate German
5.0 hours lecture
Prerequisite: GER 3 or recent completion of three years
of High School German and Qualification for the Honors
program.
Grading: letter grade or credit/no credit
A continuation of an intensive study of the German
culture, art and language based on the reading of short
stories, a variety of articles, literary selections by famous
authors, German films and a study of German values in
history. Also, a continuation of the review of German
grammar with an emphasis on how syntax and
vocabulary facilitate the development of ideas.
Readings of short stories and literary selections by famous
contemporary German authors will expand the
knowledge acquired in GER 3 dealing with German art
and literature. Furthermore, a career focus to language
and the various professional disciplines will be added to
reinforce the student’s understanding of modern German
culture. Finally, relating language to culture is the
central focus.
Transfer Status: Transferable to UC/CSU, see counselor
for limitations.
### Courses of Instruction

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>GER 8AD</td>
<td>2.0</td>
<td>Spoken German</td>
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<tr>
<td>3.0 hours lecture</td>
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<tr>
<td>Prerequisite: GER 2 or 2A and 2B</td>
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<td>Grading: letter grade or credit/no credit</td>
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<tr>
<td>An intensive study and practice of spoken German conversation based on practical, everyday situations concerning travel, business, current events, culture and people in German-speaking countries. The emphasis is on enlarging vocabulary on current idiomatic usage and on language patterns fundamental to the active use of German.</td>
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<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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| GER 25D     | 3.0   | Advanced German: Literature |
| 3.0 hours lecture |
| Prerequisite: GER 4 |
| Grading: letter grade or credit/no credit |
| Review grammar, stressing oral and written composition, and practice for fluency. Emphasis is on career-related language with a choice of collateral readings relative to business, science or the humanities. Attention is given to developing vocabulary and standard forms appropriate to individual career objectives. Study different literary genres through short novels, fairy tales, poems, etc. Outside readings and reporting in the respective field of study or in representative German literature are included. |
| Transfer Status: Transferable to UC/CSU, see counselor for limitations. |

### HEALTH EDUCATION (HLED)

<table>
<thead>
<tr>
<th>HLED 2</th>
<th>2.0 units</th>
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<tbody>
<tr>
<td><strong>Introduction to Health Education</strong></td>
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<tr>
<td>3.0 hours lecture</td>
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<td>Grading: letter grade or credit/no credit</td>
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<td>General study of health designed to promote desirable health attitudes and to provide up-to-date information in the areas of individual, family and community health. Not open for credit to students registered in or with credit in HLED 3. Fulfills AA/AS degree requirements in health education.</td>
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<td>Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
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<tr>
<th>HLED 3</th>
<th>3.0 units</th>
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</thead>
<tbody>
<tr>
<td><strong>Contemporary Health Problems</strong></td>
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<tr>
<td>3.0 hours lecture</td>
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<td>Grading: letter grade or credit/no credit</td>
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<tr>
<td>Action-oriented course with up-to-date presentations of current health problems and the methods of coping. Speakers, videos, slides and student experiences will be employed to acquaint students with the facts and the choices they have as consumers of health service and products. Not open for credit to students registered in or with credit in HLED 2. Fulfills AA/AS degree requirements in Health Education.</td>
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<td>Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
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<tr>
<th>HLED 4</th>
<th>3.0 units</th>
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<tr>
<td><strong>Women’s Health Issues</strong></td>
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<tr>
<td>3.0 hours lecture</td>
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<td>Grading: letter grade or credit/no credit</td>
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<tr>
<td>Proposes to help women attain an optimum state of health; includes becoming discerning consumers of the health care industry. Fundamentals of normal physiology and natural defense mechanisms will be covered to the extent necessary to promote understanding of the cause, prevention and treatment of various conditions or disorders, including reproductive organ dysfunction, menstrual disorders, sexually transmitted diseases, infertility, complications of pregnancy, osteoporosis, cancer and cardiovascular disease. The importance of lifestyle habits will be emphasized. Other topics include gender differences in health and mortality and the history and current status of research on women’s health issues.</td>
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<td>Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
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HLED 10  3.0 units
Human Sexuality
3.0 hours lecture
Grading: letter grade or credit/no credit
An intro to human sexual knowledge, attitudes and behaviors viewed from the biological, psychological, sociological, cultural, religious and historical perspectives. Provides three units of elective work in the health sciences or sociology. It does not take the place of HLED 2 or 3 which are required for the AA/AS degrees. Not open for credit to students registered in or with credit in PSYCH 10.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

HISTORY (HIST)

HIST 1A  (CAN HIST 2)  3.0 units
History: Western (European) Civilization
3.0 hours lecture
Grading: letter grade
A broad survey of European civilization and its world significance from pre-history to the end of the Thirty Years War, including Greece, Rome, Middle Ages, Renaissance and Reformation through the Age of Discovery.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

HIST 1AH  3.0 units
Honors History of Western European Civ
3.0 hours lecture
Prerequisite: Qualification for the Honors Program
Grading: letter grade
A broad survey of European civilization and its world significance from pre-history to the end of the Thirty Years War, including Greece, Rome, Middle Ages, Renaissance and Reformation through the Age of Discovery.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

HIST 1B  (CAN HIST 4)  3.0 units
History: Western (European) Civilization
3.0 hours lecture
Grading: letter grade
Traces European civilization from the end of the Thirty Years War in 1648 to the present, including the French Revolution, Napoleonic era, Industrial Revolution, age of nationalism and imperialism, World Wars I and II, atomic age and rise and fall of the great powers and the post-war era.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

HIST 1BH  3.0 units
Honors History of Western European Civ
3.0 hours lecture
Prerequisite: Qualification for the Honors Program
Grading: letter grade
Traces European civilization from the end of the Thirty Years War in 1648 to the present, including the French Revolution, Napoleonic era, Industrial Revolution, age of nationalism and imperialism, World Wars I and II, atomic age, rise and fall of Soviet power and the post cold war era.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

HIST 2A  3.0 units
The Ancient World
3.0 hours lecture
Grading: letter grade
An intro to the earliest stages of human culture from paleolithic times through the establishment of the classical civilization of the Eurasian continent and Nilotic Africa.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

HIST 2B  3.0 units
World Civilizations
3.0 hours lecture
Grading: letter grade
An intro to the development of the world civilization from the ancient world to about 1700. The emphasis is comparative and the focus is on the interactions of major cultures. Includes migration and settlement patterns, the role of universal religions, major medieval civilizations, technology and the effects of explorations and colonization movements.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

HIST 2C  3.0 units
The Modern World
3.0 hours lecture
Grading: letter grade
A comprehensive survey of the major world civilizations at the start of the European expansion. The creation of European colonial empires around the world and their overall impact is a major focus, as is the role of industrialization, science, technological innovation and communication in the decades after 1700. Competing ideologies and their impact are linked to the emergence of the modern nation state. Major themes are brought together in a close examination of the problems and successes of the contemporary era.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

HIST 2CH  3.0 units
Honors The Modern World
3.0 hours lecture
Prerequisite: Qualification for the Honors Program
Grading: letter grade
A comprehensive survey of the major world civilizations at the start of European expansion. The creation of European colonial empires around the world and their overall impact is a major focus, as is the role of industrialization, science, technological innovation and communication in the decades after 1700. Competing ideologies and their impact are linked to the emergence of the modern nation state. Major themes are brought together in a close examination of the problems and successes of the contemporary era.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

HIST 5A  3.0 units
History of England and Great Britain
3.0 hours lecture
Grading: letter grade
A survey of English history from earliest times through the reign of Queen Anne (1714). Anglo-Saxon, Norman, Plantagenet (Angevin), Tudor and Stuart contributions to the evolution of English law, politics, economics, social class structure and culture will be examined.
Courses of Instruction

closely and evaluated. Recommended for pre-legal students and majors in English.  
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**HIST 5B**  
*History of England and Great Britain*  
3.0 units  
3.0 hours lecture  
Grading: letter grade  
A survey of English history from the Accession of George I of Hanover (1714) through the closing decades of the Second Hundred Years’ War, expansion of the New British Empire, the age of Victoria, causes and effects of World Wars I and II and postwar adjustments by the United Kingdom to a new set of realities up to the present time. Recommended for pre-legal students and majors in English.  
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**HIST 6**  
*History of Russia*  
3.0 units  
3.0 hours lecture  
Grading: letter grade  
A survey of Russian history from the founding of the Russian state to the present. Emphasizes Imperial Russia in the 19th century, the road to revolution in 1917, development of Soviet society and the role of the former USSR in international affairs and the post Cold War Russia.  
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**HIST 8A**  
*History of the Americas*  
3.0 units  
3.0 hours lecture  
Grading: letter grade  
A comprehensive survey of the Western Hemisphere from its earliest contact with European civilization through the five centuries to the present. The fall semester (8A) gives particular attention to the structures of Pre-Columbian cultures, the conquest period and the subsequent development of European colonial empires in the new world. The spring semester (8B) focuses on the struggle for independence, the development of distinct national identities among new world republics and the problems of economic, political and social development these countries faced over the last century. Both courses are comparative and chronological in scope for Latin America, Canada and the United States. Recommended for Spanish majors.  
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**HIST 8BH**  
*Honors History of the Americas*  
3.0 units  
3.0 hours lecture  
Grading: letter grade  
A comprehensive survey of the Western Hemisphere from its earliest contact with European civilization through the five centuries to the present. The fall semester (8A) gives particular attention to the structures of Pre-Columbian cultures, the conquest period and the subsequent development of European colonial empires in the new world. The spring semester (8B) focuses on the struggle for independence, the development of distinct national identities among new world republics and the problems of economic, political and social development these countries faced over the last century. Both courses are comparative and chronological in scope for Latin America, Canada and the United States. Recommended for Spanish majors.  
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**HIST 9A**  
*History of China*  
3.0 units  
3.0 hours lecture  
Grading: letter grade or credit/no credit  
A survey of the history of China from antiquity to the present, emphasizing the modern era the last century. Particular attention is given to the evolution of the traditional Chinese civilization, the impact of modern imperialism on that culture, the building of a new society in the People’s Republic of China and China’s role in the contemporary world.  
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**HIST 9B**  
*History of Japan and Korea*  
3.0 units  
3.0 hours lecture  
Grading: letter grade or credit/no credit  
A survey of the history of Japan and Korea from antiquity to the present. The relationship of each country to the Chinese civilization is explored, as well as the evolution of unique Japanese and Korean cultures. Emphasizes the modern era with the impact of the West, the movement to modernize and a growing involvement in world affairs.  
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**HIST 9C**  
*History of India and Southeast Asia*  
3.0 units  
3.0 hours lecture  
Grading: letter grade or credit/no credit  
A survey of the history of India and Southeast Asia from antiquity to the present. Emphasizes the political, economic, social and religious characteristics of
traditional India, the impact of the Moslem and British invasions of India and the development of independent, modern India. Southeast Asia is studied through the history of representative nations and cultures, such as Vietnam and Indonesia.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

HIST 10 (CAN HIST 8) 3.0 units
Hist/Early America (Colonial-Reconstr)
3.0 hours lecture
Grading: letter grade
A study of major political, economic, social, diplomatic and intellectual trends and events from Colonial times through Reconstruction (1877). Attention is given to the birth of American society, establishment of the nation, westward expansion, the issue of slavery, the development of a multi-ethnic culture, the Civil War and reconstruction of the South. HIST 10 and 11 need not be taken in sequence, if the student desires to take both courses. Not open for credit to students who have completed HIST 8A.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

HIST 11 (CAN HIST 10) 3.0 units
Hist/Modern America (Reconstr-Present)
3.0 hours lecture
Grading: letter grade
A study of major political, economic, social, diplomatic and intellectual trends and events from the end of Reconstruction (1877) to the present. Emphasizes the building of the modern industrial society, growing involvement in international relations, the evolution of a multi-ethnic community and social reform movements of the 20th century. HIST 10 and 11 need not be taken in sequence if the student desires to take both courses. Not open for credit to students who have completed HIST 8B.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

HIST 18 3.0 units
History of Mexico
3.0 hours lecture
Grading: letter grade or credit/no credit
A survey of the historical and cultural development from the pre-Columbian era to the modern time. Focuses on Amerindian cultures, the exploration, colonization and development of Hispanic California, the coming of the American and the political, economic and cultural development of California since its acquisition by the United States. Recommended for those planning a teaching career in California.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

HIST 25 3.0 units
History of American Woman
3.0 hours lecture
Grading: letter grade
Survey of the history of women in America from the Colonial period to the present, emphasizing the relevant political, economic and social factors that shaped women’s experiences in the United States.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

HIST 27A 3.0 units
History of the African-American to 1877
3.0 hours lecture
Grading: letter grade or credit/no credit
A comprehensive survey of the African-American experience in the United States from the colonial period to the Civil War. Includes the African civilization prior to European enslavement, the American institution of slavery and the role of African-Americans during colonial wars. Emphasizes the contributions of African-Americans to the social, economic and political development of the United States.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

HIST 27B 3.0 units
Hist/African-American (Reconstr-Present)
3.0 hours lecture
Grading: letter grade or credit/no credit
A comprehensive survey of African-American social, political and economic development in the United States from the Reconstruction Period to the present. Will examine Jim Crow and white supremacy, the modern civil rights movement and the new struggle for community economic development and educational and employment in the twenty-first century.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

HIST 48 3.0 units
History of California
3.0 hours lecture
Grading: letter grade or credit/no credit
A comprehensive survey of California from pre-Columbian times to the present. Focuses on Amerindian cultures, the exploration, colonization and development of Hispanic California, the coming of the American and the political, economic and cultural development of California since its acquisition by the United States. Recommended for those planning a teaching career in California.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

HIST 49 3.0 units
History of the American West
3.0 hours lecture
Grading: letter grade
A broad survey of the history of the American West and its significance from pre-history to the present, including Native Americans, the frontier experience, the Gold Rush, women and the diverse cultures of the West, environmental issues, popular representations of the West, twentieth century problems, urban and suburban development.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

HORTICULTURE (HORT)

HORT 10A 4.0 units
Greenhouse Management and Operation
2.0 hours lecture, 6.0 hours laboratory
Grading: letter grade or credit/no credit
Learn greenhouse structure, heating and cooling systems, humidity and watering systems, propagation systems and controls, proper soil mix, fertilizer and injector systems, propagation methods, transplanting, shifting of nursery stock, quality and inventory control, shipping practices and credit management. Automation, mechanization and other labor saving equipment and procedures will be discussed.
### Courses of Instruction

**Transfer Status:** Transferable to CSU, see counselor for limitations.

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<tr>
<th>Course Code</th>
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<td>HORT 28A</td>
<td>Horticulture Equipment Operation (Fall)</td>
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### Course Descriptions

**HORT 15A: Basic Horticulture**
- **Hours:** 1.5 lecture, 1.5 laboratory
- **Grading:** letter grade or credit/no credit
- **Topics:** Learn the basic aspects and techniques of the horticulture industry: nomenclature, plant physiology, soils, fertilizers, irrigation, propagation, pruning and pest identification and control.
- **Transfer Status:** Transferable to CSU, see counselor for limitations.

**HORT 15B: Basic Horticulture**
- **Hours:** 1.5 lecture, 1.5 laboratory
- **Grading:** letter grade or credit/no credit

**HORT 11A: Plant Identification—Trees**
- **Hours:** 2.0 lecture, 3.0 laboratory
- **Grading:** letter grade or credit/no credit
- **Topics:** Focuses on the study of trees, including identification, culture and landscape uses.
- **Transfer Status:** Transferable to CSU, see counselor for limitations.

**HORT 11B: Plant Identification—Shrubs**
- **Hours:** 2.0 lecture, 3.0 laboratory
- **Grading:** letter grade or credit/no credit
- **Topics:** Focuses on the study of shrubs, including identification, culture and landscape uses.
- **Transfer Status:** Transferable to CSU, see counselor for limitations.

**HORT 11C: Plant Identification—Herbaceous**
- **Hours:** 2.0 lecture, 3.0 laboratory
- **Grading:** letter grade or credit/no credit
- **Topics:** Focuses on the study of herbaceous plants, including identification, culture and landscape uses.
- **Transfer Status:** Transferable to CSU, see counselor for limitations.

**HORT 11D: Plant Identification—Tropicals**
- **Hours:** 2.0 lecture, 3.0 laboratory
- **Grading:** letter grade or credit/no credit
- **Topics:** Focuses on the study of tropical plants, including identification, culture and landscape uses.
- **Transfer Status:** Transferable to CSU, see counselor for limitations.

**HORT 10B: Greenhouse Management and Operation**
- **Hours:** 2.0 lecture, 6.0 laboratory
- **Grading:** letter grade or credit/no credit
- **Topics:** Learn greenhouse structure, heating and cooling systems, humidity and watering systems, propagation systems and controls, proper soil mix, fertilizer and injector systems, propagation methods, transplanting, shifting of nursery stock, quality and inventory control, shipping practices and credit management. Automation, mechanization and other labor saving equipment and procedures will be discussed.
- **Transfer Status:** Transferable to CSU, see counselor for limitations.

**HORT 19A: Turf Management (Fall)**
- **Hours:** 2.0 lecture, 6.0 laboratory
- **Grading:** letter grade or credit/no credit
- **Topics:** Learn turf identification, culture requirements, climatic conditions, pests and diseases, watering techniques, installation and repair of irrigation systems and maintenance of new turf. Participate in removal of sod and installation of new turf from seed, sod and stolons.
- **Transfer Status:** Transferable to CSU, see counselor for limitations.

**HORT 19B: Turf Management (Spring)**
- **Hours:** 2.0 lecture, 6.0 laboratory
- **Grading:** letter grade or credit/no credit
- **Topics:** Learn turf identification, culture requirements, climatic conditions, pests and diseases, watering techniques, installation and repair of irrigation systems and maintenance of new turf. Participate in removal of sod and installation of new turf from seed, sod and stolons.
- **Transfer Status:** Transferable to CSU, see counselor for limitations.

**HORT 21: Principles of Landscape Design**
- **Hours:** 3.0 lecture
- **Grading:** letter grade or credit/no credit
- **Topics:** Learn basic landscape design and drafting skills: landscape symbols and lettering for plant materials, hardscape, irrigation, lighting and electrical, local and state codes. Prepare finished drawing of a new landscape site and cost estimates for materials and labor.
- **Transfer Status:** Transferable to CSU, see counselor for limitations.

**HORT 26A: Plant Propagation**
- **Hours:** 2.0 lecture, 3.0 laboratory
- **Grading:** letter grade or credit/no credit
- **Topics:** Learn sexual and asexual propagation of foliage, annual, perennial, tropical, flowering and ornamental plants, greenhouse and shadehouse systems.
- **Transfer Status:** Transferable to CSU, see counselor for limitations.

**HORT 26B: Plant Propagation**
- **Hours:** 2.0 lecture, 3.0 laboratory
- **Grading:** letter grade or credit/no credit
- **Topics:** Learn sexual and asexual propagation of foliage, annual, perennial, tropical, flowering, ornamental plants, operation and maintenance of propagation chambers and greenhouse and shadehouse systems.
- **Transfer Status:** Transferable to CSU, see counselor for limitations.

**HORT 28A: Horticulture Equipment Operation (Fall)**
- **Hours:** 2.0 lecture, 3.0 laboratory
- **Grading:** letter grade or credit/no credit
Courses of Instruction

Learn to safely operate, maintain and perform minor repairs of two-cycle and four-cycle horticulture equipment, including gas and diesel engines and electric and pneumatic motors.
Transfer Status: Transferable to CSU, see counselor for limitations.

HORT 28B  3.0 units
Horticulture Equipment Operation (Spr)
2.0 hours lecture , 3.0 hours laboratory
Grading: letter grade or credit/no credit
Learn to safely operate, maintain and perform minor repairs of two-cycle and four-cycle horticulture equipment, including gas and diesel engines and electric and pneumatic motors.
Transfer Status: Transferable to CSU, see counselor for limitations.

HORT 30  3.0 units
Integrated Pest Management
3.0 hours lecture
Grading: letter grade or credit/no credit
Learn to diagnose pests and disease on ornamental plants and turf, chemical and biological control and their regulation, local, state and federal laws pertaining to pesticide application. Prepare for the pesticide applicator’s exam.
Transfer Status: Transferable to CSU, see counselor for limitations.

HORT 202AB  4.0 units
Principles of Pruning
2.0 hours lecture , 6.0 hours laboratory
Grading: letter grade or credit/no credit
Learn to properly prune trees, shrubs and vines, identify pruning periods for deciduous and evergreen plants, identify and safely operate tools and equipment to industry standards, perform maintenance and repair of tools and equipment.

HORT 223AD  4.0 units
Landscape Construction
2.0 hours lecture , 6.0 hours laboratory
Grading: letter grade or credit/no credit
Develop a basic knowledge of the theory and application of soil preparation, equipment operation, planting, maintenance and hardscape techniques.

HORT 227A  2.0 units
Interior Plant Design/Installation Fall
1.5 hours lecture , 1.5 hours laboratory
Grading: letter grade or credit/no credit
Learn interior landscape design, installation and maintenance techniques, cultural and climatic conditions, pests and diseases and their prevention and control, cool and warm season color and how to bid and sell a design.

HORT 227B  2.0 units
Interior Plant Design/Maintenance Spring
1.5 hours lecture , 1.5 hours laboratory
Grading: letter grade or credit/no credit
Learn interior landscape design and maintenance techniques, cultural and climatic conditions, pests and diseases and their prevention and control, cool and warm season color and how to bid and sell a design.

HORT 271AD  2.0 units
Work Experience: Horticulture
1.0 hour lecture , 4.1 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
An extension of vocational learning experiences through employment in work experience directly related to horticulture/landscape. One unit of credit shall be granted for every 75 hours per semester. Maximum of 12 units.

HORT 272AD  3.0 units
Work Experience: Horticulture
1.0 hour lecture , 8.3 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
An extension of vocational learning experiences through employment in work experience directly related to horticulture/landscape. One unit of credit shall be granted for every 75 hours per semester. Maximum of 12 units.

HORT 273AD  4.0 units
Work Experience: Horticulture
1.0 hour lecture , 12.5 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
An extension of vocational learning experiences through employment in work experience directly related to horticulture/landscape. One unit of credit shall be granted for every 75 hours per semester. Maximum of 12 units.

HORT 430A  4.0 units
Landscape Maintenance
3.0 hours lecture , 3.0 hours laboratory
Grading: letter grade or credit/no credit
Theory and applications of landscape management and installation, plant, weed and pest identification, turf grass, equipment operation and maintenance, manual and automatic irrigation, plant propagation and culture, landscape plans and construction and types of industrial and domestic applications are topics of discussion.

HORT 430B  4.0 units
Landscape Maintenance
3.0 hours lecture , 3.0 hours laboratory
Recommended Preparation: HORT 430A
Grading: letter grade or credit/no credit
Theory and applications of landscape management and installation, plant, weed and pest identification, turf grass, equipment operation and maintenance, manual and automatic irrigation, plant propagation and culture, landscape plans and construction, types of industrial and domestic applications are topics of discussion.

HORT 611  0.0 unit
Hort/Animal Sci for Disabled Students
5.0 hours lecture , 10.0 hour laboratory
Grading: LBCC Non-Graded Course
Designed to cover: grounds maintenance, safe operation of hand and power tools, soils and soil amendments, fertilizers, turf management, flower, vegetable and fruit identification and culture, annuals and perennials, pruning, disease and weed recognition and control, irrigation principles and repair. Landscape plans and construction (limited). Flower design: materials and methods and holiday display. Animal science: care, feeding, reproduction, health, housing and record keeping. Marketing: harvesting, packing, sales and...
bookkeeping. Industrial applications. Also includes field trips, guest lecturers and special lab and field projects for students with disabilities.

**HUMAN SERVICES/SOCIAL WORK (HS)**

**HS 1 3.0 units**
Introduction to Social Work
3.0 hours lecture
Grading: letter grade or credit/no credit
Identify and analyze the origin and development of the primary helping services in urban and rural communities. Emphasizes social problems and issues which resulted in the development of these services, the value systems significant in their operation and the effect of shifting patterns in society on the delivery of helping services. Class work supplemented by observation of or participating in local primary helping service agencies.
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**HS 7 3.0 units**
Introduction to Victimization
3.0 hours lecture
Grading: letter grade
Explore the cost of victimization to society. Emphasizes information on existing resources, participation in the creation and expansion of knowledge and resources and the career opportunities in the field. Class work supplemented by observation of local primary helping service agencies.
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**HS 15 3.0 units**
Social Welfare: People with Disabilities
3.0 hours lecture
Grading: letter grade
An overview of various disabilities and their etiology. Study of methods and processes of adjustment of people with various disabilities and their families. A survey of the social psychological factors and societal attitudes that facilitate or inhibit normal functioning. An overview of the various social services available to people with disabilities that assist with education, employment, interaction situations, social skills training, advocacy, self help groups and other services that help people with various disabilities reach their full potential.
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**HS 26 3.0 units**
Introduction to Gerontology
3.0 hours lecture
Grading: letter grade or credit/no credit
Provides an overview of the social, psychological and biological effects of aging, emphasizing individual differences among older adults, including ethnic differences. Explore the basic processes, adjustments and environments of the aging and aim at breaking down individual and societal stereotypes. Not open for credit to students registered in or with credit in HOMEC26 or PSYCH26.
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**HS 40A 3.0 units**
Introduction to Addictive Behaviors
3.0 hours lecture
Grading: letter grade
For individuals who wish to expand their knowledge regarding addictive behaviors. Covers the basic causal theories of alcoholism and drug abuse and explores methods of identification, classification, treatment and intervention. Designed to help prepare students for careers in a rapidly growing field.
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**HS 40B 3.0 units**
Introduction to Addictive Behaviors
3.0 hours lecture
Grading: letter grade
For individuals who wish to expand their knowledge regarding addictive behaviors. Covers basic theories of co-dependency and eating disorders and explores methods of identification, classification, treatment and intervention. Designed to help prepare students for careers in a rapidly growing field.
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**HS 41 3.0 units**
Introduction to Chemical Dependency
3.0 hours lecture
Grading: letter grade
Takes the student through the history of alcohol abuse and the use of mood altering substances during this century. The ability to abuse and become addicted to other behaviors, such as food and sex, will also be explored. Psychological, social and physical contributions and outcomes of addictive behavior will be studied. Designed for those interested in the helping services.

**HS 43 3.0 units**
Case Management: Treatment & Aftercare
3.0 hours lecture
Grading: letter grade
Examine ways to conduct initial intake assessment, orientation to various treatment programs and terms for termination. Clients' rights and stages of recovery from alcohol and drug dependencies will also be studied. Designed for those interested in the helping fields, this course will provide strategies for prioritizing problems, organizing cases and applying the law to provide assistance.

**HS 45 3.0 units**
Stress Mgmt for the Helping Professional
3.0 hours lecture
Grading: letter grade
Examines various ways that professionals in the helping services experience stress. Students' personal limitations will be explored. Learn to prevent burnout and skills that will increase students' ability to help others. Emphasizes strategies to promote personal growth. Designed for persons interested in the human services/helping professions.

**HS 46 3.0 units**
Physiology & Pharmacology of Drugs
3.0 hours lecture
Grading: letter grade
Examines the effects of alcohol and other psychoactive drugs on the body and everyday behavior. Such issues as drug tolerance, synergistic effects and effects of drugs on sexual performance are used to develop a treatment program.

**HS 47**  
**Intervention, Treatment & Recovery**  
3.0 units  
3.0 hours lecture  
Grading: letter grade  
Thoroughly explores the counseling process from the perspective of both client and counselor. Therapeutic orientations will be learned and applied, through class role playing, of individual, group and family counseling sessions. Designed for students interested in the helping professions.

**HS 48**  
**Group & Family Process**  
3.0 units  
3.0 hours lecture  
Prerequisite: HS 47  
Grading: letter grade  
Students will explore the counseling process from the perspective of both client and counselor. Therapeutic orientations of group/family counseling will be learned and applied through class role playing. Designed for students interested in helping professions.

**Transfer Status:** Transferable to CSU, see counselor for limitations.

**HS 50**  
**Law and Ethics**  
3.0 units  
3.0 hours lecture  
Grading: letter grade  
Learn the applicable laws and liabilities relating to drug and alcohol use/abuse. Issues of confidentiality, patient rights, assessments and interventions will be explored. Designed for students interested in helping professions.

**HS 71AD**  
**Work Experience — Human Services**  
2.0 units  
1.0 hour lecture, 3.3 hours laboratory  
Corequisite: Enrollment in at least seven units including this course.  
Grading: letter grade or credit/no credit  
An extension of vocational learning experiences through employment in work experience directly related to the occupational goal or career major for which the student college program is designed.  
**Transfer Status:** Transferable to CSU, see counselor for limitations.

**HS 72AD**  
**Work Experience — Human Services**  
3.0 units  
1.0 hour lecture, 6.6 hours laboratory  
Corequisite: Enrollment in at least seven units including this course.  
Grading: letter grade or credit/no credit  
An extension of vocational learning experiences through employment in work experience directly related to the occupational goal or career major for which the student college program is designed.  
**Transfer Status:** Transferable to CSU, see counselor for limitations.

**HS 73AD**  
**Work Experience — Human Services**  
4.0 units  
1.0 hour lecture, 12.5 hours laboratory  
Corequisite: Enrollment in at least seven units including this course.  
Grading: letter grade  
This course prepares students to develop work experience objectives, career goals, job interviewing skills and address employment issues encountered in the workplace. Field placements provide vocational experiences through direct employment in the Alcohol/Drug Counseling and Human Services disciplines.

**HS 207**  
**Development of Helping/Listening Skills**  
3.0 units  
3.0 hours lecture  
Grading: letter grade or credit/no credit  
For persons who are in helping roles in the area of social services. Includes techniques for volunteer, peer and para-professional assistance and counseling. The development of skills in initiating, attending, responding and personalizing aid to a client is the core of the course. Small groups guided through a learning sequence of listening and helping skills are included.

**HS 209**  
**Human Connections in a Changing Society**  
3.0 units  
3.0 hours lecture  
Grading: letter grade  
Designed to increase the level of integration between what we think we should be and what we are. Develop self-awareness and the ability to relate to others. A practical course through which the student may become a more authentic person and more effective as a helping person. Lecture and discussion will be supplemented by many opportunities for practical experiences in applying the concepts learned.

**HS 226**  
**Stress on Caregivers to Elderly**  
3.0 units  
3.0 hours lecture  
Grading: letter grade  
For persons in helping roles for the elderly. Develop an awareness of the problems of both the elderly and their caregivers. Includes discussion regarding stressors, intervention techniques and the needs of caregivers. Lecture and discussion will be supplemented with development of a student resources list.

**HS 228**  
**Life Enhancement for Seniors**  
3.0 units  
3.0 hours lecture  
Grading: letter grade  
Open to students of all ages, this course will help to explore one’s own personal beliefs and ideas about aging. Learn the components of healthy aging, as well as ways to attain well being in the later years. Techniques such as life planning, education and use of resources will be utilized. Experiential learning is key to this course. Designed for those in the helping services.

**HS 251**  
**HIV: Cultural Competence in Treatment**  
3.0 units  
3.0 hours lecture  
Prerequisite: HS 41  
Grading: letter grade  
This course provides updated information, theory, and skills for counseling people with HIV, sexual minorities, people with disabilities and other culturally diverse populations. It is designed for social service and addiction counseling students to assist in recognizing and addressing drug use in these groups.
Courses of Instruction

HS 252  3.0 units
Dual Diagnosis: Assessment & Treatment
3.0 hours lecture
Prerequisite: HS 41
Grading: letter grade
This course explores understanding mental illness and persons with more than one mental/psychiatric disorder. It introduces students to the various disorders in infancy, childhood, adolescence and adulthood. It will introduce students to co-existing disorders and various diagnosis and treatment techniques used to treat this unique population. Students will tour two different types of mental health facilities, to provide an additional understanding of mental health issues.

HS 253  3.0 units
Activity/Recreation Leadership Training
3.0 hours lecture
Grading: letter grade
This course is designed for individuals who are aspiring to work as a professional in activity/recreational programs with the elderly and for adults with physical and mental disabilities. The curriculum follows guidelines established by the State of California for those individuals training in Activity Leadership positions in healthcare and community settings. Coursework includes group projects and requires two field trips to two different community settings. Lecturers from the community will present relevant material in specific areas.

HS 606  0.0 unit
Life Planning
1.0 hour lecture
Grading: LBCC Non-Graded Course
An overview of how to improve the later years of life with attention to health, consumer skills, self-management issues and entitlements. Designed for senior adults.

HUMANITIES (HUMAN)

HUMAN 1  3.0 units
Comparative World Cultures
3.0 hours lecture
Grading: letter grade or credit/no credit
Compares through analysis selected major civilizations and seeks to respond to the current need for intercultural understanding in an interdependent world. Interdisciplinary teams of faculty drawn from the humanities and the social sciences select major cultures from the ancient, medieval and modern periods of world history which are examined thematically. Such themes include how distinctive historical, regional and local cultures design, share, reproduce and meet basic biological, material and symbolic needs, and experienced both continuity and change through internal realignments of their social, economic, political and intellectual institutions or by external contact with other people.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

HUMAN 1H  3.0 units
Honors Comparative World Cultures
3.0 hours lecture
Prerequisite: Qualification for the Honors Program
Grading: letter grade or credit/no credit
Describes how selected major cultures meet similar basic needs, such as establishing value systems, socialization of children, meeting material needs and perceiving persons in other cultures. An interdisciplinary approach, drawing from both the humanities and social sciences. Seeks to respond to the current need for intercultural understanding in an interdependent world. Not open to students registered in or with credit in SOCSC1 or 1H.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

HUMAN 3  3.0 units
Intro to Issues/Phil, Psych & Religion
3.0 hours lecture
Grading: letter grade
Using a point/counterpoint debate format, a teaching team, composed of a philosopher and a psychologist, compare and integrate insights from three disciplines—philosophy, psychology and religion in a critical investigation of theoretical positions, such as Plutonic idealism, Christian theology, Freudian analysis, Skinnerian behaviorism, existentialism and other major intellectual viewpoints. Not open for credit to students registered in or with credit in PHIL 3 or PSYCH3.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

HUMAN 7  3.0 units
American Pluralism and Identity
3.0 hours lecture
Grading: letter grade or credit/no credit
Explores the multicultural nature of American society, using more than one discipline. Using the Humanities to analyze the creativity of each ethnic group as they constructed artistic, literary, musical, philosophical and religious identities based on their traditions and experiences, will seek to understand the United States as a common culture. Using the Social Sciences to compare and contrast the origins, living conditions and experiences of America’s constituent populations, will analyze the complexity of the processes effecting the interaction of the American people.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

INDUSTRIAL RELATIONS

INDRL 42  3.0 units
Basic Human Relations
3.0 hours lecture
Grading: letter grade or credit/no credit
Objectives of human relations, insights from behavioral studies, management and management functions, improving human relations and personal advancement.
Transfer Status: Transferable to CSU, see counselor for limitations.

INTERDISCIPLINARY STUDIES

AND HONORS (INDIS)

INDIS 1AH  1.0 unit
Honors Interdisciplinary Seminar
1.0 hour lecture
Prerequisite: Qualification for the Honors Program
Grading: letter grade or credit/no credit
Analyzes Charles Darwin’s theory and the impact his writing had on science from the perspective of philosophy and biology. Emphasizes the cognitive skills of these disciplines relating the topic of this seminar to the course content listed below. Honors option credit will be granted for students completing the seminar. Intended for students who have completed or are now taking BIO 1A-B, 2, 5, 11, 20, 25 or 41 and PHIL 6, 7, 11 or 12.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**INDIS 1BH**
Honors Interdisciplinary Seminar
1.0 hour lecture
Prerequisite: Qualification for the Honors Program
Grading: letter grade or credit/no credit
Analyzes contemporary American society from the standpoint of power and aggression using the perspective of history and psychology. Emphasizes the cognitive skills of these disciplines relating the topic of this seminar to the course content listed below. Honors option credit will be granted for students completing this seminar. Intended for students who have completed or are now taking HIST 1A-B, 10, 11 or 25 or PSYCH 1, 2 or 33.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**INDIS 1CH**
Honors Interdisciplinary Seminar
2.0 units
2.0 hours lecture
Prerequisite: Qualification for the Honors Program
Grading: letter grade or credit/no credit
Analyzes the Columbian Revolution from its origins to its impact on the Americas, using the perspective of history and library science. Emphasizes the cognitive skills of these disciplines relating the topic of this seminar to the course content listed below. Honors option credit will be granted for students completing the seminar. Intended for students who have completed or are now taking HIST 1A-B, 2B-C, 8A-B, 10, 11 or LIB 1.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**INDIS 1DH**
Honors Interdisciplinary Seminar
1.0 unit
1.0 hour lecture
Prerequisite: Qualification for the Honors Program
Grading: letter grade or credit/no credit
Analyzes the fundamental issues facing humanity as a result of the collapse of traditional beliefs after the scientific revolution (1543-1687), using the perspective of philosophy and history. Emphasizes the cognitive skills of these disciplines relating the topic of this seminar to the course content listed below. Honors option credit will be granted for students completing the seminar. Intended for students who have completed or are now taking HIST 1A-B, 2B-C, 8A-B, 10, 11 or PHIL 6, 7, 11 or 12.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**INTERIOR DESIGN (ID)**

**ID 1**
Fundamentals of Interior Design
3.0 units
3.0 hours lecture
Grading: letter grade or credit/no credit
Application of design principles and elements in planning of total interior environments that meet individual, functional, legal and environmental needs. Emphasizes the background treatments (flooring, walls, windows) and the choices available.

