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, 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 memories that you will take with you long after you have completed your educational experience at LBCC. Thank you.

Maurice Spencer
ASB President
Summer Sessions 2005
May 31 First Summer Session Classes Begin
June 20 Second Summer Session Classes Begin
July 11 Third Summer Session Classes Begin
July 4 Holiday (Independence Day)

Fall Semester 2005
August 15 Begin Fall Classes
September 5 Holiday (Labor Day)
September 29 Deadline to Apply for December Graduation
November 11 Holiday (Veterans Day)
November 24-25 Holiday (Thanksgiving)
December 8-16 Final Exams - Refer to Fall Schedule of Classes
December 16 Fall Classes End
December 17-January 16 Winter Recess

Spring Semester 2006
January 17 Spring Classes Begin
February 17 Holiday (Lincoln's Birthday)
February 20 Holiday (Washington's Birthday)
March 2 Deadline to Apply for May Graduation
April 17-23 Spring Recess
May 22-31 Final Exams - Refer to Spring Schedule of Classes
May 29 Holiday (Memorial Day)
May 31 Spring Classes End
June 1 Graduation

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

Lakewood Extension Campus
4401 Briercrest Avenue
Lakewood, California 90713
(562) 938-4810

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, 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, February 2005.

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 or 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 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.

**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**

Long Beach City College Senior Studies Program offers a variety of non-credit classes for enrichment and mind-body healthy living. Special theater programs, music, exercise and stimulating lectures are designed for the active adult (50 and older). Mini tours to museums and galleries and a campus Senior Club are unique to the program.

The Senior Center is located at the Pacific Coast Campus, Room FF 108. Special helps is given during
General Information

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. There is no formal application for ACE. Each course is listed with its own class number and students enroll in any individual course that meets his or her need.

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, 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 awarded 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.

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

III. 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, English 49, 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, Sociology 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:

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<th>SAT TOTAL</th>
<th>ACT</th>
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<tr>
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<td>1175</td>
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</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)
- Letters of recommendation, including a statement of the goals of the Honors Program and an evaluation of the student’s participation in the program
- Facilitation of placement in four-year college Honors Programs
- President’s Scholar Honors upon graduation
- Academic Senate Scholar Honors upon transfer
- Priority transfer privileges to universities at the junior level

For further information concerning the application process for the Honors Program, call (562) 938-4354 or visit the Honors Program Office in the LAC Library Mezzanine, L203A, or visit us on the web at http://honorsprogram.lbcc.edu.

Admissions & Registration Information
Admission Requirements
Any person 18 years or older, or who has a high school diploma or its equivalent, is eligible to enroll at Long Beach City College, provided the applicant otherwise meets the admission requirements. Under certain conditions, K-12 students may also attend college classes.

All students are classified as either a California “resident” or a “non-resident.” In general, a student must have lived in the state of California with full intent to remain as a permanent resident for at least one year prior to the start of the semester in order to be classified as a “resident.”

In order to be considered California residents, students must provide evidence of intent to become a permanent California resident, such as a California driver’s license, voter registration, car registration, proof of purchase of a home, etc, that is a year old before the semester begins. No single document is necessarily conclusive proof. California residence cannot be granted if there is evidence of any such document from another state. Residence for unmarried minors (those under 18) will be determined by the residence of the parent with whom the student lives. Students must establish that they have lived in California, with the intent to become a permanent resident, for more than one year before the start of the semester they plan to attend.

Students who are not U.S. citizens must verify their immigration status at the time of registration. If classified as a non-resident, they must pay non-resident tuition. Foreign students who plan to enroll with a student visa (F-1) must have the application files completed at least three weeks before the start of the semester. No I-20 will be issued until all requirements are met.

The above statements on residence are not intended to include all of the laws governing residence. The full text of the laws is presented in the California Education Code, available in the college library.

Students must submit the appropriate admissions applications and/or enrollment forms for each term they wish to attend. Documents, such as applications and transcripts, submitted to the college become the property of Long Beach City College and will not be returned and may not be duplicated.

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, or Intermediate 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

Some of the Health Programs in the School of Health and Science have limited enrollments due to the availability of clinical sites. These programs have separate admissions processes based on a combination of ranking and a lottery to insure that students are selected in a fair and equitable manner. Admission to Long Beach City College does not insure acceptance into these programs. To be considered, students must complete stated prerequisites, submit an official application form, send official transcripts, and attend a formal group advising session before stated deadlines. After the stated deadlines, applications are evaluated and given numerical scores. Once admissions for a given semester are completed, there are no waiting lists maintained. Students have the opportunity to reapply for a subsequent term and are evaluated compared to the other students applying at the same time.

Effective August 2004, no new students were added to existing waiting lists. Students on existing waiting lists must complete all prerequisites that were in effect at the time they applied. New students must meet current requirements.

High School Graduates (2005)

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 $151 per unit, the capital outlay fee is $22 per unit, and the enrollment fee is $26 per unit. All 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
or
obtain it online at http://intl.