Transfer Status: Transferable to CSU, see counselor for limitations.

**ID 5**
Interior Design Studio I
2.0 units
1.0 hour lecture, 3.0 hours laboratory
Recommended Preparation: ID 1 (may be taken concurrently)
Grading: letter grade or credit/no credit
Designed to apply concepts and theories presented in the lecture course, Intro to Interior Design. Emphasizes the design process in developing solutions for design projects.

Transfer Status: Transferable to CSU, see counselor for limitations.

**ID 10**
Beginning Drafting: Interior Design
3.0 units
2.0 hours lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
Applications of methods and theory used for architectural drawings, including basic graphics and projections for design and working drawings.

Transfer Status: Transferable to CSU, see counselor for limitations.

**ID 20**
Interior Design Careers
2.0 units
2.0 hours lecture
Grading: letter grade or credit/no credit
A survey of the interior design profession, industry, related occupations and work sites. Emphasizes personal, educational and professional qualifications required for entry into the interior design profession.

Transfer Status: Transferable to CSU, see counselor for limitations.

**ID 30**
Applied Color Theory and Design
4.0 units
3.0 hours lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
Basic design theory and application. Utilization of tools, materials and equipment to develop technical skills applicable to interior, architectural and other related fields of design. Exploration of cultural heritage and psychological implications of design.

Transfer Status: Transferable to CSU, see counselor for limitations.

**ID 50**
Interior Materials and Products
4.0 units
4.0 hours lecture
Grading: letter grade or credit/no credit
Analysis, application and evaluation of products and materials used in interior design. Includes interior textiles, furnishings and finish materials and products.

Transfer Status: Transferable to CSU, see counselor for limitations.

**ID 70**
Space Planning
3.0 units
2.0 hours lecture, 3.0 hours laboratory
Recommended Preparation: ID 10
Grading: letter grade or credit/no credit
Courses of Instruction

The application of programming, theory and techniques in residential and commercial space planning. Skills in drafting and presentation techniques are emphasized in the studio.

Transfer Status: Transferable to CSU, see counselor for limitations.

ID 70AD 1.0 unit
Work Experience Issues-Interior Design
1.0 hour lecture
Corequisite: Enrollment in at least seven units including ID 71AD, 72AD or 73AD, and ID 70AD
Grading: letter grade or credit/no credit
Seminar related to work experience. Discussion of work experience objectives, career goals, employment search, communication skills and problem solving.
Transfer Status: Transferable to CSU, see counselor for limitations.

ID 71AD 1.0 unit
Work Experience: Interior Design
4.1 hours laboratory
Corequisite: Enrollment in at least seven units including ID 71AD and 70AD.
Grading: letter grade or credit/no credit
Vocational learning experiences through employment directly related to the industry.
Transfer Status: Transferable to CSU, see counselor for limitations.

ID 72AD 2.0 units
Work Experience: Interior Design
8.3 hours laboratory
Corequisite: Enrollment in at least seven units including ID 72AD and 70AD.
Grading: letter grade or credit/no credit
Vocational learning experiences through employment directly related to the industry.
Transfer Status: Transferable to CSU, see counselor for limitations.

ID 73AD 3.0 units
Work Experience: Interior Design
12.5 hours laboratory
Corequisite: Enrollment in at least seven units including ID 73AD and 70AD.
Grading: letter grade or credit/no credit
Vocational learning experiences through employment directly related to the industry.
Transfer Status: Transferable to CSU, see counselor for limitations.

ID 76 2.0 units
History of American Material Culture
2.0 hours lecture
Grading: letter grade or credit/no credit
A stylistic overview and survey of the American material culture from the 17th to the mid 19th century, emphasizing the decorative arts and furnishings and the social context in which they were made and/or used. Types of artifacts to be studied include furniture, architecture, metal, ceramics, textiles, glass and prints.
Transfer Status: Transferable to CSU, see counselor for limitations.

ID 80 3.0 units
History of Interiors and Furnishings I
3.0 hours lecture
Grading: letter grade or credit/no credit
The historical relationship between the decorative arts, period furniture and interior architecture is illustrated in this overview of our design heritage from antiquity through the nineteenth century in France. Emphasizes style development as it relates to social, economic and political context.
Transfer Status: Transferable to CSU, see counselor for limitations.

ID 90 3.0 units
History of Interiors and Furnishings II
3.0 hours lecture
Grading: letter grade or credit/no credit
The historical relationship between the decorative arts, period furniture and interior architecture is illustrated in this overview of design heritage. Beginning with the sixteenth century England and America, analyze the influences and changes in design to the present. Emphasizes style development as it relates to social, economic and political forces.
Transfer Status: Transferable to CSU, see counselor for limitations.

ID 200 2.0 units
Interior Illustration
1.0 hour lecture, 3.0 hours laboratory
Recommended Preparation: ID 10
Grading: letter grade or credit/no credit
Covers application methods, techniques and tools used for illustrating interior spaces and products. Includes one and two point perspective, highlighting, shading and shadowing of interior elements.

ID 210 3.0 units
Fundamentals of Lighting
3.0 hours lecture
Grading: letter grade or credit/no credit
The fundamentals of lighting, design, theory and application, including the history and vocabulary of lighting; how light affects color and vision, incandescent and fluorescent lamps, lighting techniques for interior designers, codes and energy efficient lighting practices.

ID 215 2.0 units
Interior Design Studio II
1.0 hour lecture, 3.0 hours laboratory
Prerequisite: ID 5
Recommended Preparation: ID 30 and 70
Grading: letter grade or credit/no credit
Covers developing, analyzing and applying design concepts to interior environments. Universal design, “green” design, space planning, lighting systems, interior components, architectural elements and specification writing will be integrated into research projects emphasizing a problem solving approach.

ID 230 3.0 units
Business and Professional Practice
3.0 hours lecture
Grading: letter grade or credit/no credit
The business and professional management of an interior design practice, including legal issues, project management and business practices.

ID 270A 2.0 units
Exploring Interior Design
2.0 hours lecture
Grading: letter grade or credit/no credit
An intro course designed for the person who is redecorating, remodeling or seeking new ideas or information about future purchases in home furnishings. Includes: choosing furniture, color, window and wall treatments, floor coverings, lighting and accessories.

**ID 270B** 2.0 units
*Exploring Interior Design*
2.0 hours lecture
Grading: letter grade or credit/no credit
An intro course designed for the person who is redecorating, remodeling or seeking new ideas and information about future purchases in home furnishings. Includes: choosing furniture, color, window and wall treatments, floor coverings, lighting and accessories.

**ID 272** 1.0 unit
*Residential Furnishings*
1.0 hour lecture
Grading: letter grade or credit/no credit
For the individual requiring information about home furnishings in a short term course. Includes tips on how to “master plan” a decorating idea and information on the latest trends and styles in interior design. A practical course for someone ready to buy a new home or remodel an existing one.

**ID 286A** 2.0 units
*Introduction to Floral Design*
1.5 hours lecture, 1.5 hours laboratory
Grading: letter grade or credit/no credit
A study of the elements and principles of design, color coordination, basic floral arranging and basic corsage construction. Nomenclature of flowers and foliage and their uses is included. 286A covers fall flowers; 286B covers spring flowers.

**ID 286B** 2.0 units
*Introduction to Floral Design*
1.5 hours lecture, 1.5 hours laboratory
Grading: letter grade or credit/no credit
A study of the elements and principles of design, color coordination, basic floral arranging and basic corsage construction. Nomenclature of flowers and foliage and their uses is included. 286A covers fall flowers; 286B covers spring flowers.

**ID 287A** 2.0 units
*Intermediate Floral Design-Wedding*
1.5 hours lecture, 1.5 hours laboratory
Recommended Preparation: One semester of ID 286A or ID 286B
Grading: letter grade or credit/no credit
This is one of three courses which constitute a comprehensive overview of techniques used at an intermediate level within the floral industry. Complete instructions on the art and science of designing sympathy flowers are included from the elaborate casket to simple home tributes. Course focuses on mechanics/construction for efficiency in design.

**ID 287B** 2.0 units
*Intermediate Floral Design-Sympathy*
1.5 hours lecture, 1.5 hours laboratory
Recommended Preparation: One semester of ID 286A or ID 286B
Grading: letter grade
This is one of three courses which constitute a comprehensive overview of techniques used at an intermediate level within the floral industry. Complete instructions on the art and science of designing sympathy flowers are included from the elaborate casket to simple home tributes. Course focuses on mechanics/construction for efficiency in design.

**ID 287C** 2.0 units
*Intermediate Floral Design-Banquet Holiday*
1.5 hours lecture, 1.5 hours laboratory
Recommended Preparation: One semester of ID 286A or ID 286B
Grading: letter grade or credit/no credit
This is one of three courses which constitute a comprehensive overview of techniques used at an intermediate level within the floral industry. Complete instructions on the art and science of designing sympathy flowers are included from the elaborate casket to simple home tributes. Course focuses on mechanics/construction for efficiency in design.

**ID 288** 2.0 units
*Advanced Floral Design*
1.5 hours lecture, 1.5 hours laboratory
Recommended Preparation: ID 286A-B and ID 287AC
Grading: letter grade or credit/no credit
Techniques for the planning, design and execution of intricate floral arrangements. Includes applications and methods for creating designs in less time for profit. Required for students in the Floral Design Certificate Program.

**ID 289** 3.0 units
*Applied Floral Shop Operation*
3.0 hours lecture
Grading: letter grade or credit/no credit
Techniques in floral shop operation, including the handling of perishable floral materials. Required for students in the floral design certificate program.

**ITALIAN (ITAL)**

**ITAL 1** 5.0 units
*Elementary Italian*
5.0 hours lecture, 1.0 hour laboratory
Grading: letter grade or credit/no credit
Intro to the Italian language with emphasis on listening, comprehension, conversation, reading and writing skills to develop control of the basic sounds, forms and structure of Italian. Topics for conversation are everyday life situations and issues in the Italian world. Not recommended for native speakers of Italian or students who have completed one year of high school Italian with a grade of B or better or equivalent.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ITAL 1A** 3.0 units
*Elementary Italian 1A*
3.0 hours lecture
Grading: letter grade or credit/no credit
Intro to the Italian language, emphasizing listening, comprehension, conversation, reading and writing skills to develop control of the basic sounds, forms and structure of Italian. Topics for conversation are everyday life situations and issues in the Italian world. Not recommended for native speakers of Italian or students who have completed one year of high school Italian with a grade of B or better.
Courses of Instruction

ITAL 1B
Elementary Italian 1B
2.0 hours lecture, 1.0 hour laboratory
Prerequisite: ITAL 1A
Grading: letter grade or credit/no credit
Continuation of ITAL 1A, emphasizing listening, comprehension, conversation, reading and writing skills to develop control of the basic sounds, forms and structure of Italian. Topics for conversation are everyday life situations and issues in the Italian world. Not recommended for native speakers of Italian or students who have completed one year of high school Italian with a grade of B or better.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ITAL 2
Elementary Italian
5.0 hours lecture, 1.0 hour laboratory
Prerequisite: ITAL 1 or ITAL 1A and 1B or recent completion of one year of High School Italian.
Grading: letter grade or credit/no credit
Continuation of ITAL 1A, emphasizing listening, comprehension, conversation, reading and writing skills to develop control of the basic sounds, forms and structure of Italian. Topics for conversation are everyday life situations and issues in the Italian world. Not recommended for native speakers of Italian or students who have completed one year of high school Italian with a grade of B or better.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ITAL 2A
Elementary Italian 1A
3.0 hours lecture
Prerequisite: ITAL 1 or ITAL 1A and 1B or recent completion of one year of High School Italian.
Grading: letter grade or credit/no credit
Continuation of the study of basic grammar forms, emphasizing on listening and speaking, reading and writing based on modern topical material.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ITAL 2B
Elementary Italian 2A
2.0 hours lecture, 1.0 hour laboratory
Prerequisite: ITAL 2A
Grading: letter grade or credit/no credit
Continuation of the study of basic grammar forms emphasizing on listening and speaking, reading and writing, based on modern topical material.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ITAL 3
Intermediate Italian
5.0 hours lecture
Prerequisite: ITAL 2 or 2A and 2B
Grading: letter grade or credit/no credit
A review of grammar with emphasis on listening, comprehension, reading and writing skills to express and comprehend sentences using the subjunctive, relative clauses, passive voice and impersonal statements. Not recommended for native speakers of Italian.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
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| JOURN 1A    | 3.0   | Introduction to Desktop Publication              | 2.0           | 3.0             |         | Study and practice in writing, editing, designing and producing desktop publications, such as fliers, brochures, newsletters, small magazines and newspapers, using electronic publishing techniques.  
Transfer Status: Transferable to CSU, see counselor for limitations. |                                                     |
| JOURN 1B    | 3.0   | Introduction to Desktop Publication              | 2.0           | 3.0             |         | Study and practice in writing, editing, designing and producing desktop publications, such as fliers, brochures, newsletters, small magazines and newspapers, using electronic publishing techniques.  
Transfer Status: Transferable to CSU, see counselor for limitations. |                                                     |
| JOURN 5     | 3.0   | Introduction to Public Relations                 | 3.0           |                  |         | Fundamentals of publicity and public relations for community groups and business organizations. Learn sources, techniques and outlets to gain publicity. Practice planning and preparing various types of publicity programs and press releases.  
Transfer Status: Transferable to CSU, see counselor for limitations. |                                                     |
| JOURN 6AD   | 3.0   | Working on the Magazine                          | 2.0           | 3.0             |         | Learn principles of periodical publication and methods of editing, manufacturing and distributing magazines of every type. Includes practical training and instruction in editorial works, such as editing, writing, proofreading and headline writing. Attention is also given to production problems of the modern magazine.  
Transfer Status: Transferable to CSU, see counselor for limitations. |                                                     |
| JOURN 10 (CAN JOUR 4) | 3.0   | Introduction to Mass Communication               | 3.0           |                  |         | A study of the mass media and their influence on the individual and society. Designed for all majors.  
Transfer Status: Transferable to UC/CSU, see counselor for limitations. |                                                     |
| JOURN 20 (CAN JOUR 2) | 3.0   | Beginning Newswriting and Reporting              | 3.0           |                  |         | Gain experience gathering, writing and editing of news stories using computers.  
Transfer Status: Transferable to UC/CSU, see counselor for limitations. |                                                     |
Courses of Instruction

Transfer Status: Transferable to CSU, see counselor for limitations.

LEARNING AND ACADEMIC RESOURCES (LEARN)

LEARN 11 2.0 units
Learning and Academic Strategies
2.0 hours lecture
Grading: credit/no credit
A comprehensive study and learning skills course. Topics include goal setting, commitment and motivation, time-management, learning styles, memory and concentration, study-reading techniques, critical thinking, listening skills, note-taking and test-taking. Provides small group interaction and individualized instruction to develop a support system and a mentor experience with the instructor. Emphasizes individual approaches to learning through diagnosis of difficulties and the development of an effective system of study. Transfer Status: Transferable to CSU, see counselor for limitations.

LEARN 11A 2.0 units
College Learn Skills Workshop
3.0 hours lecture
Grading: credit/no credit
A comprehensive study and learning skills course. Topics include goal setting, commitment and motivation, time-management, learning styles, memory and concentration, study-reading techniques, critical thinking, listening skills, note taking, and test taking. Provides small group interaction and individualized instruction to develop a support system and a mentor experience with the instructor. Emphasizes individual approaches to learning through diagnosis of difficulties and the development of an effective system of study. Transfer Status: Transferable to CSU, see counselor for limitations.

LEARN 11M1 0.5 unit
College Test Taking
0.5 hour lecture
Grading: credit/no credit
This course is designed to assist the student in acquiring confidence and competency in understanding the principles of test development and application of test-taking strategies. Transfer Status: Transferable to CSU, see counselor for limitations.

LEARN 20 3.0 units
Student-Athlete Success Training
3.0 hours lecture
Grading: letter grade
Designed to assist the student-athlete in synthesizing his or her strengths in athletics with academic strengths for increased academic success. Emphasizes introducing the student-athlete to the expectations of higher education and developing techniques and skills necessary for achieving academic success. Develop awareness of and management strategies for the special personal and social demands of collegiate athletics. An intro to the regulations and expectations of athletic governing bodies (e.g., NCAA, COA). Transfer Status: Transferable to CSU, see counselor for limitations.

LIBRARY (LIB)

LIB 1 1.0 unit
Intro to Libraries/Information Resources
1.0 hour lecture
Grading: letter grade or credit/no credit
Teaches basic college-level research skills necessary for effective use of traditional and new information resources. Emphasizes research strategies and evaluation of information resources. Covers the different levels, types and formats of information, including the Internet. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

LIB 2 0.5 unit
Web Databases
0.5 hour lecture
Courses of Instruction

Grading: credit/no credit
A hands-on introduction to Web databases and their structures, this course emphasizes evaluation of information, search strategies, and search techniques used to effectively access and retrieve information in the Web environment. Beneficial for students who wish to develop vital information technology skills for both academic and professional purposes.

Transfer Status: Transferable to CSU, see counselor for limitations.

LIB 3 3.0 units
Information Competency
3.0 hours lecture
Grading: letter grade or credit/no credit
The course is designed to help students become an information-literate world citizen in the new seamless and global Information World. The course encompasses library literacy, information technology literacy, and Internet literacy. It encourages thought transformation, intelligent reasoning, and a new understanding of the world, including an appreciation of cultural diversity.

The course has a well-balanced structure in practices and theories, with lectures, forum discussion in-class and online, computer lab activities and written research assignments. In addition, there will be field trips to some of the most famous and richest libraries and museums in Southern California.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

LIB 210 1.0 unit
Web Health Resources
1.0 hour lecture
Grading: letter grade or credit/no credit
A hands-on introduction to web health resources, this course acquaints students with health resources on the Internet and via subscription. Beneficial for the general community and for students in the healthcare field who wish to expand their specialty knowledge base in order to gain a competitive edge and upgrade their job skills.

LIB 211 1.0 unit
Web Business Resources
1.0 hour lecture
Grading: letter grade or credit/no credit
A hands-on introduction to web business resources, this course acquaints students with business resources on the Internet and via subscription. Beneficial for the general community and for students in the business and economics field who wish to expand their specialty knowledge base in order to gain a competitive edge and upgrade their job skills.

LIB 212 1.0 unit
Web Law Resources
1.0 hour lecture
Grading: letter grade or credit/no credit
A hands-on introduction to web law resources, this course acquaints students with law resources on the Internet and via subscription. Beneficial for the general community and for students in the law field who wish to expand their specialty knowledge base in order to gain a competitive edge and upgrade their job skills.

LIB 801 1.0 unit
Basic Information Research Skills
1.0 hour lecture
Grading: credit/no credit
A preliminary course in finding, retrieving and evaluating information. Emphasizes locating information quickly and easily in the modern information environment. Intended for beginning college students, students in vocational programs who are not planning to transfer to a degree program soon and for any other student needing to develop basic information seeking skills.

MACHINE TOOL (MACHT)

MACHT 50A 3.0 units
Machine Tool Operation and Practices
2.0 hours lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
Machine tool layout and job procedures, measuring instruments, cutting tools, materials, engine lathe, milling machine and drilling are discussed.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MACHT 50B 3.0 units
Machine Tool Operation and Practices
2.0 hours lecture, 3.0 hours laboratory
Prerequisite: MACHT 50A
Grading: letter grade or credit/no credit
Machine tool layout and job procedures, precision measuring, thread cutting, special cutting tools, engine lathe, horizontal and vertical mills, drills, grinders, basic metallurgy, an intro to numerical control are discussed.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MACHT 201 10.0 units
Machine Shop 1
5.0 hours lecture, 15.0 hours laboratory
Grading: letter grade or credit/no credit
Covers safety practices, measurement, tools and equipment, basic projects on the drill press, lathe and milling machine, related math and blueprint reading.

MACHT 202 10.0 units
Machine Shop 2
5.0 hours lecture, 15.0 hours laboratory
Prerequisite: MACHT201
Grading: letter grade or credit/no credit
Covers safety practices, measuring tools, layout, intermediate projects on the lathe, milling machine, shaper, basic heat treating, related math and blueprint reading.

MACHT 203 10.0 units
Machine Shop 3
5.0 hours lecture, 15.0 hours laboratory
Prerequisite: MACHT 202
Grading: letter grade or credit/no credit
Covers safety practices, advanced projects on the tracer lathe, milling machine and horizontal jig borer, surface and cylindrical grinding, related math and blueprint reading.

MACHT 204 10.0 units
Machine Shop 4
5.0 hours lecture, 15.0 hours laboratory
Prerequisite: MACHT 203
Grading: letter grade or credit/no credit
Covers safety practices, advanced machine work, including tool making, gear cutting, numerical control and heat treating, advanced math and theory.
MACHT 250 5.0 units
CNC Manual Programming
4.0 hours lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
Emphasizes the operation, setup and shop floor programming of Computer Numerical Control, machining and turning centers. Provides a thorough understanding of all steps involved in writing programs for CNC machine tool. Covers all the basics of a CNC system, including its components, functions and suitable applications.

MACHT 260 5.0 units
CNC Graphics Programming
4.0 hours lecture, 3.0 hours laboratory
Prerequisite: MACHT 250
Grading: letter grade or credit/no credit
Covers CNC controls and MDI programming on industrial simulators and micro computers. Control-based programming includes geometry description, tool path driving, looping and patterns.

MACHT 271AD 2.0 units
Work Experience-Machine Tool
1.0 hour lecture, 4.1 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
Vocational learning experiences through employment in work experience directly related to the industry.

MACHT 272AD 3.0 units
Work Experience-Machine Tool
1.0 hour lecture, 8.3 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
Vocational learning experiences through employment in work experience directly related to the industry.

MACHT 273AD 4.0 units
Work Experience-Machine Tool
1.0 hour lecture, 12.5 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
Vocational learning experiences through employment in work experience directly related to the industry.

MACHT 421AD 2.0 units
Machine Shop
6.0 hours laboratory
Grading: letter grade or credit/no credit
Tools and equipment, practical projects on the lathe, milling machines, shapers, drill press, grinders, etc. Safety practices are included.

MACHT 450 5.0 units
Advanced Graphics Programming
4.0 hours lecture, 3.0 hours laboratory
Prerequisite: MACHT 250
Grading: letter grade
An advanced study of modern industrial practices in CNC two and three dimensional graphics-based machine tool programming utilizing several different graphics-based controls and computer programming software. Study, develop and write detailed CNC/CAM part programs.

MACHT 460 5.0 units
Advanced CNC Language Programming
4.0 hours lecture, 3.0 hours laboratory
Prerequisite: MACHT 250
Grading: letter grade or credit/no credit
An advanced study of CNC language programming for manufacturing operations. Primary emphasis is on the development of full three axis language-based programming skills utilizing APT, FAPT and DIE II languages. Utilizing the APT language, learn to describe complex part geometries and verify the accuracy of tool paths on computers and machine control systems. Further, program complex CNC part programs with contours and sculptured surfaces and develop different cutter paths.

MANAGEMENT (MGMT)

MGMT 49A 3.0 units
Introduction to Management
3.0 hours lecture
Grading: letter grade
An intro to management with an emphasis on first-line supervision and employer-employee relationships. Transfer Status: Transferable to CSU, see counselor for limitations.

MGMT 49B 3.0 units
Human Resources Management
3.0 hours lecture
Grading: letter grade
This course will focus on the HRM theories and practices of planning, recruiting, selecting, training and evaluating. Discussions will include the important areas of ethics, diversity, compensation & benefits, motivation, communication, quality of work life, labor-management relations and corporate/legal considerations. Transfer Status: Transferable to CSU, see counselor for limitations.

MGMT 58 3.0 units
Leadership and Supervision
3.0 hours lecture
Grading: letter grade
Presents practical case applications, concepts, techniques, skills and practice sessions. Focuses on problems that may arise for women supervising men, as well as other women, and problems faced by an employee moving from the labor force to a supervisory position carrying the new responsibilities of a member of the management team. Not open for credit to students registered in or with credit in INDRL58. Transfer Status: Transferable to CSU, see counselor for limitations.

MGMT 60 3.0 units
Management & Organization Behavior
3.0 hours lecture
Grading: letter grade or credit/no credit
A comprehensive approach to establishing and maintaining a management by objectives program covering a body of tested management principles and techniques. Transfer Status: Transferable to CSU, see counselor for limitations.
MGMT 80 3.0 units
Small Business Entrepreneurship
3.0 hours lecture
Grading: letter grade
Learn to organize and profitably operate a small business enterprise in today’s economic climate, emphasizing the development of a coherent business plan.
Transfer Status: Transferable to CSU, see counselor for limitations.

MGMT 271AD 2.0 units
Work Experience — Business & Management
1.0 hour lecture, 4.1 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
An extension of vocational learning through employment directly related to one’s occupational goal. One unit of credit shall be granted for every 75 hours per semester. Maximum of 12 units.

MGMT 272AD 3.0 units
Work Experience — Business & Management
1.0 hour lecture, 8.3 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
An extension of vocational learning through employment directly related to one’s occupational goal. One unit of credit shall be granted for every 75 hours per semester. Maximum of 12 units.

MGMT 273AD 4.0 units
Work Experience — Business & Management
1.0 hour lecture, 12.5 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
An extension of vocational learning through employment directly related to one’s occupational goal. One unit of credit shall be granted for every 75 hours per semester. Maximum of twelve units.

MARKETING (MKTG)

MKTG 40 3.0 units
Salesmanship
3.0 hours lecture
Grading: letter grade or credit/no credit
This course is designed for those looking at a career in professional sales or as a refresher for current sales professionals. The course will help you develop an understanding of the roles and functions of professional selling in the marketing of goods and services, with an emphasis on the development of strong business relationships.
Transfer Status: Transferable to CSU, see counselor for limitations.

MKTG 41 3.0 units
Advertising
3.0 hours lecture
Grading: letter grade or credit/no credit
This course is designed for those looking at a career in marketing/advertising or as a refresher for current frontline marketing professionals. The course will help you develop an understanding of the role of promotion in the marketing mix and will focus on the specific functions of Integrated Marketing Communication in the marketing of goods and services.
Transfer Status: Transferable to CSU, see counselor for limitations.

MKTG 42 3.0 units
Retailing Principles and Practices
3.0 hours lecture
Grading: letter grade
Study the principles, practices, policies and organization of businesses engaged in retail merchandising.
Transfer Status: Transferable to CSU, see counselor for limitations.

MKTG 47 3.0 units
Essentials of Marketing
3.0 hours lecture
Grading: letter grade
Deals with the importance, analysis, processes and institutions concerned with the distribution of products and services from origin to consumption, as well as trends in current marketing methods and policies.
Transfer Status: Transferable to CSU, see counselor for limitations.

MKTG 271AD 2.0 units
Work Experience — Marketing
1.0 hour lecture, 4.1 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
An extension of vocational learning through employment directly related to one’s occupational goal. One unit of credit shall be granted for every 75 hours per semester. Maximum of twelve units.

MKTG 272AD 3.0 units
Work Experience — Marketing
1.0 hour lecture, 8.3 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
An extension of vocational learning through employment directly related to one’s occupational goal. One unit of credit shall be granted for every 75 hours per semester. Maximum of twelve units.

MKTG 273AD 4.0 units
Work Experience — Marketing
1.0 hour lecture, 12.5 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
An extension of vocational learning through employment directly related to the occupational goal. One unit of credit shall be granted for every 75 hours per semester. Maximum of twelve units.

MATHEMATICS (MATH)

MATH 28 3.0 units
Mathematics for Elementary Teaching I
3.0 hours lecture, 1.0 hour laboratory
Prerequisite: MATH 130 or one year of high school intermediate algebra with a grade of B or better as reflected by the second semester grade and MATH 120 or one year high school geometry.
Recommended Preparation: Eligibility for ENGL 1
Grading: letter grade
Courses of Instruction

One of several courses designed for prospective elementary teachers. Includes pattern recognition, problem solving, sets, functions, numeration systems, number theory, models and algorithms for operations with whole numbers, integers, rational numbers and decimals. Emphasizes the problem solving process. Incorporates group activities and exploration of topics with manipulatives. Writing is emphasized throughout the course.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MATH 29 3.0 units
Math for Elementary Teaching II
3.0 hours lecture, 1.0 hour laboratory
Prerequisite: MATH 28 and 120 or one year of high school geometry.
Grading: letter grade
Designed for prospective elementary teachers. Includes basic geometric vocabulary and notation, constructions, congruence, similarity, measurement, the Pythagorean Theorem, motion geometry and tessellations. Emphasizes the problem solving process. Incorporates group activities and exploration of topics through the use of manipulatives and a geometry drawing utility. Writing is emphasized throughout the course.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MATH 36 (CAN MATH 2) 3.0 units
The Nature of Mathematics
3.0 hours lecture, 1.0 hour laboratory
Prerequisite: MATH 130 or one year of high school intermediate algebra with a grade of B or better as reflected by the second semester grade and MATH 120 or one year high school geometry.
Grading: letter grade
A general education course for students not majoring in science and math and strongly recommended for prospective elementary teachers. This activity-based course covers such topics as set theory, combinations, permutations, logic, probability and statistics.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MATH 37 (CAN MATH 12) 3.0 units
Finite Mathematics
3.0 hours lecture
Prerequisite: Qualification through the Math assessment process or one year High School Intermediate Algebra with a grade of B or better as reflected by the second semester grade or MATH 130.
Grading: letter grade
Includes probability, expectation, linear programming, matrix methods for linear systems and other topics.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MATH 37H 3.0 units
Honors Finite Mathematics
3.0 hours lecture
Prerequisite: Qualification through the Math assessment process or one year High School Intermediate Algebra with a grade of B or better as reflected by the second semester grade or MATH 130 and qualification for the Honors Program.
Grading: letter grade
Selected topics from finite math, including probability, expectation, linear programming, matrix methods for linear systems and other topics.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MATH 40 3.0 units
Trigonometry
3.0 hours lecture
Prerequisite: MATH 130 or one year of high school intermediate algebra with a grade of B or better as reflected by the second semester grade and MATH 120 or one year high school geometry.
Grading: letter grade
Plane trigonometry, including definitions of the curricular functions, properties of functions, inverse functions, identities and other inter-relationships, graphing, complex numbers and applications to right and oblique triangles.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MATH 45 3.0 units
College Algebra
3.0 hours lecture
Prerequisite: Qualification through the Math assessment process or one year High School Intermediate Algebra with a grade of B or better as reflected by the second semester grade or MATH 130.
Grading: letter grade
Advanced algebra topics, including functions, graphing, inverse functions and systems of equations. Students preparing for MATH 60 should take MATH 50 instead. Not open for credit to students registered in or with credit in MATH 50.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MATH 47 (CAN MATH 34) 3.0 units
Calculus for Business
3.0 hours lecture
Prerequisite: MATH 45 or 50
Grading: letter grade or credit/no credit
Includes differentiation of functions of one and several variables; optimization methods; integration of functions of one variable; exponential and logarithmic functions; emphasizes applications to business and economics. Not open for credit to students registered in or with credit in MATH 60.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MATH 50 (CAN MATH 16) 4.0 units
Precalculus Math
4.0 hours lecture
Prerequisite: MATH 40
Grading: letter grade
Preparation for calculus. Includes polynomial, rational, exponential, logarithmic and trigonometric functions and their graphs; applications of trigonometry; systems of equations and inequalities; sequences and series; and topics from analytic geometry.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MATH 55A 4.0 units
Discrete Mathematics I
4.0 hours lecture
Prerequisite: MATH 50
Grading: letter grade
Courses of Instruction

First of two semesters of discrete math for computer related disciplines: Topics include logic, truth tables, elementary set theory, proof techniques and combinations.
Transfer Status: Transferable to CSU, see counselor for limitations.

MATH 55B 3.0 units
Discrete Mathematics II
3.0 hours lecture
Prerequisite: MATH 55A
Grading: letter grade
Second of two semesters of discrete mathematics needed in computer related disciplines: Topics include graph theory, Boolean algebra, algebraic structures and linear algebra.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MATH 60 (CAN MATH 18) 5.0 units
First Calculus Course
5.0 hours lecture
Prerequisite: MATH 50 or high school precalculus with a grade of B or better as reflected by the second semester grade.
Grading: letter grade
Topics include limits, derivative and integral, theory and applications, and differentiation and integration of sines and cosines.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MATH 70 (CAN MATH 20) 5.0 units
Second Calculus Course
5.0 hours lecture
Prerequisite: MATH 60
Grading: letter grade
Topics include transcendental functions, methods of integration, plane analytic geometry, polar coordinates and infinite series.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MATH 80 (CAN MATH 22) 5.0 units
Third Calculus Course
5.0 hours lecture
Prerequisite: MATH 70
Grading: letter grade
Topics include vector calculus, analytic geometry in three dimensions, partial differentiation and multiple integration.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MATH 84 4.0 units
Intro Differential Eqs and Linear Alg
4.0 hours lecture, 1.0 hour laboratory
Prerequisite: MATH 80 (may be taken concurrently).
Grading: letter grade
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MATH 110 4.0 units
First Course in Algebra
5.0 hours lecture
Prerequisite: Qualification through the Math assessment process or MATH 815.
Recommended Preparation: Students who have not met the reading proficiency requirement for graduation are advised to take a reading course before taking this algebra course.
Grading: letter grade or credit/no credit
Includes operations with polynomials and rational expressions; solving linear equations and inequalities; solving quadratic equations by factoring, completing the square and the quadratic formula; graphing; properties of exponents and radical expressions; solving rational and radical equations; solving systems of linear equations; and applications. May receive credit for either MATH 110 or 110A and 110B.

MATH 110A 3.0 units
First Course in Algebra
3.0 hours lecture
Prerequisite: Qualification through the Math assessment process or MATH 815.
Recommended Preparation: Students who have not met the reading proficiency requirement for graduation are advised to take a reading course before taking this algebra course.
Grading: letter grade or credit/no credit
The first of a two semester sequence of the first course in algebra. Topics include review of integers, exponents, operations with polynomial expressions, solving linear equations, factoring and solving quadratic equations by factoring. The math requirement for an Associate degree is not satisfied by MATH 110A alone. May receive credit for either MATH 110 or 110A and 110B.

MATH 110B 3.0 units
First Course in Algebra
3.0 hours lecture
Prerequisite: MATH 110A
Recommended Preparation: Students who have not met the reading proficiency requirement for graduation are advised to take a reading course before taking this algebra course.
Grading: letter grade or credit/no credit
The second of a two semester sequence of the first course in algebra. Topics include rational expressions and equations, equations and inequalities in two variables, graphing, systems of linear equations and inequalities, roots and radicals, solving quadratic equations by methods other than factoring and applications. May receive credit for either MATH 110 or 110A and 110B.

MATH 120 3.0 units
Geometry
3.0 hours lecture
Prerequisite: Qualification through the Math assessment process or MATH 110 or MATH 110B or one year High School Elementary Algebra with a grade of B or better as reflected by the second semester grade.
Grading: letter grade or credit/no credit
A traditional Euclidean geometry course covering such topics as deductive reasoning, basic postulates and theorems, congruency, similarity, constructions, area, and volume.

MATH 130 4.0 units
Intermediate Algebra
5.0 hours lecture
Prerequisite: Qualification through the Math assessment process or MATH 110 or MATH 110B or MATH 880 or one year High School Elementary Algebra with a grade of B or better as reflected by the second semester grade. Recommended Preparation: Students who have not met the reading proficiency requirement for graduation are advised to take a reading course before taking this algebra course.

Grading: letter grade or credit/no credit
Continues the study of algebra in preparation for transfer level courses. Includes polynomial, algebraic, quadratic, exponential and logarithmic functions; graphing; systems of equations and inequalities; factoring; rational expressions and equations; and roots, radicals and complex numbers.

**MATH 650**
Math Learning Center
1.0 hour laboratory
Grading: LBCC Non-Graded Course
Permits a student to proceed at an individual pace through basic math, algebra, systems of measurement, basic geometry, and math functions.

**MATH 805**
Modern Arithmetic
4.0 hours lecture
Grading: credit/no credit
Basic arithmetic covering operations with whole numbers, fractions and decimals; ratios, proportions and percents; and applications of arithmetic to common problems. Not applicable for degree credit.

**MATH 815**
Preparation for Algebra
4.0 hours lecture
Grading: credit/no credit
Topics include order of operations, operations with integers, solving linear equations, intro to graphing, operations with polynomials and an intro to the properties of exponential expressions. Not applicable for degree credit.

**MATH 880**
Review of Basic Algebra
5.0 hours lecture
Grading: credit/no credit
A review of elementary algebra designed as preparation for intermediate algebra.

**MEDICAL ASSISTING (MA)**

**MA 270**
Introduction to Medical Assisting
2.0 hours lecture, 3.0 hours laboratory
Grading: letter grade
Presents clinical procedures utilized by medical assistants. Includes the beginning level skills of asepsis, vital signs, health history, office emergencies, patient education and basic pharmacology. Typically offered for nine weeks.

**MA 280**
Health Care Clinical Procedures
2.0 hours lecture, 3.0 hours laboratory
Prerequisite: MA 270 and health evaluation.
Grading: letter grade
Develop the knowledge and skills required to assist the physician with performing diagnostic tests and to assist with physical therapy. Typically offered for nine weeks.

**MA 282**
Advanced Health Care Clinical Procedures
2.0 hours lecture, 3.0 hours laboratory
Prerequisite: MA 280
Grading: letter grade
An advanced level of skills including: psychosocial skills, medication administration, math for medication administration, electrocardiograph techniques, venipuncture and other health care office clinical skills.

**MA 284AB**
Medical Assisting Specialized Practicum
6.0 hours laboratory
Grading: credit/no credit
Work experience in selected health care offices and/or clinics. Typically offered for nine weeks.

**MA 286**
Medical Assisting Combined Practicum
12.0 hours laboratory
Grading: credit/no credit
Work experience in selected health care offices and/or clinics. Will have both administrative and clinical duties. Typically offered for nine weeks.

**MA 288**
Medical Assisting Practicum Seminar
1.0 hour lecture
Corequisite: MA 284 or 286
Grading: letter grade
Learn an advanced level of skills and theory, including office emergencies, professional office conduct, health care office management, resume writing and techniques utilized in job seeking. Typically offered for nine weeks.

**MA 290**
Basic Medical Insurance Billing
2.0 hours lecture, 3.0 hours laboratory
Grading: letter grade
Develop knowledge of medical insurance billing requirements and skills necessary to successfully file claims and effect collection of payment for medical services given.

**MULTIMEDIA TECHNICIAN**

**MMT 202**
Principles of Interactive Design
1.0 hour lecture
Grading: letter grade or credit/no credit
An overview of essential components required for successful multimedia applications in education, information and training.

**MUSIC (MUSIC)**

**MUSIC 1**
Music Theory 1
3.0 hours lecture, 1.0 hour laboratory
Corequisite: MUSIC 5AD
Recommended Preparation: MUSIC 31 or MUSIC 6
Grading: letter grade or credit/no credit
Music Theory 1 is designed for music majors, but is open to non-majors with musical performance experience. This course covers the following topics through analysis
MUSIC 2 3.0 units
Music Theory 2
3.0 hours lecture, 1.0 hour laboratory
Prerequisite: MUSIC 1
Corequisite: MUSIC 9AD
Grading: letter grade or credit/no credit
Music Theory 2 is designed for music majors, but is open to non-majors with musical performance experience. This course covers the following topics through analysis and application of compositional practices of pieces from the common-practice period: diatonic harmony, primary and secondary triads, non-harmonic tones, dominant seventh chords, four-part writing and figured bass. MUSIC 5AD is a corequisite for MUSIC 1.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MUSIC 3 3.5 units
Music Theory 3
2.0 hours lecture, 1.0 hour laboratory
Prerequisite: MUSIC 2
Grading: letter grade or credit/no credit
Tonal counterpoint, analysis, techniques, dictation, sight singing and keyboard application are covered.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MUSIC 4 3.0 units
Music Theory 4
3.0 hours lecture, 1.0 hour laboratory
Prerequisite: MUSIC 2
Grading: letter grade or credit/no credit
Music Theory 4 is designed for music majors, but is open to non-majors with musical performance experience. This course covers the following topics through analysis and application of compositional practices of pieces from the common-practice period: enharmonic spellings and modulations, extended chords, more altered chords, common-tone diminished sevenths, late-Romantic techniques, serial techniques, set-class theory and other 20th century techniques. MUSIC 10AD is a corequisite for MUSIC 4.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MUSIC 5AD 2.0 units
Musicianship
2.0 hours lecture, 1.0 hour laboratory
Recommended Preparation: Experience performing music and/or MUSIC 31 or 6
Grading: letter grade or credit/no credit
Covers the techniques of musical dictation and sight-singing with basic, tonal materials. Topics covered are scales, intervals, basic chord structures, and harmonic-melodic-rhythmic dictation. This course coordinates with the topics of Music 1, and is a corequisite to Music 1; however, Music 5AB itself does not have a corequisite.
Transfer Status: Transferable to CSU, see counselor for limitations.

MUSIC 6 3.0 units
Introduction to Music Theory
3.0 hours lecture, 1.0 hour laboratory
Grading: letter grade or credit/no credit
A study of musical notation and principles of melody, harmony and form, as well as an intro to sight singing and ear training.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MUSIC 7AB 2.0 units
Elementary Voice
1.0 hour lecture, 3.0 hours laboratory
Prerequisite: MUSIC 1
Recommended Preparation: MUSIC 7AB
Grading: letter grade or credit/no credit
Problems of tone production, breathing, diction, repertoire and song interpretation are studied. Designed to meet the voice requirements of music majors. Development of self-confidence through class performance.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MUSIC 8AD 2.0 units
Musicianship 2
2.0 hours lecture, 1.0 hour laboratory
Prerequisite: MUSIC 1
Grading: letter grade or credit/no credit
This course covers the techniques of musical dictation and sight-singing with intermediate, tonal materials. Topics covered are intermediate scales, intervals, chord structures, and harmonic-melodic-rhythmic dictation.
Transfer Status: Transferable to CSU, see counselor for limitations.

MUSIC 9AD 2.0 units
Musicianship 3
2.0 hours lecture, 1.0 hour laboratory
Grading: letter grade or credit/no credit
This course covers the techniques of musical dictation and sight-singing with advanced, tonal materials. Topics covered are advanced scales, intervals, chord structures, and harmonic-melodic-rhythmic dictation.
Transfer Status: Transferable to CSU, see counselor for limitations.

MUSIC 10AD 2.0 units
Musicianship 4
2.0 hours lecture, 1.0 hour laboratory
Grading: letter grade or credit/no credit
A study of musical notation and principles of melody, harmony and form, as well as an intro to sight singing and ear training.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MUSIC 11AD 1.0 unit
Long Beach City College Viking Chorale
2.0 hours lecture, 4.0 hours laboratory
Recommended Preparation: Prior vocal experience
Grading: letter grade or credit/no credit
Study and performance of standard choral literature. A considerable number of public performances are given each semester and attendance is required for a grade.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MUSIC 12AD 1.0 unit
Long Beach City College Viking Singers
2.0 hours lecture, 4.0 hours laboratory
Grading: letter grade or credit/no credit
Select ensemble with performances throughout the year. All periods and styles of choral music, especially classical chamber literature, are performed. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MUSIC 13AD 1.0 unit
College Symphony Orchestra
2.0 hours lecture, 3.0 hours laboratory
Recommended Preparation: Prior instrumental experience
Grading: letter grade or credit/no credit
Study of orchestral techniques through reading, rehearsal and performance of standard literature. Participation in performances is required. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MUSIC 14AD 1.0 unit
Orchestra
1.0 hour lecture, 3.0 hours laboratory
Recommended Preparation: Prior instrumental experience
Grading: letter grade or credit/no credit
Study of orchestral techniques through reading, rehearsal and performance of orchestral repertoire. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MUSIC 15AD 1.0 unit
Chamber Orchestra
1.0 hour lecture, 3.0 hours laboratory
Recommended Preparation: Prior instrumental experience
Grading: letter grade or credit/no credit
Consists of reading, study and performance of standard repertoire for the small orchestra. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MUSIC 17AD 1.0 unit
Applied Music
6.0 hours laboratory
Recommended Preparation: Prior vocal or instrumental experience.
Grading: letter grade or credit/no credit
For the music major privately studying a keyboard instrument, voice, guitar or any standard band or orchestra instrument. Includes listening to and performing representative literature from various periods and composers. The level of proficiency is determined by faculty adjudication. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MUSIC 19AD 1.0 unit
Beginning Instruments
1.0 hour lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
Instruction in elementary and intermediate principles of playing string, woodwind, brass and percussion instruments. Not designed for the study of the student’s major instrument. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MUSIC 20AD 1.0 unit
LBCC Southland Chorale
2.0 hours lecture, 4.0 hours laboratory
Recommended Preparation: Prior vocal experience.
Grading: letter grade or credit/no credit
The study and performance of choral, orchestra choral works, light opera and musical theatre. Involves participation in all concerts and performances. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MUSIC 21AD 1.0 unit
LBCC Viking Women’s Choir
1.0 hour lecture, 2.0 hours laboratory
Recommended Preparation: Prior vocal experience.
Grading: letter grade or credit/no credit
The study and performance of choral works from all musical periods and styles for treble voices. Participation involves concerts, festivals and tour. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MUSIC 22AD 1.0 unit
LBCC Viking Men’s Choir
1.0 hour lecture, 2.0 hours laboratory
Recommended Preparation: Prior vocal experience.
Grading: letter grade or credit/no credit
The study and performance of choral literature from all musical periods and styles for male voices. Participation involves concerts, festivals and tour. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MUSIC 25AD 1.0 unit
Chamber Music Ensemble
1.0 hour lecture, 3.0 hours laboratory
Recommended Preparation: Prior vocal or instrumental experience.
Grading: letter grade or credit/no credit
The study and performance of music for chamber ensembles. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MUSIC 26AD 1.0 unit
String Ensemble
1.0 hour lecture, 3.0 hours laboratory
Recommended Preparation: Prior instrumental experience.
Grading: letter grade or credit/no credit
Reading, study and the performance of literature associated with the string orchestra. Music from the Baroque, Classical and Romantic periods will be highlighted. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MUSIC 27AD 1.0 unit
Brass Ensemble
1.0 hour lecture, 3.0 hours laboratory
Recommended Preparation: Prior instrumental experience.
Grading: letter grade or credit/no credit
The brass ensemble rehearses and performs music of various periods for this particular medium. The group can range from a quintet to large double brass choirs. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MUSIC 30A 3.0 units
Music History/Antiquity to 1800
3.0 hours lecture, 1.0 hour laboratory
Grading: letter grade or credit/no credit
A survey of music history and literature from antiquity to 1800, including cultural, intellectual and social influences.

MUSIC 30B 3.0 units
Music History and Literature
3.0 hours lecture, 1.0 hour laboratory
Grading: letter grade or credit/no credit
A survey of music history and literature from 1750 to the present, including cultural, intellectual and social influences. Offered Fall semester only.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MUSIC 31 3.0 units
Music Fundamentals
3.0 hours lecture
Grading: letter grade or credit/no credit
An intro experience in the elements of music, stressing an understanding of pitch and rhythm and their application to the creative process of personal expression. Recommended for elementary credential candidates.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MUSIC 33A 3.0 units
Intercultural Music
3.0 hours lecture
Grading: letter grade or credit/no credit
A survey of vernacular and popular music of the American Indian culture as it impacts upon American jazz and European music. Primarily emphasizes those forms passed on by means of oral tradition, hearing, ritual and anthropological recordings.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MUSIC 33B 3.0 units
Intercultural Music
3.0 hours lecture
Grading: letter grade or credit/no credit
A survey of vernacular and popular music of the Mexican and South American cultures as they impact American jazz and European music. Primarily emphasizes those forms passed on by means of oral tradition, hearing, ritual and anthropological recordings.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MUSIC 33C 3.0 units
Intercultural Music
3.0 hours lecture
Grading: letter grade or credit/no credit
A survey of vernacular and popular music of the African culture as it impacts American jazz and European music. Emphasizes those forms passed on by means of oral tradition, hearing, ritual and anthropological recordings.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MUSIC 33D 3.0 units
Intercultural Music
3.0 hours lecture
Grading: letter grade or credit/no credit
A survey of vernacular and popular music of the Asian culture as it impacts American jazz and European music. Emphasizes those forms passed on by means of oral tradition, hearing, ritual and anthropological recordings.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MUSIC 33E 3.0 units
Intercultural Music
3.0 hours lecture
Grading: letter grade or credit/no credit
A survey of vernacular and popular music of the Asian culture as it impacts American jazz and European music. Emphasizes those forms passed on by means of oral tradition, hearing, ritual and anthropological recordings.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MUSIC 34AD 2.0 units
Music Video Production
2.0 hours lecture, 2.0 hours laboratory
Grading: letter grade or credit/no credit
An in-depth exam of the components necessary to produce a music video, including completion of a camera-ready production proposal, script, storyboard and budget consideration. Production of selected projects.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MUSIC 35 3.0 units
Music of Multicultural America
3.0 hours lecture
Grading: letter grade or credit/no credit
A comparative and integrative study of the multicultural musical styles of the United States, based on the fundamental principles of music appreciation. Includes the music of native Americans, European Americans, African Americans, Chicano/Latino Americans, Asian Americans and Mid-Eastern Americans from their historical roots to the present. Analysis of musical traditions from a technical and cultural perspective; and sequential development of listening and descriptive skills through a variety of media including films, recordings and computer-assisted instruction.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MUSIC 38AD 1.0 unit
Wind Ensemble
2.0 hours lecture, 5.0 hours laboratory
Recommended Preparation: Prior instrumental experience.
Grading: letter grade or credit/no credit
Involves the study and performance of music composed for small wind groups, as well as unusual combinations of wind and percussion instruments, usually with one player per part. The musical literature represented includes the baroque, classical, romantic and twentieth century.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MUSIC 39 3.0 units
Appreciation of Music
3.0 hours lecture, 1.0 hour laboratory
Grading: letter grade or credit/no credit
A broad approach to musical literature and its place in the cultural development of Western civilization. Designed for the non-major.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MUSIC 40 3.0 units
Appreciation of Music
3.0 hours lecture, 1.0 hour laboratory
Grading: letter grade or credit/no credit
A broad approach to musical literature and its place in the cultural development of Western civilization. Designed for non-majors.
Courses of Instruction

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**MUSIC 41AD  1.0 unit**

**College Chorus**
1.0 hour lecture, 3.0 hours laboratory
Recommended Preparation: Prior vocal experience
Grading: letter grade or credit/no credit
Study of vocal techniques and music reading through performance of choral music. Participation in a very limited number of performances each semester is required.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**MUSIC 42AD  1.0 unit**

**Professional Advanced Vocal Ensembles**
1.0 hour lecture, 3.0 hours laboratory
Recommended Preparation: MUSIC 78AD and/or 44AD
Grading: letter grade or credit/no credit
For advanced ensemble and solo singers combining the technology of computers, synthesizers and modern recording facilities.

Transfer Status: Transferable to CSU, see counselor for limitations.

**MUSIC 44AD  1.0 unit**

**The Evening Jazz Choir**
2.0 hours lecture, 4.0 hours laboratory
Recommended Preparation: Prior vocal experience
Grading: letter grade or credit/no credit
Jazz standards and pop classics performed and studied by this choir. Comprised of people within the community who usually work full-time in a non-related occupation and can rehearse and perform during the evening.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**MUSIC 45AD  1.0 unit**

**Gospel Music**
2.0 hours lecture, 3.0 hours laboratory
Grading: letter grade
Music 45AD covers the study and performance of Gospel Music including traditional, historic, contemporary, Praise and Worship. Emphasis will be directed to vocal techniques, genre, and the origin of Gospel Music. Key figures in the field will be studied.

Transfer Status: Transferable to CSU, see counselor for limitations.

**MUSIC 46AD  1.0 unit**

**College Symphonic Band**
2.0 hours lecture, 4.0 hours laboratory
Recommended Preparation: Prior instrumental experience.
Grading: letter grade or credit/no credit
A performance organization dedicated to the production of a wide variety of musical literature and an association with professional soloists.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**MUSIC 47AD  1.0 unit**

**Wind Symphony**
1.0 hour lecture, 3.0 hours laboratory
Recommended Preparation: Prior instrumental experience.
Grading: letter grade or credit/no credit
A performance organization which seeks out, prepares and performs wind band literature from all periods and musical styles. While all repertoire is considered, the majority of music performed is somewhat more traditional in nature and tends to be focused more on mainstream 20th Century literature composed and transcribed for wind instruments.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**MUSIC 48AD  1.0 unit**

**Recording Band**
4.0 hours laboratory
Recommended Preparation: Prior instrumental experience.
Grading: letter grade or credit/no credit
An opportunity to experience a professional recording situation, such as click-tracks, overdubbing and the study of microphone capabilities for live recording sessions. Learn recording techniques. Both the traditional and commercial music student will benefit.

Transfer Status: Transferable to CSU, see counselor for limitations.

**MUSIC 49AD  1.0 unit**

**Viking Show Band**
2.0 hours lecture, 4.0 hours laboratory
Recommended Preparation: Prior instrumental experience.
Grading: letter grade or credit/no credit
Perform for all home football and basketball games, as well as pep rallies, performances on campus and at a variety of special activities in and around the community.

Transfer Status: Transferable to CSU, see counselor for limitations.

**MUSIC 50AD  1.0 unit**

**Performance Showcase/Ensemble Workshop**
1.0 hour lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
An ensemble that performs arrangements in various styles and develops sight-reading skills. In addition, the ensemble interacts as small groups to perform in concert at the conclusion of the semester.

Transfer Status: Transferable to CSU, see counselor for limitations.

**MUSIC 51A  2.0 units**

**Beginning Piano 1**
2.0 hours lecture, 2.0 hours laboratory
Grading: letter grade or credit/no credit
Basic keyboard technique, major and minor scales, sight reading and technical skills are encountered in beginning piano music.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**MUSIC 51B  2.0 units**

**Beginning Piano 2**
2.0 hours lecture, 2.0 hours laboratory
Prerequisite: MUSIC 51A
Grading: letter grade or credit/no credit
Basic keyboard technique, major and minor scales, sight reading and technical skills are encountered in beginning piano music.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.
**MUSIC 52AD 2.0 units**  
Advanced Piano  
1.0 hour lecture, 3.0 hours laboratory  
Prerequisite: MUSIC 51B  
Grading: letter grade or credit/no credit  
A continuation of technical skills, technical studies, sight reading and piano literature from intermediate to advanced levels.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**MUSIC 55AD 1.0 unit**  
Guitar  
1.0 hour lecture, 2.0 hours laboratory  
Grading: letter grade or credit/no credit  
Beginning study of the guitar, using a classical approach to basic technique, musicianship and repertory.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**MUSIC 58AD 1.0 unit**  
College Philharmonia  
2.0 hours lecture, 3.0 hours laboratory  
Recommended Preparation: Prior successful orchestral experience.  
Grading: letter grade  
Study and performance of the orchestral repertory and works by contemporary composers. Emphasizes ensemble techniques including articulation, balance, phrasing, expression and accompanying. Two concerts minimum per semester.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**MUSIC 59AD 2.0 units**  
Digital Recording and Sampling Technique  
2.0 hours lecture, 3.0 hours laboratory  
Grading: letter grade or credit/no credit  
Deals with the study of the digital recording and sampling techniques used in contemporary music and film scoring (i.e., re-mixes, rap music, pop, contemporary jazz, rhythm & blues, sound effects, etc.).  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**MUSIC 60AD 2.0 units**  
Pro Tools (Digital Audio Recording/Edit)  
2.0 hours lecture, 2.0 hours laboratory  
Grading: letter grade  
Provides instruction on the functions and operations of Pro Tools software and a general overview of Pro Tools related hardware. Provides hands-on experience through ‘real-world’ related assignments for students to record, edit and mix digital audio in a Macintosh computer environment. Although the Pro Tools systems vary in specification, features and price, the user interface for all systems is consistent and enables the student to translate learned skills to any high-end professional Digital Audio Workstation.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**MUSIC 61AD 1.0 unit**  
Music Mastering  
1.0 hour lecture, 2.0 hours laboratory  
Recommended Preparation: MUSIC 95  
Grading: letter grade or credit/no credit  
A hands-on class focusing on the processing of master mixdowns in preparation for the manufacturing of CD’s, cassettes and LP’s.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**MUSIC 62AD 1.0 unit**  
Commercial Guitar/Bass Stu (Beginning)  
1.0 hour lecture, 1.0 hour laboratory  
Grading: letter grade or credit/no credit  
A study and practice of the beginning techniques of guitar and bass as they are used and performed in studio and live performance.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**MUSIC 63AD 1.0 unit**  
Commercial Guitar/Bass Studies (Interm)  
1.0 hour lecture, 1.0 hour laboratory  
Grading: letter grade or credit/no credit  
A study and practice of the intermediate techniques of the guitar and bass as they are used and performed in the studio and live performances.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**MUSIC 65AD 2.0 units**  
Advanced-Pro Recording Techniques  
1.0 hour lecture, 4.0 hours laboratory  
Prerequisite: MUSIC 96AD  
Recommended Preparation: Audition  
Grading: letter grade or credit/no credit  
A hands-on approach into the operation and maintenance of a 24-track recording studio.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**MUSIC 66AD 2.0 units**  
Studio Mixdown Techniques  
1.0 hour lecture, 3.0 hours laboratory  
Prerequisite: MUSIC 94  
Recommended Preparation: Prior vocal or instrumental experience.  
Grading: letter grade or credit/no credit  
A hands-on approach into the complex techniques of the multi-track studio mixdown process, including the use of outboard gear, the placement of recorded components within the stereo spectrum, the aesthetic considerations in the final mix and automated mixing.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**MUSIC 67AD 2.0 units**  
Studio Design  
1.0 hour lecture, 3.0 hours laboratory  
Grading: letter grade or credit/no credit  
The study of recording studio design based on the evaluation of acoustical specifications, equipment needs and industry standards, space availability, budget requirements and manufacturer equipment specifications.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**MUSIC 68 2.0 units**  
Basic Audio Theory  
2.0 hours lecture  
Grading: letter grade or credit/no credit  
An intro to the theoretical and practical aspects of recording studio technology.
Courses of Instruction

Transfer Status: Transferable to CSU, see counselor for limitations.

MUSIC 69A 2.0 units
Analysis of Music Video
2.0 hours lecture
Grading: letter grade or credit/no credit
An in-depth exam into the development of different styles of music videos and their relationship to current music videos in today’s music industry.
Transfer Status: Transferable to CSU, see counselor for limitations.

MUSIC 69B 2.0 units
Analysis of Music Video
2.0 hours lecture
Grading: letter grade or credit/no credit
An in-depth exam into the development of different styles of music videos and their relationship to current music videos in today’s music industry.
Transfer Status: Transferable to CSU, see counselor for limitations.

MUSIC 69C 2.0 units
Analysis of Music Video
2.0 hours lecture
Grading: letter grade or credit/no credit
An in-depth exam into the development of different styles of music videos and their relationship to current music videos in today’s music industry.
Transfer Status: Transferable to CSU, see counselor for limitations.

MUSIC 69D 2.0 units
Analysis of Music Video
2.0 hours lecture
Grading: letter grade or credit/no credit
An in-depth exam into the development of different styles of music videos and their relationship to current music videos in today’s music industry.
Transfer Status: Transferable to CSU, see counselor for limitations.

MUSIC 70AD 2.0 units
Studio Maintenance
1.0 hour lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
A hands-on approach to the techniques necessary for successful performance in the maintenance of the recording studio and sound reinforcement equipment, including troubleshooting, cable connections, tape deck calibration and equipment design and construction.
Transfer Status: Transferable to CSU, see counselor for limitations.

MUSIC 71AD 2.0 units
Introduction to Music Technology
1.0 hour lecture, 4.0 hours laboratory
Grading: letter grade or credit/no credit
Designed to acquaint students to the elements needed to create music within today’s industry: traditional music notation, music processing with computers and computer controlled music.
Transfer Status: Transferable to CSU, see counselor for limitations.

MUSIC 72AD 2.0 units
Com Improvisation/Arranging/Scoring
1.0 hour lecture, 3.0 hours laboratory
Recommended Preparation: Prior vocal experience.
Grading: letter grade or credit/no credit
Designed to prepare students for careers as professional arrangers and improvisationalists. Study writing and performance principles as they apply to the recording industry.
Transfer Status: Transferable to CSU, see counselor for limitations.

MUSIC 74AD 2.0 units
Commercial Solo Voice
1.0 hour lecture, 4.0 hours laboratory
Recommended Preparation: MUSIC 7AB
Grading: letter grade or credit/no credit
Designed to help pop, rock, gospel and jazz singers learn and improve their craft. Work with a PA system, accompanist, audio and video tapes. Weekly critiques by instructor.
Transfer Status: Transferable to CSU, see counselor for limitations.

MUSIC 75A 1.0 unit
The Music Business
3.0 hours lecture
Grading: letter grade or credit/no credit
How the music business works, job opportunities, responsibilities and jobs related to the music business.
Students have the opportunity to research areas of interest and discuss the music industry with guest speakers.
Transfer Status: Transferable to CSU, see counselor for limitations.

MUSIC 75B 1.0 unit
The Music Business
3.0 hours lecture
Grading: letter grade or credit/no credit
How the music business works, job opportunities, responsibilities and jobs related to the music business.
Students have the opportunity to research areas of interest and discuss the music industry with guest speakers.
Transfer Status: Transferable to CSU, see counselor for limitations.

MUSIC 76AD 1.0 unit
Recording Techniques Lab
3.0 hours laboratory
Grading: letter grade or credit/no credit
Advanced individualized study and group projects in multi-tracking studio techniques.
Transfer Status: Transferable to CSU, see counselor for limitations.

MUSIC 77AD 1.0 unit
Studio Performance Techniques
1.0 hour lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
A lab in recording performances to introduce studio situations. An opportunity to prepare for and participate in live recordings.
Transfer Status: Transferable to CSU, see counselor for limitations.

MUSIC 78AD 1.0 unit
Studio Singers
2.0 hours lecture, 4.0 hours laboratory
Recommended Preparation: Prior vocal experience
Grading: letter grade or credit/no credit
Study and performance of jazz and pop literature, emphasizing the stylistics characteristic of music from this style. Public performance and studio recording required. Transfer Status: Transferable to CSU, see counselor for limitations.

**MUSIC 79AD**  
1.0 unit  
**Commercial Guitar/Bass Studies (Adv)**  
1.0 hour lecture, 2.0 hours laboratory  
Grading: letter grade or credit/no credit  
A study of the techniques used in the playing of the guitar and electric bass. Designed to acquaint students with the skills necessary in the commercial music environment. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**MUSIC 80AD**  
1.0 unit  
**“City” Jazz Big Band**  
1.0 hour lecture, 5.0 hours laboratory  
Grading: letter grade or credit/no credit  
Simulation of commercial, professional performing situations. Designed to augment a program of private study on one’s major instrument or voice. Transfer Status: Transferable to CSU, see counselor for limitations.

**MUSIC 81AD**  
2.0 units  
**Commercial Keyboard**  
1.0 hour lecture, 3.0 hours laboratory  
Grading: letter grade or credit/no credit  
A study of the piano for non-piano majors who plan to use the piano as a song writing and music theory study tool. Transfer Status: Transferable to CSU, see counselor for limitations.

**MUSIC 82AD**  
2.0 units  
**Sound Reinforcement**  
2.0 hours lecture, 4.0 hours laboratory  
Prerequisite: MUSIC 94  
Grading: letter grade or credit/no credit  
Hands-on instruction in the use of sound reinforcement equipment, including micing techniques for live sound, selection and assembly of live sound systems and the development of mixing expertise in a live sound venue. Transfer Status: Transferable to CSU, see counselor for limitations.

**MUSIC 83AD**  
1.0 unit  
**Film/Video Music/Scoring**  
1.0 hour lecture, 2.0 hours laboratory  
Grading: letter grade or credit/no credit  
A study of the various aspects of writing for video, motion pictures and television, including appropriate compositional techniques, stylistic considerations and an in-depth study of the use and application of computer technology in writing music for video and film media. Transfer Status: Transferable to CSU, see counselor for limitations.

**MUSIC 84AD**  
2.0 units  
**Commercial Songwriting**  
2.0 hours lecture, 4.0 hours laboratory  
Grading: letter grade or credit/no credit  
To help develop and improve the student’s effectiveness at analyzing songs written by professional song writers and an intro to contemporary music technology and its applications for the song writer. Gain insight into the operation and usage of the drum machine, synthesizer, computers and how they relate to contemporary song writing. Transfer Status: Transferable to CSU, see counselor for limitations.

**MUSIC 85AD**  
1.0 unit  
**Commercial Small Jazz Group**  
1.0 hour lecture, 3.0 hours laboratory  
Recommended Preparation: Prior instrumental experience  
Grading: letter grade or credit/no credit  
The study and performance of music for small commercial groups with an emphasis on improvisation. Transfer Status: Transferable to CSU, see counselor for limitations.

**MUSIC 86AD**  
2.0 units  
**Record Production (Fundamentals)**  
1.0 hour lecture, 6.0 hours laboratory  
Prerequisite: MUSIC 94  
Grading: letter grade or credit/no credit  
Provides the knowledge needed to function as a producer in today’s state-of-the-art recording studios. Transfer Status: Transferable to CSU, see counselor for limitations.

**MUSIC 87AD**  
1.0 unit  
**Vocal Jazz Trios, Quintets, Octettes**  
1.0 hour lecture, 3.0 hours laboratory  
Recommended Preparation: Prior vocal experience.  
Grading: letter grade or credit/no credit  
Study and performance of jazz standards and pop classics of unusually difficult arrangements for varying vocal harmony. Many concerts per semester. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**MUSIC 88AD**  
1.0 unit  
**Small Studio Lab**  
3.0 hours laboratory  
Recommended Preparation: One semester of MUSIC 94, 95, 96AD or 98AD  
Grading: letter grade or credit/no credit  
Independent study in recording studio projects that may involve the use of synthesizers, drum machines, digital effects units and computers in the small studio environment. An opportunity for producers/songwriters/ recording engineers to develop studio techniques. Transfer Status: Transferable to CSU, see counselor for limitations.

**MUSIC 89B**  
3.0 units  
**The History of Rock Music**  
3.0 hours lecture, 1.0 hour laboratory  
Grading: letter grade or credit/no credit  
A chronological study of the elements of rock music tracing the development and evolution of the styles and structures of this genre from 1968 to the present. Significance will also be given to the sociological and political impact of this music. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**MUSIC 90AD**  
2.0 units  
**Commercial Music Theory**  
1.0 hour lecture, 3.0 hours laboratory  
Grading: letter grade or credit/no credit
A study of diatonic and nondiatonic harmony, including the circle of fifths, common chords and progressions with direct application to commercial instrumental techniques, song forms and lead sheet usage.

Transfer Status: Transferable to CSU, see counselor for limitations.

**MUSIC 91AD** 2.0 units

**Special Studies**

1.0 hour lecture, 3.0 hours laboratory

Recommended Preparation: Prior vocal or instrumental experience.

Grading: letter grade or credit/no credit

Directed study of special problems in music theory, composition, musicology, performance practice or organization and administration of instrumental or vocal ensembles.

Transfer Status: Transferable to CSU, see counselor for limitations.

**MUSIC 92AD** 1.0 unit

**Applied Vocal & Instrumental Music**

10.0 hour laboratory

Grading: letter grade or credit/no credit

Designed for music majors to complete. Strongly recommended instruction on either a keyboard instrument, voice, guitar or any standard instrument of the band or orchestra. Includes performance of representative music literature from various periods and composers. Level of proficiency is determined by faculty adjudication.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**MUSIC 93AD** 2.0 units

**Record Production (Using MIDI)**

1.0 hour lecture, 5.0 hours laboratory

Grading: letter grade or credit/no credit

A hands-on approach into the production of records, utilizing computer technology and MIDI based musical equipment.

Transfer Status: Transferable to CSU, see counselor for limitations.

**MUSIC 94** 2.0 units

**Beginning Recording Techniques**

2.0 hours lecture, 2.0 hours laboratory

Grading: letter grade or credit/no credit

Hands-on instruction for beginners in the use of multitrack recording systems, emphasizing the development of critical listening skills and a recording project.

Transfer Status: Transferable to CSU, see counselor for limitations.

**MUSIC 95** 2.0 units

**Intermediate Recording Techniques**

2.0 hours lecture, 2.0 hours laboratory

Prerequisite: MUSIC 94

Grading: letter grade or credit/no credit

Intermediate recording theory and hands-on instruction in the use of a multitrack studio, emphasizing microphone techniques.

Transfer Status: Transferable to CSU, see counselor for limitations.

**MUSIC 96AD** 2.0 units

**Advanced Recording Techniques**

1.0 hour lecture, 4.0 hours laboratory

Prerequisite: MUSIC 95

Grading: letter grade or credit/no credit

Advanced recording techniques, with hands-on instruction in the use of a 16-track studio. Individualized study and research into studio procedures, advanced mic ing techniques and the development of mixing expertise.

Transfer Status: Transferable to CSU, see counselor for limitations.

**MUSIC 97AD** 2.0 units

**Tools of the Music Trade**

2.0 hours lecture, 4.0 hours laboratory

Grading: letter grade or credit/no credit

The study of the tools, skills, principles, methods and terminology used in the music trades including MIDI (Musical Instrument Digital Interface) systems and an in-depth survey of available technology.

Transfer Status: Transferable to CSU, see counselor for limitations.

**MUSIC 271AD** 2.0 units

**Work Experience-Music**

1.0 hour lecture, 4.2 hours laboratory

Corequisite: Enrollment in at least seven units including this course.

Grading: letter grade or credit/no credit

Vocational learning experiences through employment directly related to the industry.

**MUSIC 272AD** 3.0 units

**Work Experience-Music**

1.0 hour lecture, 8.3 hours laboratory

Corequisite: Enrollment in at least seven units including this course.

Grading: letter grade or credit/no credit

Vocational learning experiences through employment directly related to the industry.

**MUSIC 273AD** 4.0 units

**Work Experience-Music**

1.0 hour lecture, 12.5 hours laboratory

Corequisite: Enrollment in at least seven units including this course.

Grading: letter grade or credit/no credit

Vocational learning experiences through employment directly related to the industry.

**NURSING ASSISTANT (NA)**

**NA 210A** 6.0 units

**Nursing Assistant**

3.5 hours lecture, 7.5 hours laboratory

Prerequisite: VN 810A

Recommended Preparation: Current CPR card for health care providers, health evaluation, live scan fingerprints.

Grading: letter grade

A beginning nursing course designed to develop an understanding of basic nursing skills. Upon successful completion the student qualifies for testing to be certified as a nursing assistant by the State of California.
The course also meets federal guidelines for nursing assistant certification. Fingerprinting with a criminal record report is required the first week of the course. Compliance with all clinical agency health and safety policies is required the second week of the course.

**NA 210B**  
2.0 units  
**Home Health Aide**  
1.5 hours lecture, 1.5 hours laboratory  
Prerequisite: VN 210A or certification as a nursing assistant from an approved nursing assistant course.  
Current CPR card for health care providers.  
Grading: letter grade  
For the Certified Nurse Assistant who has completed an approved nurse aide program and wishes to become a Certified Home Health Aide. Provides the theory and practice required by the California State Department of health Services for certification as a Home Health Aide. Compliance with all clinical agency health and safety policies is required the second week of the course.

**NA 810A**  
1.5 units  
**Orientation for Nursing Assistant Program**  
1.5 hours lecture  
Grading: credit/no credit  
For the student who is planning to enter the nurse assistant and/or home health aide course. Designed to orient the student to a nursing career and provide skills and information necessary for successful completion of the nursing assistant program.

**NURSING, ASSOCIATE DEGREE**  
**NURSING- RN (ADN)**

**ADN 11A**  
2.5 units  
**Introduction to Nursing**  
2.5 hours lecture  
Prerequisite: ENGL 1, 105 or ESL 34 and BIO 60, 60L, and CDECE47.  
Corequisite: PSYCH 1 or SOCIO 1 (may be taken as prerequisite). BIO 62.  
Grading: letter grade or credit/no credit  
An intro to the basic concepts of Orem’s Self-Care Requisites Nursing theory. Included are the basic knowledge, skills and attitudes necessary to meet or to assist in meeting the universal self care requisites of the hospitalized adult. Includes the fundamental concepts upon which subsequent courses in the nursing program build.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**ADN 11AL**  
1.5 units  
**Introduction to Nursing Lab**  
4.5 hours laboratory  
Prerequisite: ENGL 1, 105 or ESL 34 and BIO 60, 60L, and CDECE47. Compliance with all clinical agency health and safety policies is required the first day of the course.  
Corequisite: BIO 62 and ADN 11A.  
Grading: letter grade or credit/no credit  
On-campus lab practice and application of the course content in live nursing situations.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**ADN 11B**  
2.5 units  
**Health Deviations 1**  
2.5 hours lecture  
Prerequisite: ADN 11A and ADN 11AL.  
Corequisite: BIO 62.  
Grading: letter grade or credit/no credit  
Intro to the demands for increased care which are necessitated by deviations in health in the adult. Emphasizes the self-care requisites of intake of air, intake of water, balance of activity and rest and normalcy, as well as the nursing process and medications, oral and injected.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**ADN 11BL**  
1.5 units  
**Health Deviations 1 Lab**  
4.5 hours laboratory  
Prerequisite: ADN 11A and 11AL. Compliance with all clinical agency health and safety policies is required the first day of the course.  
Corequisite: BIO 62 and ADN 11B.  
Grading: letter grade or credit/no credit  
On-campus lab practice and application of the course content in live nursing situations. Skill activities include oral and injected drug administration, respiratory assessment and related skills.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**ADN 12A**  
2.5 units  
**Health Deviations 2**  
2.5 hours lecture  
Prerequisite: ADN 11B and 11BL, BIO 62.  
Corequisite: BIO 61.  
Grading: letter grade or credit/no credit  
Continues to explore the demand for increased care, necessitated by deviations in the health of the adult. Emphasizes the requisites of sufficient intake of water and food, elimination and excretion. In addition, the effects and results of specific pathological conditions and treatment modalities upon the surgical patient will be studied.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**ADN 12AL**  
1.5 units  
**Health Deviations 2: Lab**  
4.5 hours laboratory  
Prerequisite: ADN 11B, 11BL and BIO 62. Compliance with all clinical agency health and safety policies is required the first day of the course.  
Corequisite: BIO 61 and ADN 12A.  
Grading: letter grade or credit/no credit  
On-campus lab practice and application of course content in the live nursing situation. Skill activities include intravenous therapy, selected physical assessments, medical and surgical aseptic practices and related skills.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**ADN 12B**  
2.5 units  
**Health Deviations 3**  
2.5 hours lecture  
Prerequisite: ADN 12A, 12AL and BIO 62.  
Corequisite: BIO 61.  
Grading: letter grade or credit/no credit  
Continues to explore the demands for increased care necessitated by deviations in the health of the adult. Emphasizes the requisites of sufficient intake of water and food, elimination and excretion. In addition, the effects and results of specific pathological conditions
and treatment modalities upon the medical patient will be studied.  
Transfer Status: Transferable to CSU, see counselor for limitations.

ADN 128L 1.5 units
Health Deviations 3: Lab  
4.5 hours laboratory  
Prerequisite: ADN 12A, 12AL, and BIO 62. Compliance with all clinical agency health and safety policies is required the first day of the course.  
Corequisite: BIO 61 and ADN 12B.  
Grading: letter grade or credit/no credit  
On-campus lab practice and application of course content in the live nursing situation. Skill activities include intravenous therapy, selected physical assessments, medical and surgical aseptic practices and related skills.  
Transfer Status: Transferable to CSU, see counselor for limitations.

ADN 12CL 0.5 unit  
Intermediate Nursing Skills Laboratory  
1.5 hours laboratory  
Prerequisite: ADN 11BL  
Corequisite: ADN 12AL and 12BL  
Grading: letter grade  
The course content includes oral presentation of written nursing case studies and both instruction and practice of intermediate level nursing skills in a campus laboratory setting. Skill activities include intravenous therapy, cardiovascular nursing skills and bedside collection and testing of laboratory specimens.  
Transfer Status: Transferable to CSU, see counselor for limitations.

ADN 20A 1.0 unit  
Transition to Second Level Nursing  
1.0 hour lecture  
Prerequisite: BIO 62 and CDECE 47, PSYCH 1, ENGL 105 or 1 or ESL 34 and Licensed Vocational Nurse.  
Corequisite: ADN 202AD.  
Grading: letter grade or credit/no credit  
Designed to prepare advanced placement nursing students for second level nursing. The major foci are: (1) caring for the adult patient in critical care areas and (2) caring for the ill child in the hospital setting and in the pediatric clinic. Emphasizes the educative/supportive role of the nurse.  
Transfer Status: Transferable to CSU, see counselor for limitations.

ADN 21A 2.5 units  
Women’s Health  
2.5 hours lecture  
Prerequisite: ADN 12B, 12BL or 20A and BIO 62.  
Grading: letter grade or credit/no credit  
Emphasizes the developmental self-care requisites, health deviations and universal self-care requisites of women and newborns. Involves study of gynecological problems and deviations from the normal pregnancy, as well as care during the prenatal, intrapartal and postpartal periods of the normal and high risk pregnancy. Care and assessment of the normal newborn are included.  
Transfer Status: Transferable to CSU, see counselor for limitations.

ADN 21AL 3.0 units  
Women’s Health Lab  
9.0 hours laboratory  
Prerequisite: ADN 12B, 12BL or 20A and BIO 62.  
Compliance with all clinical agency health and safety policies is required the first day of the course.  
Corequisite: ADN 21A  
Grading: letter grade or credit/no credit  
On-campus lab practice and application of course content in intensive care, pediatrics and related settings. Emphasizes the educative/supportive role of the nurse.  
Transfer Status: Transferable to CSU, see counselor for limitations.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
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<tbody>
<tr>
<td><strong>ADN 22B</strong></td>
<td>2.5 units</td>
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<tr>
<td><strong>Advanced Nursing II Role Transition</strong></td>
<td>2.5 hours laboratory</td>
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<td>Prerequisite: ADN 22A and 22AL or 322A.</td>
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<td>Grading: letter grade or credit/no credit</td>
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<tr>
<td>Provides the opportunity to integrate all previously learned theories and skills, advanced geriatric content and leadership theory in a primary or team nursing setting on various hospital shifts and in the home health setting. Emphasis is placed on the role transition from student to graduate nurse.</td>
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<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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</tbody>
</table>

| **ADN 22BL** | 3.0 units |
| **Adv Nursing II-Role Transition Lab** | 9.0 hours laboratory |
| Prerequisite: ADN 22A and 22AL or 322A. Compliance with all clinical agency health and safety policies is required the first day of the course. |
| Corequisite: ADN 22B |
| Grading: letter grade or credit/no credit |
| Provides the opportunity to integrate all previously learned theories and skills, advanced geriatric content and leadership theory in a primary or team nursing setting on various hospital shifts and in the home health setting. Emphasizes the role transition from student to graduate nurse. |
| Transfer Status: Transferable to CSU, see counselor for limitations. |

| **ADN 31A** | 1.0 unit |
| **Trends in Nursing A** | 1.0 hour lecture |
| Corequisite: ADN 21A, 21AL, 21B and 21BL |
| Grading: letter grade or credit/no credit |
| Designed to study the trends and issues which affect current nursing practice. Major foci include the history of nursing, current social settings for the practice of nursing, the legal and ethical relationships in nursing, the economics of health care, the interpersonal relationships among health care professionals and current issues. |
| Transfer Status: Transferable to CSU, see counselor for limitations. |

| **ADN 31B** | 1.0 unit |
| **Trends in Nursing B** | 1.0 hour lecture |
| Prerequisite: ADN 31A |
| Corequisite: ADN 22A, 22AL, 22B and 22BL |
| Grading: credit/no credit |
| Designed to continue the study of the trends and issues in nursing. Major foci include preparation for and exploration of employment opportunities, continuing education opportunities, preparation for licensing exam, development of a personal philosophy of nursing, the current role of the nurse and the transition into the RN role. Opportunities for professional involvement and current issues in nursing. |
| Transfer Status: Transferable to CSU, see counselor for limitations. |

| **ADN 200AD** | 0.5 unit |
| **Nursing Skills Adjunct Laboratory** | 1.5 hours laboratory |
| Grading: credit/no credit |
| Allows self-paced, individualized instruction in first semester basic bedside nursing skills with supervised practice to improve performance. Builds on skills practiced in ADN 200AD. Designed for students in the RN program, students approved for re-entry, individuals who are currently licensed as LVNs and/or foreign graduate nurses. |

| **ADN 201AD** | 0.5 unit |
| **Nursing Skills Adjunct Laboratory** | 1.5 hours laboratory |
| Grading: credit/no credit |
| Allows self-paced, individualized instruction in first semester basic bedside nursing skills with supervised practice to improve performance. Builds on skills practiced in ADN 200AD. Designed for students in the RN program, students approved for re-entry, individuals who are currently licensed as LVNs and/or foreign graduate nurses. |

| **ADN 202AD** | 0.5 unit |
| **Nursing Skills Adjunct Laboratory** | 1.5 hours laboratory |
| Grading: credit/no credit |
| Allows self-paced, individualized instruction in second semester medical and surgical nursing skills with supervised practice to improve performance. Builds on skills practiced in ADN 201AD. Designed for students in the RN program, students approved for re-entry, individuals who are currently licensed as LVNs and/or foreign graduate nurses. |

| **ADN 203AD** | 0.5 unit |
| **Nursing Skills Adjunct Laboratory** | 1.5 hours laboratory |
| Grading: credit/no credit |
| Allows self-paced, individualized instruction in maternal-child and mental health nursing skills with supervised practice to improve performance. Builds on skills practiced in ADN 202AD. Designed for students in the RN program, students approved for re-entry, individuals who are currently licensed as LVNs and/or foreign graduate nurses. |

| **ADN 204AD** | 0.5 unit |
| **Nursing Skills Adjunct Laboratory** | 1.5 hours laboratory |
| Grading: credit/no credit |
| Allows self-paced, individualized instruction in advanced medical-surgical, critical care and pediatric nursing skills with supervised practice to improve performance. Builds on skills practiced in ADN 203AD. Designed for students in the RN program, students approved for re-entry, individuals who are currently licensed as LVNs and/or foreign graduate nurses. |

| **ADN 212AD** | 2.0 units |
| **Clinical Practicum I** | 6.0 hours laboratory |
| Prerequisite: ADN 11A and 11B. Compliance with all clinical agency health and safety policies is required the first day of the course. |
| Corequisite: ADN 12A or 12B |
| Grading: credit/no credit |
| Student nurse experiences in approved health care agencies through a Board of Registered Nursing approved program to apply theory and principles taught in the classroom to the clinical setting. |

| **ADN 221AD** | 2.0 units |
| **Clinical Practicum II** | 6.0 hours laboratory |
| Prerequisite: ADN 12A and 12B. Compliance with all clinical agency health and safety policies is required the first day of the course. |
Corequisite: ADN 21A or 21B  
Grading: credit/no credit  
Student nurse experiences in approved health care agencies through a Board of Registered Nursing approved program to apply theory and principles taught in the classroom to the clinical setting.

ADN 222AD 2.0 units  
Clinical Practicum III  
6.0 hours laboratory  
Prerequisite: ADN 21A and 21B. Compliance with all clinical agency health and safety policies is required the first day of the course.  
Corequisite: ADN 22A or 22B  
Grading: credit/no credit  
Student nurse worker experiences in approved health care agencies through a Board of Registered Nursing approved program to apply theory and principles taught in the classroom to the clinical setting.

ADN 286 3.0 units  
Nursing Applications of Pharmacology  
3.0 hours lecture  
Grading: letter grade  
An intro to the study of drugs and drug administration as a part of nursing care. Prototype drugs are classified into large sets so that relationships can be perceived and remembered. General principles of drug actions and interactions, both therapeutic and undesirable, are the basis for the study of individual drugs. Calculation of drug dosages is emphasized. Not open for credit to students registered in or with credit in VN 286.

ADN 410 3.5 units  
Nurse Refresher  
3.0 hours lecture, 1.5 hours laboratory  
Prerequisite: Licensed as a RN  
Grading: credit/no credit  
This course is designed to update the knowledge and skills of Registered Nurses who have not practiced within the past 5-10 years and would like to return to active nursing. A clinical preceptorship may be arranged with local hospitals at the conclusion of this course.

ADN 411 6.0 units  
Critical Care Nursing  
6.0 hours lecture  
Prerequisite: Licensed as a RN  
Grading: credit/no credit  
This course is designed to develop knowledge of advanced clinical concepts and skills required to give nursing care to the critically ill patient. Emphasis is placed on the nursing care needs of patients who are hospitalized in the various special intensive care areas. A clinical preceptorship may be arranged with local hospitals at the conclusion of this course.

ADN 412 5.0 units  
Operating Room Nursing  
5.0 hours lecture  
Prerequisite: Licensed as a RN  
Grading: credit/no credit  
This course is designed to develop knowledge of perioperative nursing concepts and skills to give nursing care to the patient undergoing surgery. A clinical preceptorship may be arranged with local hospitals at the conclusion of this course.

ADN 413AD 4.0 units  
Clinical Preceptorship  
12.0 hours laboratory  
Prerequisite: ADN 410, 411 or 412. Licensed as a RN.  
Grading: credit/no credit  
This course is designed as a clinical practicum to integrate advanced theoretical concepts into the clinical setting. Students will demonstrate advanced assessment techniques, use of the nursing process, advanced critical thinking and psychomotor skills.

ADN 486 2.0 units  
Nursing Applications of Pharmacology  
2.0 hours lecture  
Grading: credit/no credit  
A review of the study of drugs and drug administration as a part of nursing care. Prototype drugs are classified so relationships can be perceived and remembered. General principles of drug actions and interactions, both therapeutic and undesirable, are the basis for the study of individual drugs. Calculation of drug dosages is emphasized. Not open for credit to students registered in or with credit in VN 486.

ADN 610 0.0 unit  
Nursing Skills Refresher Laboratory  
0.7 hour laboratory  
Grading: LBCC Non-Graded Course  
This course allows self-paced individualized instruction in basic bedside nursing skills and supervised practice to improve performance levels.

ADN 810 0.5 unit  
Preparation for Nursing  
0.5 hour lecture  
Grading: credit/no credit  
Designed to assist the nursing or pre-nursing student with no previous experience in health care. Included are: the development of effective study habits and test-taking skills, the study of common nursing terms, abbreviations and symbols and preparation for calculation of drug dosages.

NURSING, CERTIFIED NURSING ASSISTANT (VN)  

VN 205AD 0.5 unit  
Nursing Skills Practice Laboratory  
1.5 hours laboratory  
Grading: credit/no credit  
Allows self-paced individualized instruction in basic bedside nursing skills and supervised practice to improve performance of skills taught in the Vocational Nursing program. Offered summer session only.

NURSING, VOCATIONAL NURSING (VOCN)  

VOCN 205AD 0.5 unit  
Nursing Skills Practice Laboratory  
1.5 hours laboratory  
Grading: credit/no credit  
Allows self-paced individualized instruction in vocational nursing skills with supervised practice to improve performance of skills taught in the Vocational Nursing program.
Courses of Instruction

VOCN 206AD 0.5 unit
Nursing Skills Practice Laboratory
1.5 hours laboratory
Grading: credit/no credit
Allows self-paced, individualized instruction in vocational nursing skills with supervised practice to improve performance of skills taught in the first semester of the Vocational Nursing program.

VOCN 207AD 0.5 unit
Nursing Skills Practice Laboratory
1.5 hours laboratory
Grading: credit/no credit
Allows self-paced, individualized instruction in vocational nursing skills with supervised practice to improve performance of skills taught in the second semester of the Vocational Nursing program. Builds on the skills practiced in VOCN 206AD.

VOCN 208AD 0.5 unit
Nursing Skills Practice Laboratory
1.5 hours laboratory
Grading: credit/no credit
Allows self-paced, individualized instruction in vocational nursing skills with supervised practice to improve performance of skills taught in the third semester of the Vocational Nursing program. Builds on the skills practiced in VN 206AD and 207AD.

VOCN 285 1.0 unit
Transition to Vocational Nursing
0.5 hour lecture , 1.5 hours laboratory
Prerequisite: VOCN 290A
Grading: letter grade
Designed to prepare the Certified Nurse Assistant to enter the Vocational Nursing Program in the second course (287B Common Health Deviations 1). Orem’s Theory of Self-Care and nursing process is introduced. Advanced nursing skills, such as administration of medications, skills requiring sterile techniques and feeding/ nasogastric tubes, are taught. Normally offered once each semester. Offered as a combination of theory and campus lab hours.

VOCN 286 3.0 units
Nursing Applications of Pharmacology
3.0 hours lecture
Grading: letter grade
An intro to the study of medications and administration as a part of nursing care. Prototype drugs are classified into large sets so that relationships can be perceived and remembered. General principles of medication actions and interactions, both therapeutic and undesirable, are the basis for the study of individual medications. Calculation of medication dosages is emphasized. Not open for credit to students who have completed ADN 286. May take AH 60, BIO 60, AH 210A-B and courses to strengthen reading and math.

VOCN 287 3.0 units
Common Health Deviations 1
3.0 hours lecture
Prerequisite: VOCN 290A, 285A, 286, 288C, BIO 60 and BIO 61 or 261.
Grading: letter grade
Medical-surgical course designed to develop nursing care, pharmacology and diet therapy related to deviations in fluid and electrolyte imbalance, respiratory and cardiac conditions, hypertension and diabetes. Study of Orem’s Self-Care Theory and the nursing process is continued. Normally offered for nine weeks with six hours of lecture each week.

VOCN 287L 3.0 units
Common Health Deviations 1 Lab
9.0 hours laboratory
Prerequisite: VOCN 290A, 285A, 286, 288C, BIO 60 and BIO 61 or 261. CPR certification for health care providers, health evaluation and current malpractice insurance.
Corequisite: VOCN 287B
Grading: credit/no credit
Medical-surgical course designed to apply nursing care, pharmacology and diet therapy related to deviations in fluid and electrolyte imbalance, respiratory and cardiac conditions, hypertension and diabetes. Study of Orem’s Self-Care Theory and the nursing process is continued. The role of peer assistant and leadership is introduced. Normally offered for nine weeks with eighteen hours lab each week.

VOCN 288A 3.0 units
Common Health Deviations 2
3.0 hours lecture
Prerequisite: VOCN 287B and 287BL.
Grading: letter grade
A medical-surgical nursing course designed to develop an understanding of nursing care, diet therapy and pharmacology related to the perioperative period, peripheral vascular, hematologic, gastrointestinal, urinary, musculoskeletal, eye and ear conditions and diseases and cancer. Utilization of Orem’s Self-Care Theory and the nursing process is continued. Principles of young adult development are studied.

VOCN 288AL 3.0 units
Common Health Deviations 2 Lab
9.0 hours laboratory
Prerequisite: VOCN 287B and 287BL, and health evaluation, current malpractice insurance and current CPR card.
Corequisite: VOCN 288A
Grading: letter grade or credit/no credit
A medical-surgical nursing course designed to develop an understanding of nursing care, diet therapy and pharmacology related to the perioperative period, peripheral vascular, hematologic, gastrointestinal, urinary, musculoskeletal, eye and ear conditions and diseases and cancer. Implementation of Orem’s Self-Care Theory and the nursing process is continued. Principles of young adult development are studied. The role of the peer assistant is expanded.

VOCN 288B 3.0 units
Common Health Deviations 3
3.0 hours lecture
Prerequisite: VOCN 288A and 288AL
Grading: letter grade
A medical-surgical nursing course designed to develop an understanding of nursing care, diet therapy and pharmacology related to substance abuse, sexually transmitted diseases and endocrine, reproductive, neurologic, immunologic and dermatologic conditions and diseases. Utilization of Orem’s Self-Care Theory and the nursing process is continued. Principles of middle adult development are studied.

VOCN 288BL 3.0 units
Common Health Deviations 3 Lab
9.0 hours laboratory
Prerequisite: VOCN 288A and 288AL, health evaluation, current malpractice insurance, and current CPR card for health care providers. Corequisite: VOCN 288B. You must enroll in the corequisite course before you attempt to enroll in this course.
Grading: credit/no credit
An intro obstetrical course designed to develop an understanding of nursing care, pharmacology and diet therapy related to substance abuse, sexually transmitted diseases and endocrine, reproductive, neurologic, immunologic and dermatologic conditions and diseases. Implementation of Orem’s Self-Care Theory and the nursing process is continued. Principles of middle adult development are studied. The role of peer assistant is continued. Normally offered for nine weeks with eighteen hours of lab each week.

VOCN 289C 3.0 units
Common Mental Health Deviations
3.0 hours lecture
Grading: letter grade
Intro to the theory and process of structured and therapeutic communications, the helping relationships, and self-development. Students use group process and learn to assess responses to stress, reach nursing diagnosis, plan and evaluate nursing care to help the client compensate for or overcome mental health deviation self-care deficits. Nursing care is related to common mental health problems and the major psychiatric illnesses and integrates principles of personality development and psychopharmacology. May take AH 60 and BIO 60 with Common Mental Health Deviations. Offered in 18 week increments with 3 hours lecture each week or 6 week increments with 9 hours lecture each week.

VOCN 289A 1.0 unit
Developmental Levels: Maternal/Infant
1.0 hour lecture
Prerequisite: VOCN 288B, 288BL and 290B (may be taken concurrently).
Grading: letter grade
An intro obstetrical course designed to develop an understanding of nursing care, pharmacology and diet therapy related to new mother and infant. Prenatal, perinatal and postpartum nursing care are studied. Implementation of Orem’s Self-Care Theory and nursing process is continued. Principles of fetal and newborn development are integrated. Normally offered for five weeks with three and one-half hours lecture each week.

VOCN 289AL 2.0 units
Developmental Levels-Maternal (Infant) Lab
6.0 hours laboratory
Prerequisite: VOCN 288B, 288BL and 290B (may be taken concurrently). A health evaluation, current CPR card for health care providers and current malpractice insurance.
Corequisite: VOCN 289A
Grading: credit/no credit
Clinical experience is provided in both hospital and prenatal ambulatory care facilities dealing with mothers and infants. Normally offered for five weeks with 108 hours lab.

VOCN 289B 1.0 unit
Developmental Levels: Child
1.0 hour lecture
Prerequisite: VOCN 289A and 289AL
Grading: letter grade
An intro pediatric course designed to develop an understanding of nursing care, pharmacology and diet therapy for the pediatric client. The well baby, child and adolescents with short-term illnesses, developmental problems and chronic illnesses are studied. Implementation of Orem’s Self-Care Theory and the nursing process is continued. Normally offered for four weeks with four and one-half hours lecture each week.

VOCN 289BP 1.0 unit
Developmental Levels-Child (Practicum)
3.0 hours laboratory
Prerequisite: VOCN 289A and 289AL, health evaluation, current CPR card for health care providers, current malpractice insurance.
Corequisite: VOCN 289B. You must enroll in the corequisite course before you attempt to enroll in this course.
Grading: credit/no credit
Clinical experience is provided in both hospital and prenatal ambulatory care facilities dealing with mothers and infants.

VOCN 289C 2.0 units
Developmental Levels: Older Adult
2.0 hours lecture
Prerequisite: VOCN 288B and VOCN 288BL
Grading: letter grade
An advanced medical-surgical course designed to provide the vocational nursing student with theoretical knowledge of nursing care for older adults. Study of Orem’s self-care theory and nursing process is continued. The developmental challenges and rewards of the older adult are studied. Normally offered for nine weeks.

VOCN 289CL 2.0 units
Developmental Levels: Older Adults Lab
6.0 hours laboratory
Prerequisite: VOCN 288B and VOCN 288BL, health evaluation, current CPR card for health care providers, current malpractice insurance.
Grading: credit/no credit
An advanced medical-surgical course designed to provide the vocational nursing student with application of the knowledge of nursing care for the older adult in a skilled nursing setting. Utilization of Orem’s self-care theory and nursing process is continued. The developmental challenges and rewards of the older adult are studied. Normally offered for four and one-half weeks.

VOCN 289CP 2.0 units
Development Levels: Older Adult (Practicum)
6.0 hours laboratory
Prerequisite: VOCN 288B, VOCN 288BL, health evaluation, a current CPR card for health care providers, current malpractice insurance.
Grading: credit/no credit
An advanced medical-surgical course designed to provide the vocational nursing student with application of the knowledge of nursing care for an older adult in an ambulatory setting. Utilization of Orem’s self-care theory and nursing process is continued. The developmental challenges and rewards of the older adult are studied. Normally offered for four and one-half weeks.
### Courses of Instruction

**VOCN 290** 3.0 units  
**Roles and Responsibilities**  
3.0 hours lecture  
Grading: letter grade  
An advanced course designed to assist in changing from the role of vocational nursing student to the role of vocational nursing graduate. Beginning library research skills, nursing in the community and the world, legal and ethical standards of vocational nursing practice and job application/job satisfaction skills in the health care system are covered.  

**VOCN 290A** 1.5 units  
**Roles and Responsibilities I**  
1.5 hours lecture  
Prerequisite: Certified Nursing Assistant (CNA) Certificate or VOCN 287A and VOCN 287AL and BIO 60 (may be taken concurrently).  
Grading: letter grade  
An intro to vocational nursing, legal and ethical standards of vocational nursing practice, communication, cultural aspects of nursing and beginning nursing process. Must be taken at the beginning of the Vocational Nursing Program.  

**VOCN 290B** 1.5 units  
**Roles and Responsibilities II**  
1.5 hours lecture  
Prerequisite: BIO 61 or 261. VOCN 289C, 289CL and 289CP (may be taken concurrently).  
Corequisite: VOCN 289A, 289AL, 289B and 289BP  
Grading: letter grade  
A preparation course for graduation, job application, interviews, information about higher education programs and preparation for taking the NCLEX (State Boards) for licensure as a vocational nurse. Must be taken as the last course of the Vocational Nursing Program.  

**VOCN 486** 2.0 units  
**Nursing Applications of Pharmacology**  
2.0 hours lecture  
Grading: credit/no credit  
Provides a review of drugs and drug administration as a part of nursing care. Prototype drugs are classified into large sets so that relationships can be perceived and remembered. General principles of drug actions and interactions, both therapeutic and undesirable, are the basis for the study of individual drugs. Not open for credit to students registered in or with credit in ADN 286.  

**PHILOSOPHY (PHIL)**  

**PHIL 3** 3.0 units  
**Intro to Issues/Phil, Psych & Religion**  
3.0 hours lecture  
Grading: letter grade or credit/no credit  
Using a point/counterpoint debate format, a teaching team composed of a philosopher and a psychologist compare and integrate insights from three disciplines—philosophy, psychology and religion. A critical investigation and debate of theoretical positions, such as Platonic idealism, Christian theology, Freudian analysis, Skinnerian behaviorism, existentialism and other major intellectual viewpoints. Not open for credit to students registered in or with credit in PSYCH3 or HUMAN3.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*  

**PHIL 6 (CAN PHIL 2)** 3.0 units  
**Introduction to Philosophy**  
3.0 hours lecture  
Grading: letter grade or credit/no credit  
This broad intro to philosophy surveys knowledge, science, religion, logic, value, history and metaphysics.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*  

**PHIL 6H** 3.0 units  
**Honors Introduction to Philosophy**  
3.0 hours lecture  
Prerequisite: Qualification for the Honors Program  
Grading: letter grade or credit/no credit  
This broad intro to philosophy surveys knowledge, science, religion, value, logic, history and metaphysics.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*  

**PHIL 7 (CAN PHIL 4)** 3.0 units  
**Introduction to Ethics**  
3.0 hours lecture  
Grading: letter grade or credit/no credit  
A study of the nature of morality and the application of moral principles. Examines some of the most influential moral theories formulated by philosophers of the past and present, and analyzes their applications with respect to controversial moral issues, such as abortion, euthanasia and capital punishment.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*  

**PHIL 7H** 3.0 units  
**Honors Introduction to Ethics**  
3.0 hours lecture  
Prerequisite: Qualification for the Honors Program  
Grading: letter grade or credit/no credit  
An examination of the nature of morality and the application of moral principles. The course will cover major moral theories and consider their application with respect to controversial moral issues such as abortion, euthanasia, and capital punishment.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*  

**PHIL 8** 3.0 units  
**Introduction to Non-Western Philosophy**  
3.0 hours lecture  
Grading: letter grade or credit/no credit  
A broad intro to some of the main philosophical traditions from around the world, such as Eastern Philosophy, African Philosophy and American Indian Philosophy. Themes include the meaning of life, spirituality, the role of the individual and society, the nature of reality and the affects of history and culture on belief systems.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*  

**PHIL 9** 3.0 units  
**Introduction to Existentialism**  
3.0 hours lecture  
Grading: letter grade or credit/no credit  
This course will examine the philosophical thought of existentialist writers such as Kierkegaard, Heidegger, Dostoyevsky, and Sartre. Emphasis will be placed on the analysis of recurring themes such as freedom, individuality, meaning and value, and the existence of God.  

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Courses of Instruction

PHIL 10  3.0 units
Introduction to Feminist Philosophy
3.0 hours lecture
Grading: letter grade or credit/no credit
This course will examine feminist thinking and writing on philosophical issues with an emphasis on metaphysics, epistemology, social philosophy and ethics. Topics will include an exploration of rights, justice and responsibility.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

PHIL 11  3.0 units
Critical Thinking
3.0 hours lecture
Grading: letter grade or credit/no credit
Understand, practice and improve practical reasoning skills. Focuses on the nature of reasoning and the detection and avoidance of common fallacies. Will develop the knowledge and habits needed to make decisions between conflicting ideas and beliefs. Applications are made to both contemporary and perennial issues, such as current political events and capital punishment.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

PHIL 12 (CAN PHIL 6)  3.0 units
Introduction to Logic
3.0 hours lecture
Grading: letter grade or credit/no credit
An analysis of the elements of clear and orderly thought, emphasizing deductive reasoning.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

PHIL 14  3.0 units
Historical-Philosophical Study: Religion
3.0 hours lecture
Grading: letter grade or credit/no credit
An exam of the major religions of the world (such as Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity, Islam, Pantheism and Paganism); evaluation of the main ideas and values embodied in those religions; and assistance in the formulation of an intelligent philosophy of religion.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

PHIL 15  3.0 units
Introduction to Political Philosophy
3.0 hours lecture
Grading: letter grade or credit/no credit
This course will examine some of the primary issues within political philosophy such as justifying political authority, distributive justice, and the rights and liberties of citizens.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

PHIL 16  3.0 units
Introduction to Business Ethics
3.0 hours lecture
Grading: letter grade or credit/no credit
This course will examine ethical issues in business. Topics will include environmental concerns, the distribution of wealth, informational ethics, privacy and autonomy, and affirmative action. These will be discussed in the context of moral theories such as utilitarianism, deontology and ethical egoism.
Transfer Status: Transferable to CSU, see counselor for limitations.

PHOTOGRAPHY (PHOT)

PHOT 1  2.0 units
The Photographic Vision
2.0 hours lecture
Grading: letter grade or credit/no credit
This intro course teaches a means of human communication, as well as a technical skill. Intro to the basic technical principles of the camera and how photography has, through history, influenced human perception and communication. Provides techniques for responding to the content and structure of photographs. Renowned photographers representing various perspectives appear as guests on television programs, discussing and demonstrating their unique approaches to their work. The historical and aesthetic dimensions are provided by guest museum curators, historians and critics. Throughout, students are given specific photographic projects designed to expand their photographic vision.
Transfer Status: Transferable to CSU, see counselor for limitations.

PHOT 31AB  3.0 units
Basic Photography-Black and White
2.0 hours lecture, 6.0 hours laboratory
Grading: letter grade or credit/no credit
A comprehensive course in photographic techniques for the beginning student. Emphasizes the practical applications in the use of the camera, lenses, shutters, natural lighting, roll film processing, enlarging and mounting of finished prints.
Transfer Status: Transferable to CSU, see counselor for limitations.

PHOT 32AD  3.0 units
Basic Photography-Color
2.0 hours lecture, 6.0 hours laboratory
Grading: letter grade or credit/no credit
A comprehensive course in color photography introducing practical problems involved in color printing and processing of transparencies and negatives. Explore color theory, film, paper, analysis of negatives, filtration and exposure and includes a professional critique of the work.
Transfer Status: Transferable to CSU, see counselor for limitations.

PHOT 33AD  4.0 units
Photography Studio Lighting
2.0 hours lecture, 6.0 hours laboratory
Prerequisite: One semester of PHOT 31AB
Grading: letter grade or credit/no credit
This is a comprehensive course in commercial photography with major emphasis on view camera and studio lighting techniques. It is part of the vocational program in photography.
Transfer Status: Transferable to CSU, see counselor for limitations.

PHOT 34AD  4.0 units
Advanced Photography-Applications
2.0 hours lecture, 6.0 hours laboratory
Prerequisite: One Semester of PHOT 32AD and PHOT 33AD
Grading: letter grade or credit/no credit
A comprehensive occupational course for the advanced student of photography. The major emphasis is centered around methods of complex problem-solving in professional photography.
Transfer Status: Transferable to CSU, see counselor for limitations.

PHOT 35AD  3.0 units
Photography
2.0 hours lecture, 3.0 hours laboratory
Prerequisite: One semester of PHOT 31AB
Grading: letter grade or credit/no credit
Instruction in basic and advanced photojournalism techniques. Practical experience in newspaper photography and magazine publication. Not open to students registered in or with credit in JOURN35AD.
Transfer Status: Transferable to CSU, see counselor for limitations.

PHOT 37AD  4.0 units
Portrait Photography
2.0 hours lecture, 6.0 hours laboratory
Prerequisite: One semester of PHOT 31AB or PHOT 32AD
Grading: letter grade or credit/no credit
A comprehensive course for the beginning and advanced student of portraiture with a special emphasis on posing and lighting and the business aspects of portrait photography as an occupation.
Transfer Status: Transferable to CSU, see counselor for limitations.

PHOT 38  3.0 units
Marketing Professional Photo Skills
3.0 hours lecture
Grading: letter grade or credit/no credit
Covers the application of current practices utilized in marketing professional photographic skills. Includes: freelance marketing, design and use of portfolio and professional photographic business practices.
Transfer Status: Transferable to CSU, see counselor for limitations.

PHOT 39AD  3.0 units
Documentary Photography
2.0 hours lecture, 3.0 hours laboratory
Prerequisite: One semester of PHOT 31AB
Grading: letter grade or credit/no credit
A comprehensive occupational course in documentary photography for annual reports, stock photos and public relations. Includes: releases, copyrights, legends and billing procedures.
Transfer Status: Transferable to CSU, see counselor for limitations.

PHOT 40AD  4.0 units
View Camera/"Zone System Photo"
2.0 hours lecture, 6.0 hours laboratory
Prerequisite: One semester of PHOT 31AB
Grading: letter grade or credit/no credit
A comprehensive occupational course for the advanced student of photography. Emphasizes view camera use, including perspective control, distortion control and metering methods.
Transfer Status: Transferable to CSU, see counselor for limitations.

PHOT 41AD  4.0 units
Professional Photographic Portfolio
2.0 hours lecture, 6.0 hours laboratory
Prerequisite: One semester of PHOT 31AB
Grading: letter grade or credit/no credit
A comprehensive occupational course for the advanced student of photography. The major emphasis is on developing a professional photographic portfolio.
Transfer Status: Transferable to CSU, see counselor for limitations.

PHOT 42AD  4.0 units
Experimental Photography Laboratory
2.0 hours lecture, 6.0 hours laboratory
Prerequisite: One semester of PHOT 31AB or PHOT 32AD
Grading: letter grade or credit/no credit
A comprehensive advanced lab course for students enrolled in the photography program or persons who have a background in photography and wish to improve their skills. Emphasizes practical experimental solutions to conceptual visual design problems in commercial photography.
Transfer Status: Transferable to CSU, see counselor for limitations.

PHOT 43AD  3.0 units
Digital Photography
2.0 hours lecture, 4.0 hours laboratory
Prerequisite: ART 41 or CPAS 1
Recommended Preparation: PHOT 31AB or PHOT 32AB or ART 41
Grading: letter grade or credit/no credit
A comprehensive course to train students in the application of electronic media and its use in manipulating and creating photographic images. Includes: initial computer file creation using direct digital input, scanners and photo CD, computerized image editing, image export to page layout and illustration programs, file output to viewable media and film recorders and copyright topics. The digital darkroom is a major component of this course.
Transfer Status: Transferable to CSU, see counselor for limitations.

PHOT 71AD  2.0 units
Work Experience — Photography
1.0 hour lecture, 4.1 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
An extension of vocational learning experiences through employment in work experience directly related to photography. One unit of credit shall be granted for every 75 hours per semester, maximum of twelve units.
Transfer Status: Transferable to CSU, see counselor for limitations.

PHOT 72AD  3.0 units
Work Experience — Photography
1.0 hour lecture, 8.3 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
An extension of vocational learning experiences through employment in work experience directly related to photography. One unit of credit shall be granted for every 75 hours per semester, maximum of twelve units.
Transfer Status: Transferable to CSU, see counselor for limitations.
<table>
<thead>
<tr>
<th>Courses of Instruction</th>
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<tbody>
<tr>
<td>PHOT 73AD 4.0 units</td>
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<tr>
<td>Work Experience — Photography</td>
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<tr>
<td>1.0 hour lecture, 12.5 hours laboratory</td>
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<tr>
<td>Corequisite: Enrollment in at least seven units including this course.</td>
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<tr>
<td>Grading: letter grade or credit/no credit</td>
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<tr>
<td>An extension of vocational learning experiences through employment in work experience directly related to photography. One unit of credit shall be granted for every 75 hours per semester, maximum of twelve units.</td>
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<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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| PHOT 281AD 1.0 unit |
| Photography Laboratory |
| 3.0 hours laboratory |
| Grading: letter grade or credit/no credit |
| For students enrolled in the photography program or persons who have a background in photography and wish to improve their skills. Emphasizes practical applications in roll and sheet film processing, enlarging and mounting of finished prints. |

| PHOT 291AD 1.0 unit |
| Advanced Photography Laboratory |
| 3.0 hours laboratory |
| Grading: letter grade or credit/no credit |
| For students enrolled in the photography program or persons who have a background in photography and wish to improve their skills. Emphasizes practical applications in roll and sheet film processing, enlarging and mounting of finished prints. |

| PHOT 681 0.0 unit |
| Fundamentals of Photography Laboratory |
| 6.0 hours laboratory |
| Grading: LBCC Non-Graded Course |
| A lab for the beginning photo student or persons who have a background in photography and wish to improve their skills. Emphasizes practical applications of roll film processing, enlarging and mounting of finished prints. Intended for senior citizens. |

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<thead>
<tr>
<th>PHYSICAL EDUCATION, GENERAL (PEG)</th>
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<tbody>
<tr>
<td>PEG 9AD 0.5 unit</td>
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<tr>
<td>Badminton</td>
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<tr>
<td>2.0 hours laboratory</td>
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<tr>
<td>Grading: letter grade</td>
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<tr>
<td>Instruction in the rules, techniques and strategies of badminton.</td>
</tr>
<tr>
<td>Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
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</tbody>
</table>

| PEG 10AD 1.0 unit |
| Badminton |
| 3.0 hours laboratory |
| Grading: letter grade |
| Instruction in the rules, techniques and strategies of badminton. |
| Transfer Status: Transferable to UC/CSU, see counselor for limitations. |

| PEG 11AD 0.5 unit |
| Baseball |
| 2.0 hours laboratory |
| Grading: letter grade |
| Instruction in the rules, techniques and strategies of baseball. |
| Transfer Status: Transferable to UC/CSU, see counselor for limitations. |

| PEG 12AD 1.0 unit |
| Baseball |
| 3.0 hours laboratory |
| Grading: letter grade |
| Instruction in the rules, techniques and strategies of baseball. |
| Transfer Status: Transferable to UC/CSU, see counselor for limitations. |

| PEG 13AD 0.5 unit |
| Basketball |
| 2.0 hours laboratory |
| Grading: letter grade |
| Instruction in the rules, techniques and strategies of basketball. |
| Transfer Status: Transferable to UC/CSU, see counselor for limitations. |

| PEG 14AD 1.0 unit |
| Basketball |
| 3.0 hours laboratory |
| Grading: letter grade |
| Instruction in the rules, techniques and strategies of basketball. |
| Transfer Status: Transferable to UC/CSU, see counselor for limitations. |

<p>| PEG 19AD 0.5 unit |
| Bowling |
| 2.0 hours laboratory |
| Grading: letter grade |
| Instruction in the rules, techniques and strategies of bowling. |
| Transfer Status: Transferable to UC/CSU, see counselor for limitations. |</p>
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Title</th>
<th>Description</th>
<th>Grading</th>
<th>Transfer Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEG 20AD</td>
<td>1.0</td>
<td>Bowling</td>
<td>3.0 hours laboratory&lt;br&gt;Grading: letter grade&lt;br&gt;Instruction in the rules, techniques and strategies of bowling.</td>
<td>Letter Grade</td>
<td>Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEG 31AD</td>
<td>0.5</td>
<td>Golf</td>
<td>2.0 hours laboratory&lt;br&gt;Grading: letter grade&lt;br&gt;Instruction in the rules, techniques and strategies of golf.</td>
<td>Letter Grade</td>
<td>Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEG 32AD</td>
<td>1.0</td>
<td>Golf</td>
<td>3.0 hours laboratory&lt;br&gt;Grading: letter grade&lt;br&gt;Instruction in the rules, techniques and strategies of golf.</td>
<td>Letter Grade</td>
<td>Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEG 55AD</td>
<td>4.0</td>
<td>Lifeguard/Water Safety Training</td>
<td>3.0 hours lecture, 3.0 hours laboratory&lt;br&gt;Prerequisite: Advanced swimming ability&lt;br&gt;Recommended Preparation: Advanced swimming ability&lt;br&gt;Grading: letter grade&lt;br&gt;Certification course for American Red Cross water safety instructors and lifeguards. Enables students to instruct swimming courses and to serve as a lifeguard at aquatic facilities.</td>
<td>Letter Grade</td>
<td>Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEG 58AD</td>
<td>1.0</td>
<td>Intramural Activities</td>
<td>0.5 hour lecture, 1.5 hours laboratory&lt;br&gt;Grading: letter grade&lt;br&gt;Designed to allow all students the opportunity to engage in a variety of competitive sports and activities in an intramural environment.</td>
<td>Letter Grade</td>
<td>Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEG 59AD</td>
<td>0.5</td>
<td>Racquetball</td>
<td>2.0 hours laboratory&lt;br&gt;Grading: letter grade&lt;br&gt;Instruction in the rules, techniques and strategies of racquetball.</td>
<td>Letter Grade</td>
<td>Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEG 60AD</td>
<td>1.0</td>
<td>Racquetball</td>
<td>3.0 hours laboratory&lt;br&gt;Grading: letter grade&lt;br&gt;Instruction in the rules, techniques and strategies of racquetball.</td>
<td>Letter Grade</td>
<td>Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEG 65AD</td>
<td>0.5</td>
<td>Self-Defense</td>
<td>2.0 hours laboratory&lt;br&gt;Grading: letter grade&lt;br&gt;Instruction in the techniques of the basic aquatic strokes.</td>
<td>Letter Grade</td>
<td>Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEG 66AD</td>
<td>1.0</td>
<td>Self-Defense</td>
<td>3.0 hours laboratory&lt;br&gt;Grading: letter grade&lt;br&gt;Techniques and practical applications of self-defense skills, psychological defenses and assertiveness training.</td>
<td>Letter Grade</td>
<td>Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEG 69AD</td>
<td>0.5</td>
<td>Soccer</td>
<td>2.0 hours laboratory&lt;br&gt;Grading: letter grade&lt;br&gt;Instruction in the rules, techniques and strategies of soccer.</td>
<td>Letter Grade</td>
<td>Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEG 70AD</td>
<td>1.0</td>
<td>Soccer</td>
<td>3.0 hours laboratory&lt;br&gt;Grading: letter grade&lt;br&gt;Instruction in the rules, techniques and strategies of soccer.</td>
<td>Letter Grade</td>
<td>Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEG 73AD</td>
<td>0.5</td>
<td>Softball</td>
<td>2.0 hours laboratory&lt;br&gt;Grading: letter grade&lt;br&gt;Instruction in the rules, techniques and strategies of softball.</td>
<td>Letter Grade</td>
<td>Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEG 74AD</td>
<td>1.0</td>
<td>Softball</td>
<td>3.0 hours laboratory&lt;br&gt;Grading: letter grade&lt;br&gt;Instruction in the rules, techniques and strategies of softball.</td>
<td>Letter Grade</td>
<td>Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEG 75AD</td>
<td>0.5</td>
<td>Swimming</td>
<td>2.0 hours laboratory&lt;br&gt;Grading: letter grade&lt;br&gt;Instruction in the techniques of the basic aquatic strokes.</td>
<td>Letter Grade</td>
<td>Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEG 76AD</td>
<td>1.0</td>
<td>Swimming</td>
<td>3.0 hours laboratory&lt;br&gt;Grading: letter grade&lt;br&gt;Instruction in the techniques of the basic aquatic strokes.</td>
<td>Letter Grade</td>
<td>Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
</tbody>
</table>
# Courses of Instruction

**PEG 83AD**  
0.5 unit  
Tennis  
2.0 hours laboratory  
Grading: letter grade  
Instruction in the rules, techniques and strategies of tennis.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**PEG 84AD**  
1.0 unit  
Tennis  
3.0 hours laboratory  
Grading: letter grade  
Instruction in the rules, techniques and strategies of tennis.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**PEG 85AD**  
0.5 unit  
Touch Football  
2.0 hours laboratory  
Grading: letter grade  
Instruction in the rules, techniques and strategies of touch football.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**PEG 86AD**  
1.0 unit  
Touch Football  
3.0 hours laboratory  
Grading: letter grade  
Instruction in the rules, techniques and strategies of touch football.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**PEG 87AD**  
0.5 unit  
Track & Field  
2.0 hours laboratory  
Grading: letter grade  
Instruction in the rules, techniques and strategies of track and field.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**PEG 88AD**  
1.0 unit  
Track & Field  
3.0 hours laboratory  
Grading: letter grade  
Instruction in the rules, techniques and strategies of track and field.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**PEG 89AD**  
0.5 unit  
Volleyball  
2.0 hours laboratory  
Grading: letter grade  
Instruction in the rules, techniques and strategies of volleyball.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**PEG 90AD**  
1.0 unit  
Volleyball  
3.0 hours laboratory  
Grading: letter grade  
Instruction in the rules, techniques and strategies of volleyball.

**PHYSICAL EDUCATION, OUTDOOR STUDIES (PEOS)**

**PEOS 5AD**  
1.0 unit  
Backpacking  
4.0 hours laboratory  
Grading: letter grade  
A course in backpacking and trip planning with three to five days of field experience.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**PEOS 55AD**  
0.5 unit  
Cross Country (Nordic) Skiing  
2.0 hours laboratory  
Grading: letter grade  
Instruction and practice in cross-country ski techniques, including an exercise program, dry land drills, proper ski equipment, clothing and accessories for ski tour, ski waxing, conditioning, nutrition, tour planning, wilderness hazards, safety and wilderness conservation.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**PEOS 56AD**  
1.0 unit  
Cross Country (Nordic) Skiing  
3.0 hours laboratory  
Grading: letter grade  
Instruction and practice in cross-country ski techniques, including an exercise program, dry land drills, proper ski equipment, clothing and accessories for ski tour, ski waxing, conditioning, nutrition, tour planning, wilderness hazards, safety and wilderness conservation.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**PEOS 58AD**  
1.0 unit  
Basic Rock Climbing  
3.0 hours laboratory  
Grading: letter grade  
An intro to basic rock climbing techniques with instruction and practice in rope handling, use of knots, protection, anchoring belays and rappels, emphasizing climbing safety. The elements of sound climbing judgment will be analyzed and stressed. Typically a nine-week course offered the first nine-weeks of the fall semester and the second nine weeks of the spring semester. Part of the instruction will be presented on a required weekend field trip which will provide the student with real climbing experience.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**PHYSICAL EDUCATION, PHYSICAL FITNESS (PEPF)**

**PEPF 2AD**  
1.0 unit  
Monitoring and Developing Sports Skills  
4.0 hours laboratory  
Grading: letter grade  
Selected field tests of physical fitness, joint flexibility, and muscular dexterity are administered before, during and after an assortment of prescribed physical drills and exercises. Programs to improve cardiovascular endurance, muscular strength and joint mobility are
Courses of Instruction

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>PEPF 3AD</td>
<td>0.5</td>
<td>Water Aerobics and Training</td>
</tr>
<tr>
<td>PEPF 4AD</td>
<td>1.0</td>
<td>Water Aerobics and Training</td>
</tr>
<tr>
<td>PEPF 5AD</td>
<td>0.5</td>
<td>Dance Aerobics</td>
</tr>
<tr>
<td>PEPF 6AD</td>
<td>1.0</td>
<td>Dance Aerobics</td>
</tr>
<tr>
<td>PEPF 7AD</td>
<td>2.0</td>
<td>Techniques of Aerobic Instruction</td>
</tr>
<tr>
<td>PEPF 8AD</td>
<td>2.5</td>
<td>Aerobic Circuit Training</td>
</tr>
<tr>
<td>PEPF 10</td>
<td>1.0</td>
<td>Stretch &amp; Relaxation</td>
</tr>
<tr>
<td>PEPF 21AD</td>
<td>0.5</td>
<td>Physical Fitness</td>
</tr>
<tr>
<td>PEPF 22AD</td>
<td>1.5</td>
<td>Physical Fitness</td>
</tr>
<tr>
<td>PEPF 41AD</td>
<td>0.5</td>
<td>Swimming Fitness</td>
</tr>
<tr>
<td>PEPF 42AD</td>
<td>1.0</td>
<td>Swimming Fitness</td>
</tr>
<tr>
<td>PEPF 47AD</td>
<td>0.5</td>
<td>Swim Fitness/Polo</td>
</tr>
<tr>
<td>PEPF 48AD</td>
<td>1.0</td>
<td>Swim Fitness/Polo</td>
</tr>
<tr>
<td>PEPF 53AD</td>
<td>0.5</td>
<td>Weight Training</td>
</tr>
</tbody>
</table>

Courses of Instruction

PEPF 3AD
Water Aerobics and Training
2.0 hours laboratory
Grading: letter grade
An aerobic physical fitness program employing water resists exercises without the need of swimming skills.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

PEPF 4AD
Water Aerobics and Training
3.0 hours laboratory
Grading: letter grade
An aerobic physical fitness program employing water resists exercises without the need of swimming skills.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

PEPF 5AD
Dance Aerobics
2.0 hours laboratory
Grading: letter grade
Perform exercise and dance routines to music to enhance flexibility while emphasizing the developing of strength and endurance.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

PEPF 6AD
Dance Aerobics
3.0 hours laboratory
Grading: letter grade
Perform exercise and dance routines to music to enhance flexibility while emphasizing the developing of strength and endurance.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

PEPF 7AD
Techniques of Aerobic Instruction
1.0 hour lecture, 3.0 hours laboratory
Grading: letter grade
For aerobic instructors or other interested persons exploring fundamental methods and techniques for successfully conducting aerobic or anaerobic exercise classes. Includes lectures, as well as lab requirements in practice application sessions.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

PEPF 8AD
Aerobic Circuit Training
1.0 hour lecture, 5.0 hours laboratory
Grading: letter grade
Cardiovascular and strength fitness training in a circuit setting. Ideal for normal, healthy people. Complete body conditioning.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

PEPF 10
Stretch & Relaxation
3.0 hours laboratory
Grading: letter grade
This course emphasizes the development of flexibility in muscles and joints to prevent injury and to improve body alignment and posture. Relaxation and stretching techniques will be used to improve general fitness.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

PEPF 21AD
Physical Fitness
2.0 hours laboratory
Grading: letter grade
A physical fitness program of jogging, running, conditioning and circuit training exercises.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

PEPF 22AD
Physical Fitness
5.0 hours laboratory
Grading: letter grade
A physical fitness program of jogging, running, conditioning and circuit training exercises.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

PEPF 41AD
Swimming Fitness
2.0 hours laboratory
Grading: letter grade
A physical fitness program and swimming related circuit training exercises.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

PEPF 42AD
Swimming Fitness
3.0 hours laboratory
Grading: letter grade
A physical fitness program and swimming related circuit training exercises.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

PEPF 47AD
Swim Fitness/Polo
2.0 hours laboratory
Grading: letter grade
An advanced fitness program combining the development of water polo and swimming skills.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

PEPF 48AD
Swim Fitness/Polo
3.0 hours laboratory
Grading: letter grade
An advanced fitness program combining the development of water polo and swimming skills.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

PEPF 53AD
Weight Training
2.0 hours laboratory
Grading: letter grade
Exercises for body development, competitive lifting techniques and understanding of gross anatomy are covered.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**PEPF 54AD**

**Weight Training**

3.0 hours laboratory  
Grading: letter grade  
Learn exercises for body development, competitive lifting techniques and understanding of gross anatomy.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**PEPF 70A**

**Physical Fitness for Aviators**

0.5 hour lecture, 1.5 hours laboratory  
Grading: letter grade or credit/no credit  
Covers physical fitness and fit lifestyles for aviators and students preparing for FAA and airline medical exams. Emphasizes lecture and exercise to develop and maintain cardiovascular endurance, muscular strength and joint mobility. May be taken out of sequence.  
*Transfer Status: Transferable to CU/CSU, see counselor for limitations.*

**PEPF 70B**

**Physical Fitness for Aviators**

0.5 hour lecture, 1.5 hours laboratory  
Grading: letter grade or credit/no credit  
Covers physical fitness and fit lifestyles for aviators and students preparing for FAA and airline medical exams. Emphasizes fitness testing and exercise. May be taken out of sequence.  
*Transfer Status: Transferable to CU/CSU, see counselor for limitations.*

**PEPF 81AD**

**Fitness and Wellness Center**

0.5 hour lecture, 1.5 hours laboratory  
Grading: letter grade  
Selected field and lab tests of physical fitness are administered before, during and after an assortment of exercise programs to improve cardiovascular endurance, local muscular endurance, muscular strength and joint mobility. Lectures focus on individualized goals and continuous self-evaluation, safe and sane approaches to diet and exercise, scientific information versus fallacy and weight control.  
*Transfer Status: Transferable to CU/CSU, see counselor for limitations.*

**PEPF 83AD**

**Fitness & Wellness I**

1.0 hour lecture, 3.0 hours laboratory  
Grading: letter grade or credit/no credit  
Physical fitness tests are administered before, during and after exercise programs to improve reserve capacity in endurance, local muscular endurance, muscular strength and joint mobility. Lectures and assignments focus on individual goals and continuous self-evaluation, safe and sane exercise and scientific information versus fallacy.  
*Transfer Status: Transferable to CU/CSU, see counselor for limitations.*

**PEPF 84AD**

**Fitness and Wellness Center II**

1.0 hour lecture, 3.0 hours laboratory  
Grading: letter grade or credit/no credit  
Physical fitness tests are administered before, during and after exercise programs to improve reserve capacity in endurance, muscular strength and joint mobility. Lectures and assignments focus on modifications of lifestyle to enhance the quality of life and reduce health risks.  
*Transfer Status: Transferable to CU/CSU, see counselor for limitations.*

**PEPF 629**

**Physical Fitness**

2.0 hours laboratory  
Grading: LBCC Non-Graded Course  
Emphasis is on individual programs, with the practical application in physical, emotional and social well-being. Endurance and flexibility exercises are included. Designed for senior citizens.

**PEPF 681**

**Human Performance Laboratory**

0.5 hour lecture, 1.5 hours laboratory  
Grading: LBCC Non-Graded Course  
Selected field and lab tests of physical fitness taken before, during and after an assortment of exercise programs to check cardiovascular endurance, local muscular endurance, muscular strength and joint mobility. Lectures focus on individualized goals and continuous self-evaluation, safe and sane approaches to diet and exercise and scientific information versus fallacy and weight control.

**PHYSICAL EDUCATION, PROFESSIONAL PREPARATION(PePP)**

**PEPP 1**

**Introduction to Physical Education**

2.0 hours lecture  
Grading: letter grade  
A survey of physical education and its significance in the school program, an analysis of established standards of professional ethics, discussion of personal qualities and interests necessary to successful leadership in this field. Required of physical education majors.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**PEPP 5**

**Sports Appreciation**

3.0 hours lecture  
Grading: letter grade  
A survey of sports and its role in society with a special emphasis on spectator appreciation of football, basketball, baseball, ice hockey and soccer.  
*Transfer Status: Transferable to CU/CSU, see counselor for limitations.*

**PEPP 6AD**

**Introduction to Principles of Adapted PE**

1.0 hour lecture, 3.0 hours laboratory  
Grading: letter grade  
An intro to the basic concepts and attendant skills used to assist disabled students in the performance of physical activities in the adapted physical education setting. Includes the use of exercise equipment for the disabled, assisting people in/out of wheelchairs, assisting with various health related sport activities for the disabled,
use of basic physiological, kinesiological and biomechanical principles applied in the adapted physical education setting. For students who have an interest in pursuing careers in allied health, counseling, education, social work, medicine and nursing. Transfer Status: Transferable to CSU, see counselor for limitations.

**PEPP 7**  3.0 units

**Intro to Community Recreation**
3.0 hours lecture
Grading: letter grade
For recreation majors and non-majors, a general orientation to the field of recreation and parks services, including a history of the development of the recreation profession, a survey of recreation and leisure services, a description and interpretation of recreation as a form of community service and the nature, scope and significance of leisure and recreation as a social force in contemporary society. Emphasizes the role of the professional leader in a variety of settings. Transfer Status: Transferable to CSU, see counselor for limitations.

**PEPP 10**  3.0 units

**Prevention & Care of Athletic Injuries**
2.5 hours lecture, 2.0 hours laboratory
Grading: letter grade
Principles and techniques of the prevention and care of common athletic injuries. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**PEPP 13**  1.0 unit

**Dance Aerobics-Professional Preparation**
0.5 hour lecture, 2.0 hours laboratory
Grading: letter grade
Instruction and practice in basic skills to prepare for advanced work in teaching dance aerobics through practical experience. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**PEPP 15**  3.0 units

**Sports Officiating (Fall)**
2.0 hours lecture, 3.0 hours laboratory
Grading: letter grade
Theory and practice of officiating basketball, football, soccer and baseball. Actual game officiating in intramural competition. Open to all students. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**PEPP 17**  3.0 units

**Sports Officiating (Spring)**
2.0 hours lecture, 3.0 hours laboratory
Grading: letter grade
Theory and practice of officiating softball, swimming, track and field and volleyball. Actual game officiating in intramural competition. Open to all students. Fulfills physical education requirement and undergraduate elective credit. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**PEPP 19AD**  2.0 units

**Theory of Football**
1.0 hour lecture, 3.0 hours laboratory
Grading: letter grade
Elementary and intermediate instruction and practice in scouting, film analysis, use of equipment and safety procedures. Intro to the organization and administration of a youth football program. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**PEPP 23**  3.0 units

**First Aid and Safety Education**
3.0 hours lecture
Grading: letter grade
Study of safety techniques and the principles involved in rendering prompt and intelligent first aid when necessary. Includes practical demonstration and practice in those procedures essential to meet the requirements of the Standard First Aid and Personal Safety and Cardiopulmonary Resuscitation (CPR) Certificates granted by the American Red Cross. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**PEPP 25**  1.0 unit

**Baseball (Men)**
0.5 hour lecture, 1.5 hours laboratory
Grading: letter grade
Instruction and practice in the basic skills and team play of baseball. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**PEPP 27**  1.0 unit

**Basketball (Men)**
0.5 hour lecture, 1.5 hours laboratory
Grading: letter grade
Instruction and practice in the basic skills and team play of basketball. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**PEPP 29**  1.0 unit

**Cross Country/Track and Field (Men)**
0.5 hour lecture, 1.5 hours laboratory
Grading: letter grade
Fundamental skills in track and field events, including sprinting, middle distance and distance running, relay racing, hurdles, long jump, high jump, discus, javelin and shot put. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**PEPP 31**  1.0 unit

**Football (Men)**
0.5 hour lecture, 1.5 hours laboratory
Grading: letter grade
Instruction and practice in the basic skills and team play of football. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**PEPP 35**  1.0 unit

**Soccer (Men)**
0.5 hour lecture, 1.5 hours laboratory
Grading: letter grade
Instruction and practice in the basic skills and team play of soccer. Transfer Status: Transferable to UC/CSU, see counselor for limitations.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
</table>
| PEPP 37 | 1.0 unit | Volleyball (Men)  
0.5 hour lecture, 1.5 hours laboratory  
Grading: letter grade  
Instruction and practice in the basic skills and team play of volleyball.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.* |
| PEPP 41 | 2.0 units | Aquatics (Coed)  
1.0 hour lecture, 3.0 hours laboratory  
Grading: letter grade  
Instruction and practice in the fundamental skills of all swimming strokes, diving, team and individual aquatic competitive events and pool maintenance and operation.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.* |
| PEPP 51 | 1.0 unit | Golf (Coed)  
0.5 hour lecture, 1.5 hours laboratory  
Grading: letter grade  
Provides instruction in the fundamental skills, rules and etiquette of golf.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.* |
| PEPP 53 | 1.0 unit | Tennis (Coed)  
0.5 hour lecture, 1.5 hours laboratory  
Grading: letter grade  
Fundamental skills and knowledge of tennis for physical education majors and minors. Students need not enroll concurrently in PEPP 1.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.* |
| PEPP 55 | 1.0 unit | Basketball (Women)  
0.5 hour lecture, 1.5 hours laboratory  
Grading: letter grade  
Instruction and practice in the basic skills and team play of basketball.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.* |
| PEPP 61 | 1.0 unit | Soccer (Women)  
0.5 hour lecture, 1.5 hours laboratory  
Grading: letter grade  
Instruction and practice in the basic skills and team play of soccer.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.* |
| PEPP 63 | 1.0 unit | Softball (Women)  
0.5 hour lecture, 1.5 hours laboratory  
Grading: letter grade  
Instruction and practice in the basic skills and team play of softball.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.* |
| PEPP 65 | 1.0 unit | Track and Field (Women)  
0.5 hour lecture, 1.5 hours laboratory  
Grading: letter grade  
Fundamental skills in track and field events, including sprinting, middle distance and distance running, relay racing, hurdles, long jump, high jump, discus, javelin and shot put.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.* |
| PEPP 67 | 1.0 unit | Volleyball (Women)  
0.5 hour lecture, 1.5 hours laboratory  
Grading: letter grade  
Instruction and practice in the basic skills and team play of volleyball.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.* |
| PEPP 71AD | 2.0 units | Work Experience: PE-Professional Prep  
1.0 hour lecture, 4.1 hours laboratory  
Corequisite: Enrollment in at least seven units including this course.  
Grading: letter grade or credit/no credit  
An extension of learning experience through employment directly related to the recreation/physical education career of interest to the student.  
*Transfer Status: Transferable to CSU, see counselor for limitations.* |
| PEPP 72AD | 3.0 units | Work Experience: PE-Professional Prep  
1.0 hour lecture, 8.3 hours laboratory  
Corequisite: Enrollment in at least seven units including this course.  
Grading: letter grade or credit/no credit  
An extension of learning experience through employment directly related to the recreation/physical education career of interest to the student.  
*Transfer Status: Transferable to CSU, see counselor for limitations.* |
| PEPP 73AD | 4.0 units | Work Experience: PE-Professional Prep  
1.0 hour lecture, 12.5 hours laboratory  
Corequisite: Enrollment in at least seven units including this course.  
Grading: letter grade or credit/no credit  
An extension of learning experience through employment directly related to the recreation/physical education career of interest to the student.  
*Transfer Status: Transferable to CSU, see counselor for limitations.* |

**PHYSICAL EDUCATION, INTERCOLLEGIATE ATHLETICS (PEIA)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
</table>
| PEIA 1AD | 3.0 units | Baseball (Men)  
10.0 hour laboratory  
Recommended Preparation: Admission limited to tryout  
Grading: letter grade  
A diverse program of intercollegiate athletics for men and women of exceptional ability which fulfills the legal requirement for a physical education activity.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.* |
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEIA 3AD</td>
<td>3.0</td>
<td>Basketball (Men) 10.0 hour laboratory Recommended Preparation: Admission limited to tryout Grading: letter grade A diverse program of intercollegiate athletics for men and women of exceptional ability which fulfills the legal requirement for a physical education activity. Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEIA 5AD</td>
<td>3.0</td>
<td>Cross Country (Men) 10.0 hour laboratory Recommended Preparation: Admission limited to tryout Grading: letter grade A diverse program of intercollegiate athletics for men and women of exceptional ability which fulfills the legal requirement for a physical education activity. Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEIA 7AD</td>
<td>3.0</td>
<td>Football (Men) 10.0 hour laboratory Recommended Preparation: Admission limited to tryout Grading: letter grade A diverse program of intercollegiate athletics for men and women of exceptional ability which fulfills the legal requirement for a physical education activity. Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEIA 9AD</td>
<td>3.0</td>
<td>Golf (Men) 10.0 hour laboratory Recommended Preparation: Admission limited to tryout Grading: letter grade Instruction in the rules, techniques and strategies of golf. Designed for men of exceptional ability who wish to participate in intercollegiate athletics. Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEIA 13AD</td>
<td>3.0</td>
<td>Soccer (Men) 10.0 hour laboratory Recommended Preparation: Admission limited to tryout Grading: letter grade A diverse program of intercollegiate athletics for men of exceptional ability. Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEIA 15AD</td>
<td>3.0</td>
<td>Swimming (Men) 10.0 hour laboratory Recommended Preparation: Admission limited to tryout Grading: letter grade A diverse program of intercollegiate athletics for men and women of exceptional ability which fulfills the legal requirement for a physical education activity. Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEIA 17AD</td>
<td>3.0</td>
<td>Tennis (Men) 10.0 hour laboratory Recommended Preparation: Admission limited to tryout Grading: letter grade A diverse program of intercollegiate athletics for men and women of exceptional ability which fulfills the legal requirement for a physical education activity. Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEIA 19AD</td>
<td>3.0</td>
<td>Track &amp; Field (Men) 10.0 hour laboratory Recommended Preparation: Admission limited to tryout Grading: letter grade A diverse program of intercollegiate athletics for men and women of exceptional ability which fulfills the legal requirement for a physical education activity. Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEIA 21AD</td>
<td>3.0</td>
<td>Volleyball (Men) 10.0 hour laboratory Recommended Preparation: Admission limited to tryout Grading: letter grade A diverse program of intercollegiate athletics for men of exceptional ability. Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEIA 23AD</td>
<td>3.0</td>
<td>Water Polo (Men) 10.0 hour laboratory Recommended Preparation: Admission limited to tryout Grading: letter grade A diverse program of intercollegiate athletics for men and women of exceptional ability which fulfills the legal requirement for a physical education activity. Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEIA 27AD</td>
<td>3.0</td>
<td>Basketball (Women) 10.0 hour laboratory Recommended Preparation: Admission limited to tryout Grading: letter grade A diverse program of intercollegiate athletics for men and women of exceptional ability which fulfills the legal requirement for a physical education activity. Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEIA 29AD</td>
<td>3.0</td>
<td>Cross Country (Women) 10.0 hour laboratory Recommended Preparation: Admission limited to tryout Grading: letter grade A diverse program of intercollegiate athletics for men and women of exceptional ability which fulfills the legal requirement for a physical education activity. Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEIA 31AD</td>
<td>3.0</td>
<td>Golf (Women) 10.0 hour laboratory Recommended Preparation: Admission limited to tryout Grading: letter grade Instruction in the rules, techniques and strategies of golf. Designed for women of exceptional ability who wish to participate in intercollegiate athletics. Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
</tbody>
</table>
Courses of Instruction

**PEIA 35AD** 3.0 units  
Soccer (Women)  
10.0 hour laboratory  
Recommended Preparation: Admission limited to tryout  
Grading: letter grade  
A diverse program of intercollegiate athletics for men and women of exceptional ability which fulfills the legal requirement of a physical education activity.  
Transfer Status: Transferable to UC/CSU; see counselor for limitations.

**PEIA 37AD** 3.0 units  
Softball (Women)  
10.0 hour laboratory  
Recommended Preparation: Admission limited to tryout  
Grading: letter grade  
A diverse program of intercollegiate athletics for men and women of exceptional ability which fulfills the legal requirement of a physical education activity.  
Transfer Status: Transferable to UC/CSU; see counselor for limitations.

**PEIA 39AD** 3.0 units  
Swimming (Women)  
10.0 hour laboratory  
Recommended Preparation: Admission limited to tryout  
Grading: letter grade  
A diverse program of intercollegiate athletics for men and women of exceptional ability which fulfills the legal requirement of a physical education activity.  
Transfer Status: Transferable to UC/CSU; see counselor for limitations.

**PEIA 41AD** 3.0 units  
Tennis (Women)  
10.0 hour laboratory  
Recommended Preparation: Admission limited to tryout  
Grading: letter grade  
A diverse program of intercollegiate athletics for men and women of exceptional ability which fulfills the legal requirement of a physical education activity.  
Transfer Status: Transferable to UC/CSU; see counselor for limitations.

**PEIA 43AD** 3.0 units  
Track & Field (Women)  
10.0 hour laboratory  
Recommended Preparation: Admission limited to tryout  
Grading: letter grade  
A diverse program of intercollegiate athletics for men and women of exceptional ability which fulfills the legal requirement of a physical education activity.  
Transfer Status: Transferable to UC/CSU; see counselor for limitations.

**PEIA 45AD** 3.0 units  
Volleyball (Women)  
10.0 hour laboratory  
Recommended Preparation: Admission limited to tryout  
Grading: letter grade  
A diverse program of intercollegiate athletics for men and women of exceptional ability which fulfills the legal requirement of a physical education activity.  
Transfer Status: Transferable to UC/CSU; see counselor for limitations.

**PEIA 47AD** 3.0 units  
Water Polo (Women)  
10.0 hour laboratory  
Recommended Preparation: Admission limited to tryout  
Grading: letter grade  
Instruction in the rules, techniques and strategies of water polo. Designed for women of exceptional ability who wish to participate in intercollegiate athletics.  
Transfer Status: Transferable to UC/CSU; see counselor for limitations.

**PHYSICS (PHYS)**

**PHYS 2A** (Part of CAN PHYS SEQUENCE A) 4.0 units  
General Physics  
4.0 hours lecture, 2.0 hours laboratory  
Prerequisite: MATH 130 and MATH 40  
Grading: letter grade or credit/no credit  
A non-calculus course in classical and modern physics, for students not majoring in engineering, covering the basic principles of mass and energy. Emphasizes motion dynamics, conservation laws, heat and wave motion.  
Transfer Status: Transferable to UC/CSU; see counselor for limitations.

**PHYS 2B** (Part of CAN PHYS SEQUENCE A) 4.0 units  
General Physics  
4.0 hours lecture, 2.0 hours laboratory  
Prerequisite: PHYS 2A  
Grading: letter grade or credit/no credit  
A non-calculus course in classical and modern physics, for students not majoring in engineering, covering the basic principles of mass and energy. Emphasizes electricity, magnetism, optics and modern physics.  
Transfer Status: Transferable to UC/CSU; see counselor for limitations.

**PHYS 3A** 5.0 units  
Physics for Sci. & Eng. — Mechanics  
5.0 hours lecture, 2.0 hours laboratory  
Prerequisite: MATH 60  
Recommended Preparation: PHYS 2A  
Grading: letter grade  
First in a calculus-based sequence for majors in physics, chemistry, math, engineering, astronomy and certain other fields. Includes kinematics, vectors, dynamics, energy, translational and rotational motion, fluids, oscillations and waves.  
Transfer Status: Transferable to UC/CSU; see counselor for limitations.

**PHYS 3B** 4.0 units  
Physics for Sci. & Eng. — E & M  
4.0 hours lecture, 2.0 hours laboratory  
Prerequisite: PHYS 3A  
Grading: letter grade  
Part of a calculus-based sequence for majors in physics, chemistry, math, engineering, astronomy and certain other fields. Includes electrostatics electric field, Gauss’s law, electric potential, DC circuits, magnetic fields, electromagnetism and AC circuits.  
Transfer Status: Transferable to UC/CSU; see counselor for limitations.

**PHYS 3C** 4.0 units  
Physics for Sci. & Eng. — Modern Physics  
4.0 hours lecture, 2.0 hours laboratory  
Prerequisite: PHYS 3A  
Grading: letter grade  
Part of a calculus-based sequence for majors in physics, chemistry, math, engineering, astronomy and certain other fields. Includes: thermodynamics, optics interference, diffraction, polarization, special relativity,
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 10</td>
<td>Conceptual Physics</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS 1      (CAN BIOL 12)</td>
<td>Human Physiology</td>
<td>5.0</td>
</tr>
<tr>
<td>POLSC 1     (CAN GOVT 2)</td>
<td>Introduction to Government</td>
<td>3.0</td>
</tr>
<tr>
<td>POLSC 1H</td>
<td>Honors Introduction to Government</td>
<td>3.0</td>
</tr>
<tr>
<td>POLSC 2</td>
<td>Comparative Government</td>
<td>3.0</td>
</tr>
<tr>
<td>POLSC 3</td>
<td>Issues of American Government</td>
<td>3.0</td>
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<tr>
<td>POLSC 4</td>
<td>World Politics</td>
<td>3.0</td>
</tr>
<tr>
<td>POLSC 5</td>
<td>International Relations, foreign Policy</td>
<td>3.0</td>
</tr>
<tr>
<td>POLSC 6</td>
<td>Introduction to Political Science</td>
<td>3.0</td>
</tr>
<tr>
<td>POLSC 7</td>
<td>The Constitution, Law and Society</td>
<td>3.0</td>
</tr>
<tr>
<td>POLSC 8</td>
<td>Current Issues in America</td>
<td>3.0</td>
</tr>
<tr>
<td>POLSC 9</td>
<td>Comparative Government</td>
<td>3.0</td>
</tr>
<tr>
<td>POLSC 10</td>
<td>Introduction to Political Science</td>
<td>3.0</td>
</tr>
<tr>
<td>POLSC 11</td>
<td>California Government and Politics</td>
<td>3.0</td>
</tr>
</tbody>
</table>

For limitations.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.
Courses of Instruction

A comprehensive survey of the forces shaping the governmental institutions and processes of the State of California and its cities, counties and special districts. Satisfies the requirement for a course in the principles of state and local government as required by Title 5 of the California Administrative Code. A one-unit version of the course is available as POLSC48M1. Transfer Status: Transferable to CSU, see counselor for limitations.

**PSYCHOLOGY (PSYCH)**

**PSYCH 1 (CAN PSY 2) 3.0 units**
Introduction to Psychology
3.0 hours lecture
Grading: letter grade or credit/no credit
Introduction to human psychology and behavior. A survey of the historical, physiological, and social influences on behavior, emphasizing development, learning, motivation, perception, cognition, mental health, individual and cultural differences, as well as the cause, treatment, and prevention of mental disorders. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**PSYCH 1H 3.0 units**
Honors Introduction to Psychology
3.0 hours lecture
Prerequisite: Qualification for the Honors Program
Grading: letter grade or credit/no credit
Intro to the fields of psychology through consideration of such topics as developmental processes, motivations, emotions, intelligence, learning, thinking, perception, individual differences and the healthy personality. An honors course for superior students which includes extra term paper(s), field trip(s) and additional readings. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**PSYCH 2 4.0 units**
Research Methods for Psychology
3.0 hours lecture, 3.0 hours laboratory
Prerequisite: PSYCH 1
Recommended Preparation: STAT 1
Grading: letter grade or credit/no credit
Provides a basic understanding of research designs and statistical techniques used in psychological investigation. During lab sessions, students collect and analyze data and write a research report. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**PSYCH 4 3.0 units**
Personal and Social Development
3.0 hours lecture
Grading: letter grade or credit/no credit
An application of psychology to one’s everyday life, emphasizing the adjusting to life’s challenges and growth toward one’s potential. Stresses self-awareness, self-management, interpersonal communication and the quality of interpersonal relationships. Transfer Status: Transferable to CSU, see counselor for limitations.

**PSYCH 10 3.0 units**
Human Sexuality
3.0 hours lecture
Grading: letter grade or credit/no credit
Intro to human sexuality from a psychophysiological perspective. Included are its historic development, cultural, religious and sociological influences, trends, variations, deviations and dysfunctions. Not open to students registered in or with credit in HLED 10. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**PSYCH 11 3.0 units**
Social Psychology
3.0 hours lecture
Grading: letter grade or credit/no credit
Learn how an individual’s behavior, thoughts and feelings are affected or influenced by the presence, characteristics and actions of others. Explains social interaction, provides description and understanding of interpersonal behavior. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**PSYCH 14 3.0 units**
Abnormal Psychology
3.0 hours lecture
Recommended Preparation: PSYCH 1
Grading: letter grade or credit/no credit
A survey of maladaptive behaviors, including neurosis, psychosis, substance abuse, sexual deviation, retardation, sociopathology, mood, personality, anxiety and developmental disorders, cross cultural views of maladaptive behaviors, causes, treatment and prevention. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**PSYCH 33 3.0 units**
Psychology of Personality
3.0 hours lecture
Grading: letter grade or credit/no credit
An intro to theories of personality, development, motivation, adjustment, effective and ineffective coping patterns, the healthy personality, inter and intra personal relationships, emphasizing practical everyday situations. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**PUBLIC ADMINISTRATION (PUBAD)**

**PUBAD 1 3.0 units**
Introduction to Public Administration
3.0 hours lecture
Grading: letter grade or credit/no credit
An intro to the principles and practices of public administration in national, state and local government agencies; basic organizational patterns, internal management, administrative functions and responsibilities, the bureaucracy and public policy, career opportunities in government service. Transfer Status: Transferable to CSU, see counselor for limitations.

**PUBAD 4 3.0 units**
Fundamentals of Supervision
3.0 hours lecture
Grading: letter grade or credit/no credit
An intro to the principles of leadership and supervision in local, state and federal government agencies, the role of the supervisor in relation to management,
subordinates and the public, basic procedures for planning, organizing and coordinating agency operations, techniques for analyzing and managing personnel and performance. Not open for credit to students registered in or with credit in INDRL41.

Transfer Status: Transferable to CSU, see counselor for limitations.

PUBAD 401 6.0 units
Problem Solving in Middle Management
6.0 hours lecture
Grading: credit/no credit
An intro to the principles and practices of problem solving in public service at the middle-management level, the role of middle-management supervisors, basic procedures for perceiving, identifying and defining problems; techniques for formulating, legitimizing and applying solutions to problems and skills for analyzing and evaluating results of problem solving.

PUBAD 404 2.0 units
Fundamentals of Supervision-Sgt Supervis
2.2 hours lecture
Grading: letter grade or credit/no credit
An intro to the principles of leadership and supervision in local law enforcement agencies. The role of the supervisor in relation to management, subordinates and the public, basic procedures for planning, organizing and coordinating agency operations and personnel are discussed. Designed for sergeants.

PUBAD 405 2.0 units
Supervisor Update
2.2 hours lecture
Grading: credit/no credit
Designed to update supervisory personnel on issues relevant to their agency-specific positions. This course is of particular significance and benefit to persons in supervisory positions in criminal justice agencies.

PUBAD 406 0.5 unit
Advanced Supervisory Course
0.6 hour lecture
Grading: credit/no credit
Discusses the principles of leadership and supervision in local agencies: the role of the supervisor in relation to management, subordinates and the public; basic procedures for planning, organizing and coordinating agency operations; techniques for analyzing and managing personnel and performance. Meets POST standards and is designed for police department supervisors and command staff.

PUBLIC AFFAIRS (PUBAF)

PUBAF 601 0.0 unit
Analysis of World Affairs
2.0 hours lecture
Grading: LBCC Non-Graded Course
A study of current affairs, contemporary moral issues and social communications to assist the older student in adjusting to a changing world and international relationships.

RADIO AND TELEVISION (R_TV)

R_TV 1 3.0 units
Introduction to Broadcasting
3.0 hours lecture
Grading: letter grade
Evaluation of broadcasting as a medium of mass communication through exploration of its history, literature, creative techniques, relationship and impact on society.

Transfer Status: Transferable to CSU, see counselor for limitations.

R_TV 2 2.0 units
Intro to Careers in Radio & Television
2.0 hours lecture
Grading: letter grade
A survey of the various occupations in the radio and television field, including broadcast, cable, industrial and educational areas. Explore employment opportunities, as well as the required skills and personal qualifications necessary for employment.

Transfer Status: Transferable to CSU, see counselor for limitations.

R_TV 3 2.0 units
Using Macintosh Comp Entertainment Indus
2.0 hours lecture, 2.0 hours laboratory
Grading: letter grade
Learn the Macintosh computer in the radio/television industry. No previous computer knowledge is necessary. Explore the basic operation of the Mac and the manipulation of words, numbers, sounds and graphics (or pictures) in industry applications. The use of spreadsheets, databases and some specialized R/TV applications will be explored.

Transfer Status: Transferable to CSU, see counselor for limitations.

R_TV 4 3.0 units
Writing and Production Planning
3.0 hours lecture
Grading: letter grade
Study of pre-production principles and procedures common to all producers, emphasizing scripting and other writing skills unique to the radio/television/film industry.

Transfer Status: Transferable to CSU, see counselor for limitations.

R_TV 6 3.0 units
Critical Television Viewing
3.0 hours lecture
Grading: letter grade or credit/no credit
Analyzes the power of television as a modern tool of mass communication. Among the issues studied will be: the process and effects of mass media on society, the persuasion theories that are used to create programming, the social and psychological implications of televised images on millions of people, the aesthetic dimensions of television and the relationship of this medium to its message. A variety of televised programs will be viewed to develop the ability to critically analyze the programming content that exists today, and this analysis will reveal the limitations of the medium, its production values, its depth and its aesthetic features.

Transfer Status: Transferable to CSU, see counselor for limitations.
### Courses of Instruction

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>R_TV 8</strong></td>
<td>3.0</td>
<td>Introduction to Media Production</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.0 hours lecture, 1.0 hour laboratory</td>
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<tr>
<td></td>
<td></td>
<td>Grading: letter grade</td>
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<tr>
<td></td>
<td></td>
<td>Basic principles of production, including operation of equipment and the process of developing a program from the original idea to final editing.</td>
</tr>
<tr>
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<td></td>
<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td><strong>R_TV 9</strong></td>
<td>1.0</td>
<td>Basic Camcorder Production Techniques</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.0 hour lecture</td>
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<tr>
<td></td>
<td></td>
<td>Grading: letter grade or credit/no credit</td>
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<tr>
<td></td>
<td></td>
<td>An intro survey of the basic operation of “camcorder” type video tape recorders; also covers production considerations unique to camcorders.</td>
</tr>
<tr>
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<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td><strong>R_TV 12</strong></td>
<td>2.0</td>
<td>Television Lighting</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.0 hour lecture, 3.0 hours laboratory</td>
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<tr>
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<td>Grading: letter grade or credit/no credit</td>
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<tr>
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<td></td>
<td>The practical application of the theories of television lighting. Includes: using lighting materials and equipment, the aesthetics of light, experimenting with light and color, lighting for effects and lighting for studio and field production.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td><strong>R_TV 13AD</strong></td>
<td>2.0</td>
<td>Television Production</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.0 hour lecture, 3.0 hours laboratory</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Grading: letter grade or credit/no credit</td>
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<tr>
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<td></td>
<td>Creation and production of television program material.</td>
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<tr>
<td></td>
<td></td>
<td>Produce, direct and crew a variety of projects, such as news, interviews, commercials, dramas, comedies and instructional programs.</td>
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<tr>
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<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td><strong>R_TV 14AD</strong></td>
<td>2.0</td>
<td>Electronic Field Production</td>
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<tr>
<td></td>
<td></td>
<td>2.0 hours lecture, 1.0 hour laboratory</td>
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<td>Grading: letter grade or credit/no credit</td>
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<tr>
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<td></td>
<td>The study and application of the technical aspects of video, film and multimedia production in the field. Special attention will be dedicated to successful production strategies necessary for the unique problems associated with shooting in the field, such as equipment selection, lighting, audio and the environment. Issues related to acquisition format, such as film versus tape and analog versus digital, will be explored. Students will shoot projects in the field as “stand-alone” productions and as elements for edited productions. Editing will be covered as it relates to field production.</td>
</tr>
<tr>
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<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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<tr>
<td><strong>R_TV 15AC</strong></td>
<td>2.0</td>
<td>Advanced Television Production</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.0 hour lecture, 3.0 hours laboratory</td>
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<tr>
<td></td>
<td></td>
<td>Grading: letter grade</td>
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<tr>
<td></td>
<td></td>
<td>Creation and production of television program material, emphasizing the quality of the finished product. Projects which students produce, direct and crew will be largely of their own choosing.</td>
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<tr>
<td></td>
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<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td><strong>R_TV 17AD</strong></td>
<td>1.0</td>
<td>Special Projects in Television</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.0 hour lecture, 2.0 hours laboratory</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Grading: letter grade</td>
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<tr>
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<td></td>
<td>Plan and execute one’s own project under the instructor’s guidance. May have an opportunity to work as part of a production team in a professional environment. Projects may involve scripting, research, program production or other areas of exploration.</td>
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<td></td>
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<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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<tr>
<td><strong>R_TV 21</strong></td>
<td>3.0</td>
<td>Radio Production</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.0 hours lecture, 1.0 hour laboratory</td>
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<td></td>
<td></td>
<td>Grading: letter grade</td>
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<td></td>
<td></td>
<td>Creation and production of radio program material. Projects include: disc jockey shows, news programs, interviews, commercials, editing, microphone set-up and audio board operation. Other aspects of radio station operation will be covered, such as management, sales, audience analysis and ratings.</td>
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<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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<tr>
<td><strong>R_TV 25AD</strong></td>
<td>2.0</td>
<td>Radio Activity</td>
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<td></td>
<td></td>
<td>1.0 hour lecture, 4.0 hours laboratory</td>
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<td>Grading: letter grade or credit/no credit</td>
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<td>An opportunity and responsibility to work in a variety of jobs involved in the operation of the campus radio station (KLBC). Work “on air” and behind the scenes on the radio station. Outside hours are arranged in consultation with the instructor.</td>
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<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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<tr>
<td><strong>R_TV 30AD</strong></td>
<td>1.5</td>
<td>Broadcast Newswriting</td>
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<td></td>
<td></td>
<td>1.0 hour lecture, 2.0 hours laboratory</td>
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<td>Grading: letter grade</td>
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<td>Gain experience in gathering and writing news for broadcast. Learn to write, re-write and edit stories using computers, incorporate sound tracks and visuals into their stories and work the “local angle” or “human interest element.” Some stories may be incorporated into the weekly student TV news show.</td>
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<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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<tr>
<td><strong>R_TV 34AD</strong></td>
<td>2.0</td>
<td>Music Video Production</td>
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<td></td>
<td></td>
<td>2.0 hours lecture, 2.0 hours laboratory</td>
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<td></td>
<td></td>
<td>Recommended Preparation: R_TV 14AD</td>
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<td>Grading: letter grade or credit/no credit</td>
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<tr>
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<td>An in-depth exam of the components necessary to produce a music video, including completion of a camera ready production proposal and a script of selected projects. Selected projects may be produced.</td>
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<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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<tr>
<td><strong>R_TV 35AD</strong></td>
<td>2.0</td>
<td>Television Activity</td>
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<tr>
<td></td>
<td></td>
<td>1.0 hour lecture, 4.0 hours laboratory</td>
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<tr>
<td></td>
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<td>Grading: letter grade or credit/no credit</td>
</tr>
</tbody>
</table>
An opportunity and responsibility to work in a variety of jobs involved in the video taping of various college events and/or projects. Projects may be broadcast on college cable channel. Hours are arranged in consultation with the instructor.

Transfer Status: Transferable to CSU, see counselor for limitations.

**R_TV 36AD 3.0 units**

Broadcast News Production
2.0 hours lecture, 4.0 hours laboratory
Grading: letter grade or credit/no credit
Study of basic broadcast news and information functions. Covers such material as gathering information, writing, editing and producing for news, sports, editorial, documentary, education, religion and public service programs.

Transfer Status: Transferable to CSU, see counselor for limitations.

**R_TV 37 3.0 units**

Radio/Television Management and Sales
3.0 hours lecture
Grading: letter grade
An overview of the basic elements of broadcast and cablecast management and time sales. Included are: advertising and sales techniques, rating, station promotion, budgets, FCC policies, franchise agreements and negotiations, scheduling, contest considerations, liability elements and people skills.

Transfer Status: Transferable to CSU, see counselor for limitations.

**R_TV 40AD 2.0 units**

On-Camera Performance
1.0 hour lecture, 3.0 hours laboratory
Grading: letter grade
Involves the practical application of performance techniques as applied to working in front of a camera. Performances are video-taped and analyzed which will help the student understand what is necessary in the preparation of audition material. Gain knowledge about each area responsible for a TV production.

Transfer Status: Transferable to CSU, see counselor for limitations.

**R_TV 71AD 2.0 units**

Work Experience: Radio and Television
1.0 hour lecture, 4.2 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
Vocational learning experiences through employment directly related to the industry.

Transfer Status: Transferable to CSU, see counselor for limitations.

**R_TV 73AD 4.0 units**

Work Experience: Radio and Television
1.0 hour lecture, 12.5 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
Vocational learning experiences through employment directly related to the industry.

Transfer Status: Transferable to CSU, see counselor for limitations.

**REAL ESTATE (REAL)**

**REAL 78 3.0 units**

Real Estate Economics
3.0 hours lecture
Grading: letter grade
Deals with trends and factors affecting the value of real estate, the nature and classification of land economics, the development of property, construction and subdivision, economic values and real estate evaluation, real estate cycles and business fluctuations, residential market trends, real property and special-purpose property trends.

Transfer Status: Transferable to CSU, see counselor for limitations.

**REAL 80 3.0 units**

Real Estate Principles
3.0 hours lecture
Grading: letter grade
Covers basic laws and principles of California real estate; gives understanding, background and terminology for advanced study in specialized courses. Assists those preparing for real estate license exams.

Transfer Status: Transferable to CSU, see counselor for limitations.

**REAL 81A 3.0 units**

Real Estate Practices
3.0 hours lecture
Grading: letter grade
Operational practices in real estate roles and brokerage, including listing, prospecting, advertising, financing, sales techniques, escrow and ethics. Applies toward State’s educational requirements for the broker’s exam.

Transfer Status: Transferable to CSU, see counselor for limitations.

**REAL 83A 3.0 units**

Legal Aspects of Real Estate
3.0 hours lecture
Grading: letter grade
A study of California real estate law and related legislation governing real estate transactions in California. Applied toward educational requirements for the broker’s exam.

Transfer Status: Transferable to CSU, see counselor for limitations.

**REAL 84 3.0 units**

Mortgage Brokering/Lending in California
3.0 hours lecture
Recommended Preparation: REAL 80
Grading: letter grade
An intro to the mortgage brokering operation from office setup, loan processing by computer, lending regulations, types of loans, from A to D paper, loan submission,
Courses of Instruction

quality control, FICO credit scoring, loan packaging and shipping.
Transfer Status: Transferable to CSU, see counselor for limitations.

REAL 85 Real Estate Appraisal
3.0 units
3.0 hours lecture
Grading: letter grade
Covers the purposes of appraisals, the appraisal process and the different approaches, methods and techniques to determine the value of various types of property. Emphasizes residential and single-unit property.
Transfer Status: Transferable to CSU, see counselor for limitations.

REAL 87 Real Estate Finance
3.0 units
3.0 hours lecture
Grading: letter grade
An analysis of real estate financing, lending policies and problems in financing transactions in residential, apartment, commercial and special purpose properties. The methods of financing properties are emphasized.
Transfer Status: Transferable to CSU, see counselor for limitations.

REAL 89 Real Estate Exchange
3.0 units
3.0 hours lecture
Grading: letter grade
A comprehensive study of the practices and procedures in handling the exchange of properties.
Transfer Status: Transferable to CSU, see counselor for limitations.

REAL 90 Tax Aspects of Real Estate Transactions
3.0 units
3.0 hours lecture
Grading: letter grade
A comprehensive study of the influence of taxation on real estate transactions.
Transfer Status: Transferable to CSU, see counselor for limitations.

REAL 91 Real Estate Update
3.0 units
3.0 hours lecture
Prerequisite: REAL 80 and any two other REAL estate courses from REAL 81A through REAL 254.
Grading: letter grade
An update in real estate which provides 45 hours of continuing education. Topics include finance, land acquisition and development, foreclosure procedures, trust deeds, market research techniques, escrow procedures, office management, syndication, advertising and sales techniques, mortgage update, leasing, contracts and closing procedures, title insurance, appraisal, ethics and investment analysis.
Transfer Status: Transferable to CSU, see counselor for limitations.

REAL 92A Escrows and Land Titles
3.0 units
3.0 hours lecture
Grading: letter grade
Learn to take, handle and close simple escrows, purpose and services of escrow, property and property rights, acquisition, descriptions, encumbrances, liens, charges against property, forms, deeds, transfer, recording system and title company practices.
Transfer Status: Transferable to CSU, see counselor for limitations.
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
An extension of vocational learning through employment directly related to one’s occupational goal. One unit of credit shall be granted for every 75 hours per semester. Maximum of twelve units.

REAL 273AD 4.0 units
Work Experience-Real Estate
1.0 hour lecture, 12.5 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
An extension of vocational learning through employment directly related to one’s occupational goal. One unit of credit shall be granted for every 75 hours per semester. Maximum to twelve units.

**SHEET METAL (SHMET)**

SHMET 201 10.0 units
Sheet Metal 1
6.0 hours lecture, 12.0 hours laboratory
Grading: letter grade or credit/no credit
Includes material identification, measurement, basic shop math, intro to parallel line surface development and basic sheet metal projects. Intro to safety operations, hand and power machinery, oxy-acetylene and spot welding and soft soldering are also discussed.

SHMET 202 10.0 units
Sheet Metal 2
6.0 hours lecture, 12.0 hours laboratory
Grading: letter grade or credit/no credit
Includes safety practices, radial line surface development and related metal project fabrication, advanced oxy-acetylene welding, intro to hard soldering and production shop machine set-up.

SHMET 203 10.0 units
Sheet Metal 3
6.0 hours lecture, 12.0 hours laboratory
Grading: letter grade or credit/no credit
Safety practices, intro to inert gas arc welding, intro to triangulation surface development, exotic metals fabrication and stainless steel are covered.

SHMET 204 10.0 units
Sheet Metal 4
6.0 hours lecture, 12.0 hours laboratory
Grading: letter grade or credit/no credit
Teaches safety practices and advanced live projects incorporating surface development, fabrication and inert gas welding.

SHMET 220A 5.0 units
Surface Development & Fabrication 1
4.0 hours lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
Designed for people working in or wishing to enter the fields of air conditioning, refrigeration, heating, ventilating and aircraft or industrial fabrication. A comprehensive study of sheet metal layout, including radial line and triangulation. Individualized hands-on experience in tool set-up and job shop performance equal to industrial standards.

SHMET 220B 5.0 units
Surface Development & Fabrication 2
4.0 hours lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
Designed for people working in or wishing to enter the fields of air conditioning, refrigeration, heating, ventilating and aircraft or industrial fabrication. A comprehensive course in sheet metal layout, including radial line and triangulation. Individualized hands-on experience in tool set-up and job shop performance equal to industrial standards.

SHMET 220C 5.0 units
Surface Development & Fabrication 3
4.0 hours lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
Designed for people working in or wishing to enter the fields of air conditioning, refrigeration, heating, ventilating and aircraft or industrial fabrication. A comprehensive course in sheet metal layout, including radial line and triangulation. Individualized hands-on experience in tool set-up and job shop performance equal to industrial standards.

SHMET 220D 5.0 units
Surface Development & Fabrication 4
4.0 hours lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
Designed for people working in or wishing to enter the fields of air conditioning, refrigeration, heating, ventilating and aircraft or industrial fabrication. A comprehensive course in sheet metal layout, including radial line and triangulation. Individualized hands-on experience in tool set-up and job shop performance equal to industrial standards.

SHMET 420AD 3.0 units
Sheet Metal Fabrication
1.0 hour lecture, 6.0 hours laboratory
Grading: letter grade or credit/no credit
Use hand and machine tools and equipment; perform layout and pattern development; use various types of sheet metal; demonstrate project forming, riveting, welding and soldering.

**SOCIAL SCIENCE (SOCSC)**

SOCSC 1 3.0 units
Comparative World Cultures
3.0 hours lecture
Grading: letter grade or credit/no credit
Compares through analysis selected major civilizations and seeks to respond to the current need for intercultural understanding in an interdependent world. Interdisciplinary team of faculty, drawn from the humanities and the social sciences, select major cultures from the ancient, medieval and modern periods of world history which are examined thematically. Such themes include: how distinctive historical, regional and local cultures design, share, reproduce and meet basic biological, material and symbolic needs and experience both continuity and change through internal realignments of their social, economic, political and intellectual institutions or by external contact with other peoples.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.
**Courses of Instruction**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
</table>
| SOCSC 1H    | 3.0   | Honors Comparative World Cultures 3.0 hours lecture
|             |       | Prerequisite: Qualification for the Honors Program
|             |       | Grading: letter grade or credit/no credit
|             |       | Describes how selected major cultures meet similar basic needs, such as establishing value systems, socialization of children, meeting material needs and perceiving persons in other cultures. An interdisciplinary approach drawing from both the humanities and social sciences. Seeks to respond to the current need for intercultural understanding in an interdependent world. Not open for credit to students registered in or with credit in HUMAN1 or 1H.
|             |       | Transfer Status: Transferable to UC/CSU, see counselor for limitations. |
| SOCSC 7     | 3.0   | American Pluralism and Identity 3.0 hours lecture
|             |       | Grading: letter grade or credit/no credit
|             |       | Explores the multicultural nature of American society, using more than one discipline. Using the humanities to analyze the creativity of each ethnic group as they constructed artistic, literary, musical, philosophical and religious identities based on their traditions and experiences, will seek to understand the United States as a mosaic of ethnicities, as well as a common culture. Using the social sciences to compare and contrast the origins, living conditions and experiences of America’s constituent populations, will analyze the complexity of the processes effecting the interaction of the American people.
|             |       | Transfer Status: Transferable to UC/CSU, see counselor for limitations. |
| SOCIO 1     | 3.0   | Introduction to Sociology 3.0 hours lecture
|             |       | Grading: letter grade or credit/no credit
|             |       | Study human behavior through an understanding of social organization: the role of culture, the development of personality, the function of group life and social institutions, the social processes and social interaction, factors in social change and collective behavior.
|             |       | Transfer Status: Transferable to UC/CSU, see counselor for limitations. |
| SOCIO 1H    | 3.0   | Honors Introduction to Sociology 3.0 hours lecture
|             |       | Prerequisite: Qualification for the Honors Program
|             |       | Grading: letter grade or credit/no credit
|             |       | Transfer Status: Transferable to UC/CSU, see counselor for limitations. |
| SOCIO 2     | 3.0   | Modern Social Problems 3.0 hours lecture
|             |       | Grading: letter grade or credit/no credit
|             |       | All identification and analysis of contemporary social problems in the U.S., using the perspective and methodology of the social sciences. Among the topics considered are violence, crime, poverty, sexism, racism, rapid social change, addiction, abuse and alienation.
|             |       | Transfer Status: Transferable to UC/CSU, see counselor for limitations. |
| SOCIO 11    | 3.0   | Race & Ethnic Relations in the U.S. 3.0 hours lecture
|             |       | Grading: letter grade
|             |       | The sociological study of diverse racial and ethnic groups in the U.S., including Latino, Asian American, African American and Native American sub-groups. Analysis of migration patterns, stratification, gender, social movements and inter- and intra-group relations. Also an exam of how social, political, economic and historical forces affect contemporary race and ethnic relations.
|             |       | Transfer Status: Transferable to UC/CSU, see counselor for limitations. |
| SOCIO 12    | 3.0   | Crime and Delinquency 3.0 hours lecture
|             |       | Recommended Preparation: SOCIO 1
|             |       | Grading: letter grade
|             |       | An intro to major types of criminal behavior, characteristics of offenders, factors which contribute to crime and delinquency, the criminal justice process, the human process of law enforcement, the courts, probation, parole and institutions. Includes changes in crime control and treatment processes and the role of society. Not open for credit to students registered in or with credit in ADJUS12.
|             |       | Transfer Status: Transferable to UC/CSU, see counselor for limitations. |
| SOCIO 13    | 3.0   | Sociology of Latinos 3.0 hours lecture
|             |       | Grading: letter grade
|             |       | A survey of the sociology of Latinos in the United States, with particular focus on the Mexican culture and experience. This course will include a review of the immigration experience of various Latino groups. Study will include the types and consequences of discrimination and prejudice as well as Chicano responses to racism.
|             |       | Transfer Status: Transferable to UC/CSU, see counselor for limitations. |
| SOCIO 40    | 3.0   | Marriage and the Family 3.0 hours lecture
|             |       | Grading: letter grade or credit/no credit
|             |       | Study of all major aspects of preparation for and participation in marriage and family life in the modern world; courtship problems, mate selection, marital adjustment, problems of parenthood, family crises and ways of meeting them.
|             |       | Transfer Status: Transferable to UC/CSU, see counselor for limitations. |
| SPAN 1      | 5.0   | Elementary Spanish 5.0 hours lecture
|             |       | Grading: letter grade or credit/no credit
|             |       | Intro to the Spanish language, emphasizing listening, comprehension, conversation, reading and writing skills to develop control of the basic sounds, forms and structure of Spanish. Topics for conversation are everyday life situations and issues in the Hispanic world. Not recommended for native speakers of Spanish or
students who have completed one year of high school Spanish with a grade of B or better.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

SPAN 1A (CAN SPAN 2) 3.0 units
Elementary Spanish 1A
3.0 hours lecture
Grading: letter grade or credit/no credit
Intro to the Spanish language, emphasizing listening, comprehension, conversation, reading and writing skills to develop control of the basic sounds, forms and structure. Topics for conversation are everyday life situations and issues in the Hispanic world. Not recommended for native speakers of Spanish or students who have completed one year of high school Spanish with a grade of B or better or equivalent.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

SPAN 1B (CAN SPAN 2) 2.0 units
Elementary Spanish 1B
2.0 hours lecture, 1.0 hour laboratory
Prerequisite: SPAN 1A
Grading: letter grade or credit/no credit
Intro to the Spanish language, emphasizing listening, comprehension, conversation, reading and writing skills to develop control of the basic sounds, forms and structure of Spanish. Topics for conversation are everyday life situations and issues in the Hispanic world. Not recommended for native speakers of Spanish or students who have completed one year of high school Spanish with a grade of B or better.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

SPAN 2 (CAN SPAN 4) 5.0 units
Elementary Spanish
5.0 hours lecture, 1.0 hour laboratory
Prerequisite: SPAN 1 or SPAN 1A and 1B or recent completion of one year of High School Spanish.
Grading: letter grade or credit/no credit
Continuation of the study of basic grammar forms, emphasizing listening and speaking, reading and writing, based on modern topical material.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

SPAN 2A (CAN SPAN 4) 3.0 units
Elementary Spanish 2A
3.0 hours lecture
Prerequisite: SPAN 1 or SPAN 1A and 1B or recent completion of one year of High School Spanish.
Grading: letter grade or credit/no credit
Continuation of the study of basic grammar forms, emphasizing listening and speaking, reading and writing, based on modern topical material.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

SPAN 2B (CAN SPAN 4) 2.0 units
Elementary Spanish 2B
2.0 hours lecture, 1.0 hour laboratory
Prerequisite SPAN 2A
Grading: letter grade or credit/no credit
Continuation of the study of basic grammar forms, emphasizing listening, speaking, reading and writing, based on modern topical material.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

SPAN 3 (CAN SPAN 8) 5.0 units
Intermediate Spanish
5.0 hours lecture
Prerequisite: SPAN 2 or SPAN 2A and 2B or recent completion of two years High School Spanish.
Grading: letter grade or credit/no credit
A review of grammar, an intensive study of idiomatic expressions and vocabulary, based on the reading of short stories, articles and situational dialogues which reflect Spanish culture and the development of reading and writing.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

SPAN 3H 3.0 units
Honors Intermediate Spanish
5.0 hours lecture
Prerequisite: SPAN 2 or 2A and 2B or recent completion of two years of High School Spanish and Qualification for the Honors Program.
Grading: letter grade or credit/no credit
Past verb tenses and present and past subjunctive moods; idiomatic expressions and vocabulary, based on the reading of short articles, stories and situational dialogues which reflect Spanish culture; and the development of reading and listening comprehension as well as speaking and writing skills.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

SPAN 4 (CAN SPAN 10) 5.0 units
Intermediate Spanish
5.0 hours lecture
Prerequisite: SPAN 3 or recent completion of three years of High School Spanish.
Grading: letter grade or credit/no credit
Continuation of the review of Spanish grammar, emphasizing a more advanced structure. Reading of short stories and literary selections by famous contemporary Spanish authors. Extensive practice in comprehension, speaking, writing and reading.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

SPAN 8AD 2.0 units
Spoken Spanish
3.0 hours lecture
Prerequisite: SPAN 2 or SPAN 2A and 2B
Grading: letter grade or credit/no credit
Designed to improve comprehension, structure, oral expression and fluency in Spanish as used in travel, in the home, in school and in business. Emphasizes vocabulary, idioms and language patterns fundamental to an active use of Spanish.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

SPAN 9 5.0 units
Spanish for Spanish Speakers
5.0 hours lecture
Recommended Preparation: Fluency in spoken Spanish.
Grading: letter grade or credit/no credit
Covers Hispanic culture, values, art and language, using a variety of literary selections, film, music, newspaper and magazines by famous Spanish, Latin American and Latino authors in the U.S. Intensive reading, analysis, comparison and contrast of the cultural values, found in short stories, essays, articles, video, film and documentaries, will serve as a window into the Hispanic imagination. This exploration will reveal the intellectual
Courses of Instruction

and cultural connections and variations of the Hispanic culture in Spain, Latin America and the U.S. and will serve as a springboard to perfect the literary and oral skills of native Spanish speakers.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

SPAN 10 5.0 units
Spanish for Spanish Speakers
5.0 hours lecture
Recommended Preparation: SPAN 9 or fluency in spoken Spanish.
Grading: letter grade or credit/no credit
Continuation of SPAN 9; intensive study of Hispanic culture, values, art and language using a variety of literary selections, film, music, newspaper and magazines by famous Spanish, Latin American and Latino authors in the U.S. Continuation of the reading, writing process and grammar review. Emphasizes syntax and literary styles and techniques. Study not only the intellectual and cultural connections and variations of the Hispanic culture in Spain, Latin America and the U.S. but also the stylistic and ideological differences between contemporary writers. The cultural and reading material will serve to focus on the development and understanding of writing styles and techniques that will enable the Spanish speaker to apply these techniques to creative writing and use argument and debate skills in a novel situation.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

SPAN 25A 3.0 units
Advanced Spanish: Culture in Literature
3.0 hours lecture
Prerequisite: SPAN 4
Grading: letter grade or credit/no credit
The study of the Spanish culture in short stories, fables, biographies, etc. Grammar review stressing oral and written composition. Practice for fluency. Emphasizes a career related language with a choice of collateral readings relative to business, science or humanities. Attention is given to developing vocabulary and standard forms appropriate to individual career objectives. Outside reading and reporting in the respective field of study or in representative Spanish literature.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

SPAN 25B 3.0 units
Advanced Spanish: History
3.0 hours lecture
Prerequisite: SPAN 4
Grading: letter grade or credit/no credit
Study the history of Spanish speaking countries from early to present time through texts from history books and grammar review stressing oral and written composition. Practice for fluency. Emphasizes a career related language with a choice of collateral readings relative to business, science or humanities. Attention is given to developing vocabulary and standard forms appropriate to individual career objectives. Outside reading and reporting in the respective field of study.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

SPAN 25C 3.0 units
Advanced Spanish: Politics, Current Event
3.0 hours lecture
Prerequisite: SPAN 4
Grading: letter grade or credit/no credit
A study of political and other current events through newspaper and magazine articles. Grammar review stressing oral and written composition. Practice for fluency. Emphasizes a career related language with a choice of collateral readings relative to business, science or humanities. Attention is given to developing vocabulary and standard forms appropriate to individual career objectives. Outside reading and reporting in the respective field of study or in representative Spanish literature.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

SPAN 25D 3.0 units
Advanced Spanish: Literature
3.0 hours lecture
Prerequisite: SPAN 4
Grading: letter grade or credit/no credit
A study of different literary genres through short novels, fairy tales, poems, etc. Grammar review stressing oral and written composition. Practice for fluency. Emphasizes a career related language with a choice of collateral readings relative to business, science or humanities. Attention is given to developing vocabulary and standard forms appropriate to individual career objectives. Outside reading and reporting in the respective field of study or in representative Spanish literature.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

SPAN 404 3.0 units
Spanish for Health Personnel
3.0 hours lecture
Grading: credit/no credit
Designed for those who need basic Spanish conversational skills and vocabulary in a health field. Provides awareness of Hispanic customs and culture.

SPEECH COMMUNICATION (SP)

SP 10 (CAN SPCH 4) 3.0 units
Elements of Public Speaking
3.0 hours lecture
Grading: letter grade or credit/no credit
Theory and practice in the construction and delivery of the extemporaneous speech. Required of all public speaking majors and minors.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

SP 19AD 1.0 unit
Speech Activity: Individual Events
10.0 hour laboratory
Grading: letter grade or credit/no credit
Through intercollegiate speech competition, perfect speaking skills, develop critical thinking and gain increased confidence.

Transfer Status: Transferable to CSU, see counselor for limitations.

SP 20 3.0 units
Elements of Interpersonal Communication
3.0 hours lecture
Grading: letter grade or credit/no credit
An experiential approach to the study of the process of communication at both the intrapersonal and interpersonal levels. Time will be devoted to both the
study of recent theories and experiments within the field of speech communication and their practical applications as related to perception, listening, non-verbal, conflict resolution and one’s self-concept. Transfer Status: Transferable to CSU, see counselor for limitations.

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<tr>
<th>Course Code</th>
<th>Units</th>
<th>Title</th>
<th>Description</th>
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<tbody>
<tr>
<td>SP 25</td>
<td>3.0</td>
<td>Elements of Intercultural Communication</td>
<td>Study of the relationship between culture and communication, emphasizing social, linguistic, psychological and non-verbal variables. Includes problems in the practice of intercultural communication. Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>SP 30</td>
<td>3.0</td>
<td>Elements of Group Communication</td>
<td>The theory and practice of basic principles and techniques of both small group and public group communication. Problem solving, critical thinking, creative thinking, conflict resolution, roles and skills for group interaction and leadership are employed. Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>SP 31</td>
<td>3.0</td>
<td>Elements of Leadership Communication</td>
<td>Explore definitions and theories of leadership, purposes and functions of leaders in various settings and provide opportunities for the practical application of the techniques of leadership toward understanding the role of leaders in organizational success. Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>SP 39AD</td>
<td>1.0</td>
<td>Leadership Laboratory</td>
<td>A practical application of leadership and parliamentary skills. Includes: discussions with leaders, weekly journals summarizing leadership experiences and problems. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>SP 50</td>
<td>3.0</td>
<td>Elements of Oral Interpretation</td>
<td>The basic principles of oral communication are explored through oral reading of prose, poetry and dramatic literature. Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>SP 60</td>
<td>3.0</td>
<td>Elements of Argumentation and Debate</td>
<td>Gain knowledge and understanding in the use of research skills and reasoning and learn to apply these skills in the debate of timely issues. Gain added appreciation for the role that advocacy and reasoning play in a free society. Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
</tbody>
</table>

Gain knowledge and understanding in the use of research skills and reasoning and learn to apply these skills in the debate of timely issues. Gain added appreciation for the role that advocacy and reasoning play in a free society. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP 69AD</td>
<td>1.0</td>
<td>Speech Activity: Team Events &amp; Debate</td>
<td>Through intercollegiate debate and team event competition, perfect argumentation and debate skills, the ability to perform in groups and gain increased confidence as communicators. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>SP 70</td>
<td>3.0</td>
<td>Voice and Articulation</td>
<td>Intensive training in articulation, enunciation, projection and related oral skills, based on the physiology, anatomy and assessment of voice production. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>SP 99AD</td>
<td>1.0</td>
<td>Special Projects in Speech</td>
<td>Allows students to investigate an area of speech communication that is of special interest to them. The overall philosophy is to challenge each student to accomplish goals that could not be reached in other courses. Working on an individual basis, assignments will be tailor-made, thus providing personal attention and directly observable and measurable outcomes to the instructor. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
</tbody>
</table>

SPEECH LANGUAGE PATHOLOGY ASSISTANT (SLPA)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLPA 10</td>
<td>2.0</td>
<td>Intro to Speech Language Pathology Asst</td>
<td>Intro to Speech Language Pathology Assistant career. Professional standards and scope of responsibilities. Legal and ethical issues along with the requirements for management of individuals with speech-language and hearing disorders. Considerations for cultural, ethical and linguistic diversity. Includes interdisciplinary and supervisory relationships, public interaction, individual responsibilities and compliance with both governmental and industry regulations. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
</tbody>
</table>
STATISTICS (STAT)

STAT 1 (CAN STAT 2) 3.0 units
Elementary Statistics
3.0 hours lecture
Prerequisite: Qualification through the Math assessment process or one year High School Intermediate Algebra with a grade of B or better as reflected by the second semester grade or MATH 130.
Grading: letter grade
A survey of descriptive methods of statistics, including measures of central tendency, dispersion and correlation and basic probability applications, in addition to the binomial and normal probability distributions. Emphasizes inferential techniques, including estimation, hypothesis testing and linear regression.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

STAT 1H 3.0 units
Honors Elementary Statistics
3.0 hours lecture
Prerequisite: Qualification through the Math assessment process or one year High School Intermediate Algebra with a grade of B or better as reflected by the second semester grade or MATH 130 and qualification for the Honors Program.
Grading: letter grade
Includes graphic presentation of data; probability; probability distributions such as the binomial and normal distributions; Central Limit Theorem; one and two sample hypothesis tests and confidence intervals; and simple regression and correlation. Emphasizes the use of technology in statistical analysis as it applies to real world data, as well as the written communication of results.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

TECHNOLOGY (TEC)

TEC 60 4.0 units
Computer Aided Design and Drafting (CADD)
3.0 hours lecture, 3.0 hours laboratory
Prerequisite: ARCHT 60 or DRAFT 51A
Recommended Preparation: ARCHT 60 or 61 or DRAFT 51A
Grading: letter grade
An intro and an opportunity to become familiar with the process of computer aided design. Enhance employment opportunities as a CADD operator. Not open for credit to students registered in or with credit in DRAFT 55.
Transfer Status: Transferable to CSU, see counselor for limitations.

THEATRE ARTS (TART)

TART 1 (CAN DRAM 8) 3.0 units
Acting 1 — Introduction to Acting
3.0 hours lecture, 1.0 hour laboratory
Corequisite: TART 51AD. You must enroll in the corequisite course before enrolling in this course.
Grading: letter grade or credit/no credit
An intro to acting through the process of personalization. The actor discovers and explores in him/herself qualities and experiences which are legitimate dimensions of the role he/she is creating. Explores the concept of personalization through relaxations, concentration, sensory awareness, imagination and acting exercises as the student acquires basic insights into acting for the theatre.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

TART 1B 2.0 units
Acting 1 — Movement
2.0 hours lecture, 1.0 hour laboratory
Corequisite: TART 51AD. You must enroll in the corequisite course before enrolling in this course.
Grading: letter grade or credit/no credit
An intro to the use of the human body as an instrument of expression. The study and application of the basic theories and principles of stage movement through the use of lecture and class exercise.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

TART 1C (CAN DRAM 6) 2.0 units
Acting 1 — Voice
2.0 hours lecture, 1.0 hour laboratory
Corequisite: TART 51AD. You must enroll in the corequisite course before enrolling in this course.
Recommended Preparation: TART 1B
Grading: letter grade or credit/no credit
An intro and an opportunity to become familiar with the process of computer aided design. Enhance employment opportunities as a CADD operator. Not open for credit to students registered in or with credit in DRAFT 55.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

TART 1D 2.0 units
Acting 1 — Improvisation
2.0 hours lecture, 1.0 hour laboratory
Corequisite: TART 51AD. You must enroll in the corequisite course before enrolling in this course.
Grading: letter grade or credit/no credit
Explore the various applications of theatrical improvisation. Drawing from both playwrights and imaginations, the actor will create fully realized characters, develop and analyze scenes. Mental agility, spontaneity, thinking on your feet and stage confidence will be emphasized.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

TART 2 3.0 units
Acting 2 — Technique & Characterization
3.0 hours lecture, 1.0 hour laboratory
Corequisite: TART 51AD. You must enroll in the corequisite course before enrolling in this course.
Recommended Preparation: TART 1B, 1C, or 1D, and TART 25 or 30
Grading: letter grade or credit/no credit
An investigation and development of a character that further strengthens techniques of personalization, role analysis and character motivation while including such disciplines as sense memory and improvisation. Additionally, investigation of the physical life of a character is emphasized, together with the technical and imaginative development of voice and body skills as a means of achieving fully realized characterizations (continued scene study, utilizing the works of major playwrights within the last hundred years).
Transfer Status: Transferable to UC/CSU, see counselor for limitations.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
</table>
| **TART 2A** | 2.0 units | Acting 2 — The Spoken Text  
2.0 hours lecture, 1.0 hour laboratory  
Prerequisite: TART 1C  
Corequisite: TART 51AD. You must enroll in the corequisite course before enrolling in this course.  
Grading: letter grade or credit/no credit  
Preparation and presentation of a varied range of spoken texts to free, develop and strengthen the student actor’s voice so that the actor’s unique sensibilities may be fully expressed through it.  
Transfer Status: Transferable to UC/CSU, see counselor for limitations. |
| **TART 2B** | 2.0 units | Acting 2 — The Spoken Text  
2.0 hours lecture, 1.0 hour laboratory  
Prerequisite: TART 1C  
Corequisite: TART 51AD. You must enroll in the corequisite course before enrolling in this course.  
Grading: letter grade or credit/no credit  
Preparation and presentation of a varied range of spoken texts to free, develop and strengthen the student actor’s voice so that the actor’s unique sensibilities may be fully expressed through it.  
Transfer Status: Transferable to UC/CSU, see counselor for limitations. |
| **TART 2C** | 2.0 units | Acting 2 — Movement, Mime and Mask  
2.0 hours lecture, 1.0 hour laboratory  
Corequisite: TART 51AD. You must enroll in the corequisite course before enrolling in this course.  
Grading: letter grade or credit/no credit  
Advanced application of the theory and principles of stage movement within specialized areas, such as mime, mask characterization, period movement styles and stage combat. Class exercises and lectures.  
Transfer Status: Transferable to UC/CSU, see counselor for limitations. |
| **TART 2D** | 2.0 units | Acting 2 — Movement, Mime and Mask  
2.0 hours lecture, 1.0 hour laboratory  
Corequisite: TART 51AD. You must enroll in the corequisite course before enrolling in this course.  
Grading: letter grade or credit/no credit  
Advanced application of the theory and principles of stage movement within specialized areas, such as mime, mask characterization, period movement styles and stage combat. Class exercises and lectures.  
Transfer Status: Transferable to UC/CSU, see counselor for limitations. |
| **TART 3A** | 3.0 units | Acting 3 — Scene Study  
3.0 hours lecture, 1.0 hour laboratory  
Corequisite: TART 51AD. You must enroll in the corequisite course before enrolling in this course.  
Recommended Preparation: TART 2 and TART 25  
Grading: letter grade or credit/no credit  
While utilizing contemporary and classical scene selections, emphasizing international playwrights of the 19th and 20th century, develop specific performance skills and acting techniques to heighten the intensity of the acting experience for the serious theatre student.  
Transfer Status: Transferable to UC/CSU, see counselor for limitations. |
| **TART 3B** | 3.0 units | Acting 3 — Scene Study  
3.0 hours lecture, 1.0 hour laboratory  
Prerequisite: TART 3A  
Corequisite: TART 51AD. You must enroll in the corequisite course before enrolling in this course.  
Grading: letter grade or credit/no credit  
While utilizing contemporary and classical scene selections, emphasizing international playwrights of the 19th and 20th century, develop specific performance skills and acting techniques to heighten the intensity of the acting experience for the serious theatre student.  
Transfer Status: Transferable to UC/CSU, see counselor for limitations. |
| **TART 4** | 3.0 units | Acting Workshop-Style  
2.0 hours lecture, 3.0 hours laboratory  
Prerequisite: TART 3A or 3B  
Grading: letter grade or credit/no credit  
Individual studies and exercises to develop freedom and imagination in the preparation and performance of classical and contemporary dramatic material. Scenes, cuttings and short plays.  
Transfer Status: Transferable to UC/CSU, see counselor for limitations. |
| **TART 12** | 3.0 units | Intermediate Acting  
3.0 hours lecture, 1.0 hour laboratory  
Prerequisite: TART 1  
Grading: letter grade or credit/no credit  
For the student for whom acting is an avocation: an investigation and development of character that further strengthens techniques of personalization, role analysis and character motivation while including such disciplines as sense memory and improvisation. Additionally, investigation of the physical life of a character is emphasized towards achieving fully realized characterizations. Scene study is continued, utilizing the works of major playwrights within the last hundred years.  
Transfer Status: Transferable to UC/CSU, see counselor for limitations. |
| **TART 13A** | 3.0 units | Advanced Acting  
3.0 hours lecture, 1.0 hour laboratory  
Prerequisite: TART 12  
Grading: letter grade or credit/no credit  
For the student for whom acting is an avocation: developing specific performance skills and acting techniques to heighten the intensity of the acting experience. Exercises to develop freedom and imagination are also emphasized while utilizing contemporary and classical scene selections and international playwrights.  
Transfer Status: Transferable to UC/CSU, see counselor for limitations. |
| **TART 13B** | 3.0 units | Advanced Acting  
3.0 hours lecture, 1.0 hour laboratory  
Prerequisite: TART 13A  
Grading: letter grade or credit/no credit  
For the student for whom acting is an avocation: developing specific performance skills and acting techniques to heighten the intensity of the acting experience. Exercises to develop freedom and imagination are also emphasized while utilizing contemporary and classical scene selections and international playwrights.  
Transfer Status: Transferable to UC/CSU, see counselor for limitations. |
### Courses of Instruction

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
<th>Lecture</th>
<th>Laboratory</th>
</tr>
</thead>
<tbody>
<tr>
<td>TART 25</td>
<td>Introduction to Theatre</td>
<td>3.0</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>TART 30</td>
<td>Introduction to Dramatic Literature</td>
<td>3.0</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>TART 32AD</td>
<td>Stage and Screen Writing</td>
<td>3.0</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>TART 39AD</td>
<td>Theatre Practicum</td>
<td>1.0</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>TART 40AD</td>
<td>Stage Scenery</td>
<td>2.0</td>
<td>2.0</td>
<td>3.0</td>
</tr>
<tr>
<td>TART 42AD</td>
<td>Stage Lighting</td>
<td>2.0</td>
<td>2.0</td>
<td>3.0</td>
</tr>
<tr>
<td>TART 43AD</td>
<td>Costume Crafts</td>
<td>2.0</td>
<td>1.0</td>
<td>3.0</td>
</tr>
<tr>
<td>TART 44AB</td>
<td>Costume Design</td>
<td>2.0</td>
<td>1.0</td>
<td>3.0</td>
</tr>
<tr>
<td>TART 47</td>
<td>Theatre Management</td>
<td>3.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TART 49AD</td>
<td>Rehearsal and Performance</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TART 25 Introduction to Theatre**

Corequisite: TART 51AD. You must enroll in the corequisite course before enrolling in this course. Grading: letter grade or credit/no credit

A critical analysis of theatre from an audience perspective. Elements of play production from the dramatic structure, style and historical perspective of the script to the final presentation before an audience will be explored. Included are reading, lectures and discussions on the theory and practice of play writing, producing, acting, directing, criticism, theatre architecture, set design, costume design, lighting design and the use of props. 
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**TART 30 Introduction to Dramatic Literature**

Corequisite: TART 51AD. You must enroll in the corequisite course before enrolling in this course.
Grading: letter grade or credit/no credit

An intro to the dramatic literature of the Western world, including American drama from early beginnings to present day. Dramatic structures, concepts, styles and themes of sixteen plays will be examined. The influence of the theatre and dramatic literature as a social and cultural force will be discussed. 
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**TART 32AD Stage and Screen Writing**

Recommended Preparation: TART 25, FILM 1 or ENGL 26
Grading: letter grade or credit/no credit

Fundamentals of play and screenwriting and characterization for students interested in dramatic writing.
Transfer Status: Transferable to CSU, see counselor for limitations.

**TART 39AD Theatre Practicum**

Grading: letter grade or credit/no credit

A hands-on, practical intro to the function of stage technicians, costume/wardrobe and make-up technicians and their contribution to dramatic productions. Organization of the stage, lighting and properties departments, costume and make-up departments in the running of a theatre production, including equipment use and maintenance. The function of technical stage personnel in production work are introduced to develop the students' skills and discipline in technical stage production.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**TART 40AD Stage Scenery**

Grading: letter grade or credit/no credit

8.0 hours laboratory

An intro to the phases of the administration, management and promotion of a producing theatre organization, focusing on the practical application of the principles learned in class, a "how to" course.
Transfer Status: Transferable to CSU, see counselor for limitations.

**TART 42AD Stage Lighting**

Corequisite: TART 39AD and 51AD. You must enroll in the corequisite courses before enrolling in this course. Grading: letter grade or credit/no credit

The practical application of the theories of stage lighting. Includes: using lighting materials and equipment, experimenting with light and color and lighting a stage for production.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**TART 43AD Costume Crafts**

Corequisite: TART 39AD and 51AD. You must enroll in the corequisite courses before enrolling in this course. Grading: letter grade or credit/no credit

Techniques of construction of costumes and accessories for the stage, including use of fabrics, materials and equipment. Practical experience in construction of costumes and accessories for Theatre Arts Department productions.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**TART 44AB Costume Design**

Corequisite: TART 39AD and 51AD. You must enroll in the corequisite courses before enrolling in this course. Grading: letter grade or credit/no credit

Techniques and theories of designing costumes for the stage, including design elements, execution of costume plates and costume plots, research and organization, clothing and theatrical costume history, patterns, budgets and development of costume portfolio.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**TART 47 Theatre Management**

Grading: letter grade or credit/no credit

An intro to the phases of the administration, management and promotion of a producing theatre organization, focusing on the practical application of the principles learned in class, a "how to" course.
Transfer Status: Transferable to CSU, see counselor for limitations.

**TART 49AD Rehearsal and Performance**

Corequisite: TART 1 (may be taken concurrently)

Grading: letter grade or credit/no credit

8.0 hours laboratory

Prerequisite: TART 1 (may be taken concurrently)
Corequisite: TART 51AD. You must enroll in the corequisite course before enrolling in this course.
Courses of Instruction

Grading: letter grade or credit/no credit
The application of acting and technical theatre theories through the preparation of plays for public performance. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

TART 50/1 0.5 unit
Major Production Performance
2.0 hours laboratory
Recommended Preparation: Audition
Grading: letter grade or credit/no credit
Provides study and lab exploration in all aspects of play production involving the performer to develop acting capabilities, skills and disciplines. The audition, preparation and presentational phases of the acting process will be explored under the supervision and guidance of a faculty director. Productions will be presented for public performance. Enrollment is for the duration of the audition, preparation and presentation phases of production. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

TART 52AD 2.0 units
Children's Theatre Performance
8.0 hours laboratory
Prerequisite: TART 55
1.0 hour lecture, 2.0 hours laboratory
Grading: letter grade or credit/no credit
Covers script readings, auditions, rehearsals, preparation and the performance of a children's theatre play. Bring live participatory theatre to children (ages 5-12) at schools, recreational sites, YMCA's, hospitals, etc., in the local area. Transfer Status: Transferable to CSU, see counselor for limitations.

TART 51AD 0.5 unit
Theatre Forum
0.5 hour lecture, 0.5 hour laboratory
Grading: letter grade or credit/no credit
Participation as an audience member in weekly programs dealing with the art of theatre, including scene work, one-act plays, special presentations and full productions. Provides a supplement for the student to the theatre arts course(s) being taken concurrently that semester. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

TART 50/2 1.0 unit
Major Production Performance
4.0 hours laboratory
Recommended Preparation: Audition
Grading: letter grade or credit/no credit
Provides study and lab exploration in all aspects of play production involving the performer to develop acting capabilities, skills and disciplines. The audition, preparation and presentational phases of the acting process will be explored under the supervision and guidance of a faculty director. Productions will be presented for public performance. Enrollment is for the duration of the audition, preparation and presentation phases of production. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

TART 50/3 1.5 units
Major Production Performance
6.0 hours laboratory
Recommended Preparation: Audition
Grading: letter grade or credit/no credit
Provides study and lab exploration in all aspects of play production involving the performer to develop acting capabilities, skills and disciplines. The audition, preparation and presentational phases of the acting process will be explored under the supervision and guidance of a faculty director. Production will be presented for public performance. Enrollment is for the duration of the audition, preparation and presentation phases of production. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

TART 55 2.0 units
Stage Makeup
2.0 hours laboratory
Prerequisite: TART 51AD
2.0 hours lecture, 1.0 hour laboratory
Grading: letter grade or credit/no credit
The theory and application of stage makeup. Includes: designing and applying stage makeup to actors for various theatre productions. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

TART 56AD 1.5 units
Advanced Stage Makeup
1.0 hour lecture, 2.0 hours laboratory
Prerequisite: TART 55
Corequisite: TART 39AD and 51AD. You must enroll in the corequisite courses before enrolling in this course.
Grading: letter grade or credit/no credit
Exploration of prosthetics, bald caps and wigmaking. Experimentation with new products. Designing and rendering processes. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

TART 60AD 1.0 unit
Special Projects in Theatre Arts
3.0 hours laboratory
Grading: letter grade or credit/no credit
Permits lower-division students with a generalized background in drama to explore in-depth a specific aspect of theatre arts in both theory and execution. Transfer Status: Transferable to CSU, see counselor for limitations.
Courses of Instruction

TART 75AD 1.0 unit
Summer Repertory Theatre: Performance
7.0 hours laboratory
Corequisite: TART 76AD
Recommended Preparation: Audition
Grading: letter grade or credit/no credit
This course will examine primary and secondary show business career options available in the greater Los Angeles area, as well as other geographic regions. The course specifics will include, but not be limited to: Live theatre, television, commercials and wild spots as well as auditioning, product copy, sponsors, pay tables, residuals, and headshots.

TART 76AD 1.0 unit
Summer Repertory Theatre: Production
7.0 hours laboratory
Grading: letter grade or credit/no credit
This course will examine the beginning techniques for show business professional auditioning and interviewing. Course specifics will include but not be limited to: Live theatre, television, commercials and elements of broadcasting.

TART 201 1.5 units
Show Business Careers—How to Start
1.0 hour lecture, 2.0 hours laboratory
Prerequisite: TART 1
Grading: letter grade or credit/no credit
This course will examine primary and secondary show business career options available in the greater Los Angeles area, as well as other geographic regions. The course specifics will include, but not be limited to: Live theatre, television, commercials and wild spots as well as auditioning, product copy, sponsors, pay tables, residuals, and headshots.

TART 204 1.5 units
Marketing Yourself for Show Business
1.0 hour lecture, 2.0 hours laboratory
Prerequisite: TART 1
Grading: letter grade or credit/no credit
This course will examine primary and secondary show business career options available in the greater Los Angeles area, as well as other geographic regions. The course specifics will include, but not be limited to: Live theatre, television, commercials and wild spots as well as auditioning, product copy, sponsors, pay tables, residuals, and headshots.

TART 205 3.0 units
Auditions for: Theatre & Film
3.0 hours lecture, 1.0 hour laboratory
Recommended Preparation: TART 30 or TART 1B or TART 1C
Grading: letter grade or credit/no credit
This course will examine primary and secondary show business career options available in the greater Los Angeles area, as well as other geographic regions. The course specifics will include, but not be limited to: Live theatre, television, commercials and wild spots as well as auditioning, product copy, sponsors, pay tables, residuals, and headshots.

TART 206A 1.5 units
Audition and Interview Skills—Beginning
1.0 hour lecture, 2.0 hours laboratory
Prerequisite: TART 1
Grading: letter grade or credit/no credit
This course will examine primary and secondary show business career options available in the greater Los Angeles area, as well as other geographic regions. The course specifics will include, but not be limited to: Live theatre, television, commercials and wild spots as well as auditioning, product copy, sponsors, pay tables, residuals, and headshots.

TART 206B 1.5 units
Audition and Interview Skills—Advanced
1.0 hour lecture, 2.0 hours laboratory
Prerequisite: TART 206A
Grading: letter grade or credit/no credit
This course will examine primary and secondary show business career options available in the greater Los Angeles area, as well as other geographic regions. The course specifics will include, but not be limited to: Live theatre, television, commercials and wild spots as well as auditioning, product copy, sponsors, pay tables, residuals, and headshots.

TART 208A 1.5 units
Breaking Into Commercials—Beginning
1.0 hour lecture, 2.0 hours laboratory
Prerequisite: TART 1
Grading: letter grade or credit/no credit
This course will examine primary and secondary show business career options available in the greater Los Angeles area, as well as other geographic regions. The course specifics will include, but not be limited to: Live theatre, television, commercials and wild spots as well as auditioning, product copy, sponsors, pay tables, residuals, and headshots.

TART 208B 1.5 units
Breaking Into Commercials—Advanced
1.0 hour lecture, 2.0 hours laboratory
Prerequisite: TART 208A
Grading: letter grade or credit/no credit
This course will examine primary and secondary show business career options available in the greater Los Angeles area, as well as other geographic regions. The course specifics will include, but not be limited to: Live theatre, television, commercials and wild spots as well as auditioning, product copy, sponsors, pay tables, residuals, and headshots.

TART 210A 1.5 units
Voice-Over Techniques—Beginning
1.0 hour lecture, 2.0 hours laboratory
Prerequisite: TART 1
Grading: letter grade or credit/no credit
This course will examine primary and secondary show business career options available in the greater Los Angeles area, as well as other geographic regions. The course specifics will include, but not be limited to: Live theatre, television, commercials and wild spots as well as auditioning, product copy, sponsors, pay tables, residuals, and headshots.

TART 210B 1.5 units
Voice-Over Techniques—Advanced
1.0 hour lecture, 2.0 hours laboratory
Prerequisite: TART 210A
Grading: letter grade or credit/no credit
This course will examine primary and secondary show business career options available in the greater Los Angeles area, as well as other geographic regions. The course specifics will include, but not be limited to: Live theatre, television, commercials and wild spots as well as auditioning, product copy, sponsors, pay tables, residuals, and headshots.

TART 212A 1.5 units
Acting in Film—Beginning
1.0 hour lecture, 2.0 hours laboratory
Prerequisite: TART 1
Grading: letter grade or credit/no credit
This course will examine primary and secondary show business career options available in the greater Los Angeles area, as well as other geographic regions. The course specifics will include, but not be limited to: Live theatre, television, commercials and wild spots as well as auditioning, product copy, sponsors, pay tables, residuals, and headshots.
Courses of Instruction

Prerequisite: TART 1
Grading: letter grade or credit/no credit
This course is an examination of beginning techniques for acting in film. Course topics will include but not be limited to, studio format, on location, tracking, steady-cam, multiple camera and digital aspects.

TART 212B 1.5 units
Acting in Film — Advanced
1.0 hour lecture, 2.0 hours laboratory
Prerequisite: TART 212A
Grading: letter grade or credit/no credit
This course is an examination of multiple aspects and advanced techniques for acting in film. Topics will include but not be limited to, studio, on location, multi-camera, steady-cam and digital aspects.

TOURISM, HOTEL MANAGEMENT (THRH)

THRH 16 3.0 units
Introduction to Hospitality Management
3.0 hours lecture
Grading: letter grade
Traces the growth and development of the lodging industry from early inns to modern high-rise commercial hotels and highway motels. Discusses the organization of operations, opportunities and future trends, the “Hospitality Attitude,” competitive business in the free enterprise system and types of lodging establishments. Study the growth and improvement of the industry as related to management demands, the organization of hotel operations, including all departments and the social, personal and financial growth of a hotel career.
Transfer Status: Transferable to CSU, see counselor for limitations.

THRH 22 3.0 units
Front Office Procedures
3.0 hours lecture
Grading: letter grade
Presents a systematic approach to front office procedures by detailing the flow of business through a hotel beginning with the reservation process and ending with check-out and settlement. Examines the various elements of effective front office management, paying particular attention to planning and evaluating front office operations and personnel management. Front office procedures and management are placed within the context of the overall operation of a hotel.
Transfer Status: Transferable to CSU, see counselor for limitations.

THRH 24 3.0 units
Hospitality Accounting
3.0 hours lecture
Grading: letter grade
Provides basic knowledge of hotel and motel record keeping concepts and techniques. Examines front office procedures and the functions of the night auditor. Text material will be provided for record keeping procedures for revenue, expenses, payrolls and financial statements.
Transfer Status: Transferable to CSU, see counselor for limitations.

THRH 26 3.0 units
Hospitality Supervision
3.0 hours lecture
Grading: letter grade
Designed to teach procedures in the areas of supervising concepts and practices, the mutual expectations of workers and management, hiring, training, coaching, counseling and other qualities important in providing the necessary leadership and guidance of workers.
Transfer Status: Transferable to CSU, see counselor for limitations.

THRH 28 3.0 units
Convention Management & Meeting Planning
3.0 hours lecture
Grading: letter grade
Defines the scope and various segments of the convention and group business market, describes marketing and sales strategies to attract markets with specific needs and explains methods and techniques to meet those needs as part of meeting and convention service.
Transfer Status: Transferable to CSU, see counselor for limitations.

THRH 29 3.0 units
Facilities Management
3.0 hours lecture
Grading: letter grade
Offers a complete approach to the operation and management of the physical plant of a hotel or restaurant. Details are presented in property management and related costs, leasing and contracts, equipment planning and working effectively with the engineering and maintenance department.
Transfer Status: Transferable to CSU, see counselor for limitations.

THRH 30 3.0 units
Hospitality Sales and Marketing
3.0 hours lecture
Grading: letter grade
Provides a solid background in hospitality sales, advertising and marketing. Discusses effective marketing plans, targeting and selling to the most appropriate markets, networking and producing marketing and sales materials that deliver benefits to the hospitality operation.
Transfer Status: Transferable to CSU, see counselor for limitations.

THRH 31 3.0 units
Resort Operations
3.0 hours lecture
Grading: letter grade

Courses of Instruction

Complete approach to the operation of resort properties. Beginning with historical development, details are presented in planning, development, financial investment management and marketing that deal with the unique nature of resort business. Also examines the future and the impact of the condominium concept, time-sharing, technological change and the increased cost of energy and transportation.

Transfer Status: Transferable to CSU, see counselor for limitations.

**THRH 33** 3.0 units
Housekeeping & Security Management
3.0 hours lecture
Grading: letter grade
An overview of the fundamentals of housekeeping management and the functions, tools and practices required in today’s lodging and institutional housekeeping departments. Course offered less than once a year.

Transfer Status: Transferable to CSU, see counselor for limitations.

**THRH 39** 3.0 units
Hospitality Industry Computer Systems
2.5 hours lecture, 1.5 hours laboratory
Grading: letter grade
Provides an overview of the information needs of lodging properties and food service establishments; addresses essential aspects of computer systems, such as hardware, software and generic applications; focuses on computer-based property management systems of both front office and back office functions; examines features of computerized restaurant management systems; describes hotel sales computer application, revenue management strategies and accounting applications; addresses the selection and implementation of computer systems; focuses on managing information systems; and examines the impact of the Internet and private intranets on the hospitality industry.

Transfer Status: Transferable to CSU, see counselor for limitations.

**THRH 40** 3.0 units
Hospitality Computer Systems
2.5 hours lecture, 1.5 hours laboratory
Grading: letter grade
Provides a working knowledge of the computer terminal, including front desk, night audit, management, housekeeping, marketing, city ledger, general accounting and complete payroll systems. Course offered less than once a year.

Transfer Status: Transferable to CSU, see counselor for limitations.

**THRH 271AD** 2.0 units
Work Experience — Hotel/Restaurant Mgmt
1.0 hour lecture, 4.1 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
An extension of vocational learning through employment directly related to the career for which the student college program is designed.

**THRH 272AD** 3.0 units
Work Experience — Hotel/Restaurant Mgmt
1.0 hour lecture, 8.3 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
An extension of vocational learning through employment directly related to the career for which the student college program is designed.

**TOURISM, RESTAURANT/CATERING (THRFB)**

**THRFB 17** 3.0 units
Introduction to Food and Beverage
3.0 hours lecture
Grading: letter grade
Includes orientation to food services operations, history of the industry, menu planning, food and beverage service, bar operations, budgeting, pre-control, operational analysis, equipment layout, selection and maintenance and industry safety.

Transfer Status: Transferable to CSU, see counselor for limitations.

**THRFB 18** 3.0 units
Introduction to Culinary Preparation
3.0 hours lecture
Grading: letter grade
Provides the basic knowledge needed to understand and become skillful in basic food preparation and production while studying the science of why ingredients and procedures are used. Includes hot food preparation, cold food preparation (garde manager), baking, sanitation, proper storage and handling of foods and creative presentation of foods.

Transfer Status: Transferable to CSU, see counselor for limitations.

**THRFB 19** 3.0 units
Food/Beverage Purchasing/Plan/Control
3.0 hours lecture
Grading: letter grade
Learn to develop and implement an effective purchasing program, focusing on issues pertaining to supplier relations and selection, negotiation and evaluation. Covers the principles and procedures involved in an effective food and beverage control system, including standards determination, the operating budget, cost-volume-profit analysis, income and cost control, menu pricing, labor cost control and computer applications.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**THRFB 27** 3.0 units
Bar and Beverage Management
3.0 hours lecture
Grading: letter grade
Provides students with the practical knowledge needed to manage a bar or beverage operation for the small sole proprietor or bar and beverage service in a restaurant
and/or hotel. Also presents principles and theories to support and reinforce the practical aspects.

Transfer Status: Transferable to CSU, see counselor for limitations.

**THRFB 32** 3.0 units

Introduction to Catering Management
3.0 hours lecture
Grading: letter grade
Provides practical skills and knowledge for effective management of food and beverage catering in locations ranging from homes to restaurants, clubs, gardens, hotels, water craft and other sites. Discusses designing menus, food and beverage purchasing, storage, transport and sanitation, site inspections, equipment rentals, and hiring, training and managing a staff, while emphasizing the special needs of guests.

Transfer Status: Transferable to CSU, see counselor for limitations.

**TOURISM, TRAVEL AND TOURISM (THRT)**

**THRT 210** 3.0 units

Introduction to the Travel Industry
3.0 hours lecture
Grading: letter grade
Provides a basic understanding of travel and tourism and insights into the development and operation of various components of the travel industry. Emphasizes the concepts regarding travel as an industry and different industry practices.

**THRT 212** 3.0 units

Travel Career Employment
3.0 hours lecture
Grading: letter grade
A critical exam of employment possibilities in the travel/tourism industry, emphasizing employment standards and hiring practices leading towards employment.

**THRT 214** 3.0 units

Travel Marketing and Sales Techniques
3.0 hours lecture
Grading: letter grade
Provides techniques and skills of selling and a working knowledge of the methods of merchandising and advertising travel used by airlines, tour operators, retail travel agents and other tourism industries.

**THRT 215** 3.0 units

Travel Operations & Risk Management
3.0 hours lecture
Grading: letter grade
An intro to the realistic travel industry procedures and activities which provides meaningful application materials for students interested in the travel industry. Introduces the concept of risk management in the travel industry and provides some basic concepts for the management of risk.

**THRT 216B** 3.0 units

Travel Destinations-North/Centr/South Am
3.0 hours lecture
Grading: letter grade
Study the location and physical description, history, form of government, documentation, languages, culture, currency, internal transportation, cities and major points of interest in North, Central and South America.

**THRT 216C** 3.0 units

Travel Destinations-Europe and Africa
3.0 hours lecture
Grading: letter grade
Learn location and physical description, history, form of government, documentation, languages, culture, currency, internal transportation, cities and major points of interest in Europe and Africa.

**THRT 216D** 3.0 units

Travel Dest.-Pacific, Asia & Middle East
3.0 hours lecture
Grading: letter grade
Study the location and physical description, history, form of government, documentation, languages, culture, currency, internal transportation, cities and major points of interest in Asia, the South Pacific and the Middle East.

**THRT 218** 3.0 units

Transportation and Tours
3.0 hours lecture
Grading: letter grade
Explore all forms of ground transportation, including rail, motorcoach and car rentals. Learn the methods of costing a complete itinerary and the comparisons per diem for the various forms of transportation, hotel and sightseeing for individuals and groups. Research materials such as hotel, rail guides, car rental information and tour packages are reviewed, as well as customer service.

**THRT 219** 3.0 units

Cruise Specialization
3.0 hours lecture
Grading: letter grade
Introduces ship and cruise line terminology, applications and selling techniques. Identify cruise lines’ ships and their selling destinations. Includes individual and group booking procedures.

**THRT 220** 3.0 units

Travel and Tourism Workshop
3.0 hours lecture
Grading: letter grade
Provides a working knowledge of the travel industry. Use all related travel courses in applying knowledge to mock situations.

**THRT 222A** 3.0 units

Travel Agency Computer Operations-SABRE
2.5 hours lecture, 1.5 hours laboratory
Recommended Preparation: THRT 230 or equivalent Travel/Tourism industry knowledge and/or experience.
Grading: letter grade
Provides a working knowledge of the computer terminal, including flight availability, schedules, passenger data and itineraries and fare information.

**THRT 222B** 3.0 units

Travel Agency Computer Operations-APOLLO
2.5 hours lecture, 1.5 hours laboratory
Recommended Preparation: THRT 230 or equivalent Travel/Tourism industry knowledge and/or experience.
Grading: letter grade
### Courses of Instruction

Provides a working knowledge of the computer terminal, including flight availability, schedules, passenger data and itineraries and fare information.

**THRT 222C** 3.0 units
**Travel Agency Computer Operat-WORLDSPAN**
2.5 hours lecture, 1.5 hours laboratory
Recommended Preparation: THRT 230 or equivalent
Travel/Tourism industry knowledge and/or experience.
Grading: letter grade
Provides a working knowledge of the computer terminal, including flight availability, schedules, passenger data and itineraries and fare information.

**THRT 222D** 3.0 units
**Travel Agency Computer Opr-Conversion**
2.5 hours lecture, 1.5 hours laboratory
Recommended Preparation: THRT 222A, 222B or 222C or equivalent travel industry knowledge and/or experience.
Grading: letter grade
Provides a working knowledge of the computer terminal for those trained in APOLLO who wish to convert to SABRE and for those trained in SABRE who wish to convert to APOLLO. Flight availability, schedules, passenger data, itineraries, fare information, car and hotel bookings are covered in each conversion.

**THRT 224** 3.0 units
**Meeting and Special Event Planning**
3.0 hours lecture
Grading: letter grade
Provides the skills necessary to successfully plan meetings and special events by supplying a comprehensive overview of meeting design and objectives, site selection, negotiation tactics, program planning, food and beverage, room setup, using support services, budgeting and financial planning, exhibit management, booth design, promotion, risk factors and evaluations.

**THRT 226** 3.0 units
**Travel Industry Accounting & Reporting**
3.0 hours lecture
Grading: letter grade
A basic intro to travel industry accounting, focusing on the steps in the accounting cycle. Emphasizes understanding the preparation of financial statements. Consideration is also given to accounting for expenses, fixed assets, inventory, equities, sales and payroll.

**THRT 228** 3.0 units
**Corporate Travel Management**
3.0 hours lecture
Grading: letter grade
An intro to the activities and responsibilities of the corporate travel arranger and manager. Operational techniques and financial plans and management are identified, proposals and contracts are discussed and the complete corporate travel process is presented.

**THRT 230** 3.0 units
**Travel Industry Fares & Ticketing**
3.0 hours lecture
Grading: letter grade
Provides a basic understanding of airline fares, ticketing, the issuance of air tickets and other accountable documents. Actual case studies will be used.

**THRT 234** 3.0 units
**Tour Management & Escorting**
3.0 hours lecture
Grading: letter grade
Introduces the roles and expectations of a tour manager and escort. Learn to research, plan and incorporate itineraries, promote the “package,” attract clients and manage the operational aspects of a group. The responsibilities and characteristics of a tour escort will be discussed.

**THRT 240** 3.0 units
**Travel Industry Proficiency Preparation**
3.0 hours lecture
Recommended Preparation: THRT 210, 218 and 230 or equivalent travel industry knowledge and/or experience.
Grading: letter grade
Preparation for the Travel Agency Proficiency Test (TAP) certified by ASTA (the American Society of Travel Agents) and ICTA (the Institute of Certified Travel Agents). This advanced course reviews the skills essential to a productive travel industry career.

**THRT 271AD** 2.0 units
**Work Experience-Travel Industry**
1.0 hour lecture, 4.1 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
An extension of vocational learning experiences through employment in work experience directly related to the occupational goal or career for which the student college program is designed. One unit of credit shall be granted for every 75 hours per semester. Maximum of twelve units.

**THRT 272AD** 3.0 units
**Work Experience-Travel Industry**
1.0 hour lecture, 8.3 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
An extension of vocational learning experiences through employment in work experience directly related to the occupational goal or career for which the student college program is designed. One unit of credit shall be granted for every 75 hours per semester. Maximum of twelve units.

**THRT 273AD** 4.0 units
**Work Experience-Travel Industry**
1.0 hour lecture, 12.5 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
An extension of vocational learning experiences through employment in work experience directly related to the occupational goal or career for which the student college program is designed. One unit of credit shall be granted for every 75 hours per semester. Maximum of twelve units.

### VIETNAMESE (VIET)

**VIET 1** 5.0 units
**Elementary Vietnamese**
5.0 hours lecture, 1.0 hour laboratory
Grading: letter grade or credit/no credit
Intro to the Vietnamese language, including listening comprehension, conversation, reading, writing, speaking and mastering the basic tones and grammar. Includes conversation in everyday life situations, emphasizing the traditions and customs of Vietnam. Not recommended for native speakers.

*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**VIET 1A** 3.0 units

**Elementary Vietnamese**

3.0 hours lecture

Grading: letter grade or credit/no credit

The first half of VIET 1. Intro to the Vietnamese language, including listening comprehension, conversation, reading, writing, speaking and mastering the basic tones and grammar. Topics for conversation are everyday life situations, emphasizing the traditions and customs of Vietnam. This course, in combination with VIET 1B, is equivalent to VIET 1. Not recommended for native speakers.

*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**VIET 1B** 2.0 units

**Elementary Vietnamese**

2.0 hours lecture, 1.0 hour laboratory

Prerequisite: VIET 1A

Grading: letter grade or credit/no credit

The second half of VIET 1. Intro to the Vietnamese language, including listening comprehension, conversation, reading, writing, speaking and mastering the basic tones and grammar. Topics for conversation are everyday life situations, emphasizing the traditions and customs of Vietnam. This course, in combination with VIET 1A, is equivalent to VIET 1. Not recommended for native speakers.

*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

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**WELDING (WELD)**

**WELD 50** 3.0 units

**Welding for Technicians**

2.0 hours lecture, 4.0 hours laboratory

Grading: letter grade or credit/no credit

Essentials of gas, arc and inert gas welding and their application to industrial processes.

*Transfer Status: Transferable to CSU, see counselor for limitations.*

**WELD 211** 9.0 units

**Fundamentals of Welding & Tools of Trade**

5.0 hours lecture, 13.3 hours laboratory

Grading: letter grade or credit/no credit

An intro to welding, emphasizing oxy-acetylene welding, oxy-acetylene cuttings, braze welding and pipefitting. Suitable for students majoring in other occupational areas, such as auto body repair, auto mechanics, machine tool or aircraft maintenance. Good health, manual dexterity and corrected or uncorrected 20/20 vision are necessary to be employable in the welding industry.

**WELD 212** 9.0 units

**ARC Welding & Fabrication**

5.0 hours lecture, 13.3 hours laboratory

Grading: letter grade or credit/no credit

An intro to arc welding fundamentals: safety practices, welding machines, basic welding symbols, metal identification (ferrous, non-ferrous, corrosion resistant and cast iron), inspection and testing procedures and welding codes. Skills learned will include flat, horizontal, vertical, overhead fillet welds and flat Y-groove butt welds.

**WELD 213** 9.0 units

**Advanced ARC Welding**

5.0 hours lecture, 13.3 hours laboratory

Grading: letter grade or credit/no credit

Prepares students to take the Los Angeles City certification test in structural steel and/or sheet metal welding and to advance knowledge and skills in arc welding. Includes: safety, code specifications, blueprint reading, inspection procedures and basic welding metallurgy.

**WELD 214** 9.0 units

**Inert Gas Welding (Heliarc, MIG)**

5.0 hours lecture, 13.3 hours laboratory

Grading: letter grade or credit/no credit

Teaches inert gas welding skills, including GTAW (TIG- heliarc) welding of carbon steel, stainless steel, aluminum, magnesium and GMAW (MIG) of steel and aluminum and inshield welding. Learn skills necessary for a career as an aerospace industry welder.

**WELD 220** 6.0 units

**Structural Arc Welding**

3.0 hours lecture, 9.0 hours laboratory

Grading: letter grade or credit/no credit

Preparation in structural steel and/or sheet metal welding. For students who wish to advance their knowledge and skills in arc welding. Includes safety code requirements, blueprint reading, inspection procedures, welding symbols and an intro to welding metallurgy.

**WELD 221** 4.0 units

**Arc Welding Structural Certification**

2.0 hours lecture, 6.0 hours laboratory

Grading: letter grade or credit/no credit

Prepares students to take the Los Angeles City certification test in structural steel and/or sheet metal welding and to advance knowledge and skills in arc welding. Includes: safety, electrode identification, welding code applications, basic welding metallurgy and basic welding techniques.

**WELD 230** 4.0 units

**Fundamentals of Inert Gas Weld (Heliarc)**

2.0 hours lecture, 6.0 hours laboratory

Grading: letter grade or credit/no credit

For students seeking skills in the inert gas welding process (G.T.A.W., G.M.A.W.) on aluminum. Learn the basic skills necessary for a career as an aerospace industry welder.

**WELD 271AD** 2.0 units

**Work Experience-Welding**

1.0 hour lecture, 4.1 hours laboratory

Corequisite: Enrollment in at least seven units including this course.

Grading: letter grade or credit/no credit

Satisfactory completion of at least seven units per semester including work experience and work experience issues. Vocational learning experiences
through employment in work experience directly related to the industry.

**WELD 272AD** 3.0 units

Work Experience-Welding
1.0 hour lecture, 8.3 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
Satisfactory completion of at least seven units per semester including work experience and work experience issues. Vocational learning experiences through employment in work experience directly related to the industry.

**WELD 273AD** 4.0 units

Work Experience-Welding
1.0 hour lecture, 12.5 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Grading: letter grade or credit/no credit
Satisfactory completion of at least seven units per semester including work experience and work experience issues. Vocational learning experiences through employment in work experience directly related to the industry.

**WELD 400AD** 2.0 units

Welding (General)
1.0 hour lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
Safety practices, arc, gas and inert gas welding on all types of metal, metallurgy of welding, blueprint reading, layout, related math, certification requirements and welding codes are covered.

**WELD 410AD** 2.0 units

Welding (ARC)
6.0 hours laboratory
Grading: letter grade or credit/no credit
Techniques of arc welding of steels, cast iron, aluminum, hard facing, cutting, safety practices and related information. May take a maximum of four semesters of WELD 410AD and 411AD.

**WELD 411AD** 1.0 unit

Welding (ARC)
3.0 hours laboratory
Grading: letter grade or credit/no credit
Practice arc welding procedures on various types of metal and learn safety practices.

**WELD 412AD** 3.0 units

Shielded Metal Arc Welding (ARC)
9.0 hours laboratory
Grading: letter grade or credit/no credit
This course will address the techniques of arc welding of steels, cast iron, aluminum, hard facing, and cutting. It also covers correct equipment setup and safety practices. This class is an open entry/open exit program, and it requires the completion of 162 lab hours.

**WELD 413AD** 2.0 units

SMAW Flat/Horz Groove Welds with Backing
6.0 hours laboratory
Grading: letter grade or credit/no credit
This course will address the techniques of arc welding of steels, cast iron, aluminum, hard facing, and cutting. It also covers correct equipment setup and safety practices.

This class is an open entry/open exit program, and it requires the completion of 108 lab hours.

**WELD 414AD** 2.0 units

SMAW Vert & OV/HD Grv Welds w/ Backing
6.0 hours laboratory
Grading: letter grade or credit/no credit
This course will address the techniques of arc welding of steels, cast iron, aluminum, hard facing, and cutting. It also covers correct equipment setup and safety practices. This class is an open entry/open exit program, and it requires the completion of 108 lab hours.

**WELD 415AD** 2.0 units

SMAW Flat/Horz Open Root Groove Welds
6.0 hours laboratory
Grading: letter grade or credit/no credit
This course will address the techniques of arc welding of steels, cast iron, aluminum, hard facing, and cutting. It also covers correct equipment setup and safety practices. This class is an open entry/open exit program, and it requires the completion of 108 lab hours.

**WELD 416AD** 2.0 units

SMAW Vert & O/H Open Root Groove Welds
6.0 hours laboratory
Grading: letter grade or credit/no credit
This course will address the techniques of arc welding of steels, cast iron, aluminum, hard facing, and cutting. It also covers correct equipment setup and safety practices. This class is an open entry/open exit program, and it requires the completion of 108 lab hours.

**WELD 450AD** 2.0 units

Welding (ARC)
6.0 hours laboratory
Grading: letter grade or credit/no credit
Techniques of arc welding of steels, cast iron, aluminum, hard facing, cutting, safety practices and related information. May take a maximum of four semesters of WELD 450AD and 451AD.

**WELD 451AD** 1.0 unit

Welding (ARC)
3.0 hours laboratory
Grading: letter grade or credit/no credit
Practice arc welding procedures on various types of metal and learn safety practices.

**WELD 453AD** 1.0 unit

Welding (Acetylene Gas)
3.0 hours laboratory
Grading: letter grade or credit/no credit
Learn techniques of oxy-acetylene gas welding of steels and aluminum, hard facing, flame cutting brazing, oxy-hydrogen welding and safety practices.

**WELD 455AB** 1.0 unit

Welding (Inert Gas)
3.0 hours laboratory
Grading: letter grade or credit/no credit
Techniques of metallic and tungsten inert gas welding, welding of steels, aluminum, magnesium, cast iron and safety practices are covered.

**WELD 460AD** 2.0 units

Welding (Acetylene Gas)
6.0 hours laboratory
Courses of Instruction

Grading: letter grade or credit/no credit
Techniques of oxy-acetylene gas welding of steels and aluminum, hard facing, flame cutting, brazing and oxy-hydrogen welding. Safety practices and general related information. May take a maximum of four semesters of WELD 452AD and 453AD.

WELD 461AD 1.0 unit
Oxygen Acetylene Welding
3.0 hours laboratory
Grading: letter grade or credit/no credit
Learn techniques of oxy-acetylene gas welding of steels and aluminum, hard facing, flame cutting brazing, oxy-hydrogen welding and safety practices.

WELD 480AD 2.0 units
Welding (Inert Gas)
6.0 hours laboratory
Grading: letter grade or credit/no credit
Techniques of metallic and tungsten inert gas welding. Welding of steels, aluminum, magnesium, cast iron and safety practices are covered.

WELD 481AD 1.0 unit
Welding (Inert Gas)
3.0 hours laboratory
Grading: letter grade or credit/no credit
Techniques of metallic and tungsten inert gas welding. Welding of steels, aluminum, magnesium, cast iron and safety practices are covered.

WELD 482AD 2.0 units
Gas Tungsten Arc Welding Basic Joints
6.0 hours laboratory
Grading: letter grade or credit/no credit
This course will address the techniques of Tungsten Inert Gas arc welding (TIG) of steels, cast iron, aluminum, hard facing, and cutting. It also covers correct equipment setup and safety practices. This class is an open entry/open exit program and it requires the completion of 108 lab hours.

WELD 483AD 2.0 units
Gas Metal Arc/Flux Core Arc Welding
6.0 hours laboratory
Grading: letter grade or credit/no credit
This course will address the techniques of Gas Metal Arch Welding (GMAW) and Flux Core Arc Welding (FCAW) of steels, cast iron, aluminum, hard facing, and cutting. It also covers correct equipment setup and safety practices. This class is an open entry/exit program, and it requires the completion of 108 lab hours.

WELD 601 0.0 unit
Basic Vocational Education
15.0 hours laboratory
Grading: LBCC Non-Graded Course
Offers additional assistance in a vocational field or helps improve mastery of specific vocational fundamentals. Students who plan to enroll in regular courses, or who are presently enrolled in classes and need to improve their basic vocational education knowledge can benefit from this program.
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VIGILANT, KAREN A.
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VIVIAN, SIGRID P.
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WAECHTER, CAROL N.
Speech

WAGNER, HELENE
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WALCZAK, KATHARINE L.
Center for Learning Assistance

WALKER, STEPHEN L.
Business Administration

WALLECH, MEGUMI
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WALSH, RUTHE L.
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WAN, THEODORE
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WANG, JANE SHIH
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WARD, A. JUDITH
Physical Education

WARD, STEPHEN E.
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WARKEN, THOMAS C.
English/Matriculation

WARNIMONT, KELLY
Physical Education

WATTS, JOHN T.
Public Affairs & Services

WAWRZYNSKI, PAUL A.
Health Technologies

WEBB, WILLIAM C.
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WEISBORD, JILL
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WEISS, ERIC E.
Cabinet Making/Carpentry

WELLS, MELINDA L.
Child and Adult Development

WELLS, REX C.
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WELLS, SCOTT J.
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WEST, BARBARA
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WETSCHAN, MICHAEL
Aviation Pilot Training

WHITE, CHARLES J.
Theatre

WHITEHEAD, JASON E.
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WHITELOCK, MERRI G.
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WHITTAKER, DEBRA A.
Social Science

WIEGAND, ROBERT H.
Librarian

WIENCEK, JEROME J.
Public Affairs & Services

WILKINSON, RICHARD A.
History

WILLIAMS, GARY J.
Learning & Academic Resources

WILLIAMS, SHERYL R.
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WILSON, KIRK E.
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WILSON, ROBERT
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WILSON, THOMAS
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WINCHELL, JILL E.
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WITKIN, LEONARD
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WRANIC, ANGELA
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WRIGHT, FRIEDA L.
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WURTZ, JEFFREY L.
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WYATT, ROGER, W.
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WYLIE, JAYNE R.
Vocational Nursing

WYNNE, PAUL R.
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WYOSZPOLSKI, JON J.
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YAHYE, ABDIRASHID
Computer & Business Information Systems

YANAGIHARA, GREGORY M.
Physical Science

YANG, CATALINA E.
Mathematics & Engineering

YANG, RUIXUE
English as a Second Language

YEMUT, EMAD B.
Mathematics & Engineering

YOON, YONG
English as a Second Language

YOUNG, CHRISTOPHER J.
Business

YOUNG, MAX O.
Electricity

YOUNG, STEVEN A.
Theater, Dance & Film

YUNKER, TERESA M.
English

ZAMOYSKA, CELINE C.
English as a Second Language

ZAMPPELLI, SHERI O.
Human Services

ZAWOYSKY, JOHN R.
Accounting & Business Management

ZONKOSKI, JOHN
Music & Radio/Television

ZUKOSKI, MICHAEL J.
Drafting

ZUMBRUN, JOHN D.
Aviation Maintenance

ZUNIGA, LIZBETH R.
Computer Applications & Office Technology
ABAIR, RUTH C.  
Career Center Technician

ABE, ROBERT Y.  
Computer Operator

ACOSTA, ADELINO  
Senior Clerk

AGUERO, JOSE E.  
Custodian

AGUERO, LUZ L.  
Custodian

AJA, MARY E.  
Sports Therapist

ALARCON, PETER  
Custodian

ALBERS, SUSAN K.  
Principal Cashier

ALVARADO, OLGA  
Financial Aid Technician

ALVAREZ, LISBETH  
ESL Office Coordinator

AMADOR, RUBEN E.  
Library Technician III

ANTONIO-PALOMARES, MARGARET  
Project Coordinator

ARJONA, JAVIER  
Student Center Facilitator

ASTON, STEVEN W.  
Creative Arts Production Coordinator

ATWOOD, KATHIE A.  
Campus Support Secretary

AXUP, PAMELA S.  
Human Resources Analyst

AZEVEDO, PAULO H.  
Grounds Maintenance Worker

BAKER, CINDY J.  
Accounting Supervisor

BAKER, JANE E.  
Accounting Technician III

BANGS, DIANE C.  
Human Resources Assistant

BARATIE, MYRIAN A.  
Admissions/Records Assistant

BARNES-GREEN, ADRIENNE.  
Clerk

BARNUM, ALBERT D.  
Custodian

BARRY, ANTIONETTE M.  
Senior Clerk

BARTZ, JENNIFER L.  
Secretary, Title V

BAUTISTA, JANE M.  
Instructional Assistant

BELL, DAMON A.  
Manager, Student Life

BERGEN, PATRICIA J.  
Senior Clerk

BERRY, JANICE L.  
Executive Secretary

BERRY, MARSHALL  
Custodial Supervisor I

BLACK, KATHLEEN  
Child Development Specialist-CalWorks

BLINCOE, DANIEL J.  
Senior Locksmith

BLOMBERG, CYNTHIA M.  
Health Services Specialist

BLORE, JOANNE T.  
Project Manager, Workplace Skills

BOWERS, ALISON  
Instructional Associate II

BOWERS, SARAH  
Intermediate Clerk

BOWSER JR, CLYDE C.  
Custodian

BOYKIN, TALMADGE  
Skilled Maintenance Worker

BOYLE, DEBORAH L.  
EOP&S Program Specialist

BRACKMAN, PAMELA A.  
Admissions/Records Tech II

BRADSHAW, JOAN M.  
Board Secretary

BRETON, JOANNE W.  
Schedule Technician

BRINKER, ROSEMARY A.  
Intermediate Clerk

BROOKS, CAREY V.  
Custodian

BROWN, CYNTHIA J.  
Office Assistant

BROWN, EILEEN T.  
Senior Clerk

BROWN, ROGER K.  
Lead Custodian

BROWN, SHIRLEY M.  
Intermediate Clerk

BUHAIN, ALLAN E.  
Supplies Clerk

BUI, CHAU M.  
User Support Network Coordinator

BURAS, DARYLYNN J.  
Senior Clerk

BUTCHER, JOHN E.  
Grounds Maintenance Worker

CAGE, KEILA N.  
Instructional Assistant

CAO, CAMTU  
Library Assistant

CAPONE, NANCY  
Buyer

CARR, JOAN M.  
Payroll & Benefits Manager

CARROLL, SEAN W.  
Multimedia Systems Specialist

CARTER, JERI L.  
Manager, Student Life

CARTNER, TYLER J.  
Educational Technologies

CASKEY, MARIA E.  
Senior Clerk

CHAO, JULIE  
Senior Clerk

CHAO, SEM  
Internal Auditor

CHAVEZ, LARRY  
College Center Attendant

CHEN, HU WEI-HWA  
Programmer Analyst

CHESTNUT, CARMEN L.  
Distance Learning Program Spec

CHU, TANG P.  
Programmer Analyst

CHUKWUDIRE, HURTICINE J.  
Senior Clerk

CLAYTON, STEVE L.  
Media Producer

CLEMENDE, NORINA J.  
Payroll Technician

CLEVELAND, SANDRA  
Instructional Aide

CLIFTON, RIDLEY R.  
Instructional Aide

COLEMAN, KEVIN D.  
Custodian

COMPIAN, JOHNNY  
Skilled Maintenance Worker
<table>
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GUSTIN, PHILIP J.
Grounds Maintenance Worker

GUTIERREZ, DOROTHY J.
Financial Aid Advisor

GUTIERREZ, IVAN
Instructional Aide

HALL, STEVEN P.
Stadium Maintenance Technician

HAMILTON, THOMAS E.
Instructional Toolroom
Maintenance Mechanic

HANCOCK, SANDRA I.
Instructional Equipment Assistant

HANKS, CYNTHIA A.
Media Technical Specialist

HARADA, KAREN M.
Executive Secretary

HARNESS, DOVIE L.
Accounting Technician I

HARVESTON, RANDY G.
Library Technician I

HARVEY, BRIAN P.
Mail Services Worker

HASAN, MUMTAZ
Science Lab Stockroom Assistant

HASTIE, BRIAN M.
Grounds Maintenance Worker

HEBER, LESLIE A.
Data Software Technician

HEDBERG, KAREN R.
Purchasing Assistant

HEFFERN, TIMOTHY J.
Computer Network Technician

HELDBERG, FREDRICK W.
Instructional Toolroom
Maintenance Mechanic

HELLER, KEVIN A.
Custodian

HERNANDEZ, ISRAEL
Studio Lab Assistant

HERNANDEZ, JOSE L.
Custodian

HERNANDEZ, LYNN A.
Graphic Designer

HERZOG, BARBARA B.
Tutorial Program Coordinator

HICKS, PATRICIA L.
Accounting Technician I

HILL, ROBERT H.
Manager, Student Life

HIVELY, STUART E.
Instructional Equipment Technician

HOANG, CALVIN T.
Programmer Analyst

HOBBS, ERIC Z.
Web Coordinator

HOFFLAND, CECILIA
Library Technical Assistant

HUERTA, MAGDALENA M.
Financial Aid Technician

HUTCHINGS, PETER H.
Performance Accompanist

ISAASLAZO, ROGELIO
Instructional Aide

JARRET, HERMAN N.
Custodian

JARVI, THOMAS J.
Grounds Maintenance Worker

JEFFERSON, JAMES W.
Custodian

JOHNSON, JUSTIN B.
Data Software Technician

JOHNSON, KAREN P.
Intermediate/Senior Clerk

JOHNSON, MARY B.
Administrative Secretary

JOHNSON, PATRICIA A.
Senior Clerk

JOHNSON, ROBERT
Instructional Toolroom
Maintenance Mechanic

JOSEPH, RAYMOND G. JR.
Library Technician II

KALUHIWA, MARY
Health Services Assistant

KEARNEY, KEVIN M.
Performance Accompanist

KECKEISEN, DEBORAH C.
Accountant

KHONG, NONG
Instructional Aid

KIEBLER, THOMAS
Instructional Toolroom
Maintenance Mechanic

KIFT, KATHERINE
Office Assistant

KIMBLE, ROBERTA
Program Director

KINSELLA, DENISE L.
International Program Specialist

KLINGBEIL, CYNTHIA N.
Child Development Site Supervisor

KRAVITZ, JAMES F.
Educational Technologies

KRUIZENGA, ALICIA M.
Associate Director, Foundation

LABARBA, MARY H.
Instructional Aide

LAM, HUE K.
Office Assistant

LANE, RENO A.
Financial Aid Technician

LANG-WILVERS, JACQUELINE
Grants Development Specialist

LASHOWER, KAREN L.
Instructional Aide

LAWRENCE, KERRY D.
Telecommunications Technician

LAWRENCE, SHERRI L.
Computer Operator

LEBFROM, RONALD M.
Web Coordinator

LEMLE, BARBARA
Intermediate Clerk

LEON, CYDNEY M.
Administrative Assistant

LERCH, VICKI A.
Campus Support Secretary

LICHTENBERGER, JANA M.
Buyer

LITSCHIEWSKI, MARY H.
Admissions/Records Tech II

LITTLEJOHN, ROSE
Senior Clerk

LOPEZ, PRISCILLA
Workforce Dev Coordinator

LORENCE, ELLEN K.
Senior Clerk

LOUIE, DEBRA
Instructional Aide

LOWE, D. DUANE
Director, Fiscal Affairs

LOWER, LINDA D.
Secretary II

LUUGA, AUGUST
Systems/Programming Manager

LUUGA, LYNDA G.
Registrar
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
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<tbody>
<tr>
<td>LY, BOUNRITH</td>
<td>User Support Network Coordinator</td>
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<td>LY, THAI K.</td>
<td>Instructional Assistant</td>
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<td>LYLES, STEPHANIE L.</td>
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<td>MABON, LEO</td>
<td>Custodial Services Manager</td>
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<td>MAC CULLEN, RUTH E.</td>
<td>Associate Registrar</td>
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<td>MACINTOSH, BLAKE W.</td>
<td>Media Producer</td>
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<td>MACDERA, ELIZABETH</td>
<td>Administrative Secretary</td>
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<td>MAGDALENO, CORINNE</td>
<td>Administrative Secretary</td>
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<td>MAHARAJ, PETER</td>
<td>Student Services Technical Manager</td>
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<td>MAJOR, ELLA L.</td>
<td>Accounting Technician III</td>
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<td>MALAGA, BENIGNO T.</td>
<td>Custodian</td>
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<td>MALONEY, MICHAEL S.</td>
<td>Student Athlete Success Coordinator</td>
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<td>MARCY, DONALD J.</td>
<td>Stage Technician</td>
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<td>MARIOTTA, MARIO, III</td>
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<td>MARTIN, MARLIN</td>
<td>Offset Press Operator</td>
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<td>MASESSA, MIKE R.</td>
<td>Carpenter</td>
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<td>Vehicle Attendant</td>
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<td>Buyer</td>
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<td>MEAK, SAVOUN</td>
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<td>MEAKER, CHRYSTY</td>
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<td>MEJIA-GAYTAN, GEORGIANA</td>
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<td>Phan, Vang V.</td>
<td>Custodian</td>
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<tr>
<td>Phillips, Malcolm J.</td>
<td>Truck Driver</td>
</tr>
<tr>
<td>Phuong, Mara</td>
<td>Instructional Toolroom/Maintenance Mechanic</td>
</tr>
<tr>
<td>Polly, Irene L.</td>
<td>Financial Aid Technician</td>
</tr>
<tr>
<td>Pope, Michele M.</td>
<td>Financial Aid Technician</td>
</tr>
<tr>
<td>Pope, Paula J.</td>
<td>Intermediate Clerk</td>
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<tr>
<td>Pouncil, Matais D.</td>
<td>Upward Bound Program Specialist</td>
</tr>
<tr>
<td>Quach, Lavenia H.</td>
<td>Clerk</td>
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<tr>
<td>Quinn, Tarca R.</td>
<td>Intermediate Clerk</td>
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<tr>
<td>Quintero, Paul-Anthony</td>
<td>Program Specialist</td>
</tr>
<tr>
<td>Quirk, Paul J.</td>
<td>Director of Support Services</td>
</tr>
<tr>
<td>Raley, Linda M.</td>
<td>Athletic Equipment Assistant</td>
</tr>
<tr>
<td>Raven, Sharon C.</td>
<td>Secretary</td>
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<tr>
<td>Ray, Karren J.</td>
<td>Executive Secretary</td>
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<tr>
<td>Recharte, Christine</td>
<td>Intermediate Clerk</td>
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<tr>
<td>Reeder, Daniel</td>
<td>Theater Production Technician</td>
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<tr>
<td>Remeta, Robert W.</td>
<td>Instructional Equipment Technician</td>
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<tr>
<td>Rico, Armando</td>
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<td>Rios, Refugio M.</td>
<td>Custodian</td>
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<td>Rivers, Stanley J.</td>
<td>Skilled Maintenance Worker</td>
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<tr>
<td>Robinson, Patricia L.</td>
<td>Communications Assistant I</td>
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<tr>
<td>Rodriguez, Maria N.</td>
<td>Intermediate Clerk</td>
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<tr>
<td>Roseth, Linda P.</td>
<td>Division Secretary</td>
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<tr>
<td>Ross, Patrick A.</td>
<td>Instructional Multi-Media Web Programmer</td>
</tr>
<tr>
<td>Rossmannek, Fred H.</td>
<td>Lead Media Producer</td>
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<tr>
<td>Rualo, Danilo C.</td>
<td>Lead Custodian</td>
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<td>Rualo, Emmanuel G.</td>
<td>Custodian</td>
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<tr>
<td>Rubalcava, Maria</td>
<td>Admissions and Records Assistant</td>
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<tr>
<td>Rubio, Roy</td>
<td>Grounds Equipment Operator</td>
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<tr>
<td>Ruelas, Guadalupe</td>
<td>Senior Clerk</td>
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<tr>
<td>Ruhe, Dale</td>
<td>Public Information Specialist</td>
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<tr>
<td>Ruiz, Christopher J.</td>
<td>Sports Information Specialist</td>
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<tr>
<td>Ruiz, Noelia M.</td>
<td>Financial Aid Technician</td>
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<td>Rumaguira, Pablo</td>
<td>Custodian</td>
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<tr>
<td>Russell, Nicole C.</td>
<td>Senior Clerk</td>
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<tr>
<td>Sabo, Rudy C.</td>
<td>Skilled Maintenance Worker</td>
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<tr>
<td>Sadler, Cecilia M.</td>
<td>Educational Technologist</td>
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<td>Sanchez, Sandra</td>
<td>Project Manager</td>
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<tr>
<td>Santos, Rodolfo S.</td>
<td>Custodian</td>
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<tr>
<td>Santoscoy, Oscar</td>
<td>Computer Laboratory Technician</td>
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<tr>
<td>Satele, Tauasosi M.</td>
<td>Senior Clerk</td>
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<tr>
<td>Sau, Chandha</td>
<td>Intermediate Clerk</td>
</tr>
<tr>
<td>Saumure, Normand F.</td>
<td>Plumber</td>
</tr>
<tr>
<td>Schital, Amit</td>
<td>Director, Distance Learning and Instructional Technology</td>
</tr>
<tr>
<td>Schlick, David</td>
<td>User Support Network Coordinator</td>
</tr>
<tr>
<td>Schmalzried, M. Yvonne</td>
<td>Senior Clerk</td>
</tr>
<tr>
<td>Schneider, Lois M.</td>
<td>Secretary</td>
</tr>
<tr>
<td>Schwandner, Gail B.</td>
<td>Administrative Operations Manager</td>
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<tr>
<td>Scruggs, Tina</td>
<td>Division Secretary</td>
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<tr>
<td>Segoviano, Helen M.</td>
<td>Receptionist, HR</td>
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<tr>
<td>Shandor, David B.</td>
<td>Lead Grounds Maintenance Worker</td>
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<tr>
<td>Shayegh, Mehirdad</td>
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<tr>
<td>Sheffield, N. Shayne</td>
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<td>Shernell-Banks, Deatrice</td>
<td>EOP&amp;S Program Coordinator</td>
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<tr>
<td>Shin, Cindie</td>
<td>Intermediate Clerk</td>
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<tr>
<td>Simonek, Linda G.</td>
<td>Supplies Clerk</td>
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<tr>
<td>Skille, Steven D.</td>
<td>Senior Clerk</td>
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<tr>
<td>Slater, Wendy I.</td>
<td>Senior Clerk</td>
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<tr>
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<th>Degrees and Institutions</th>
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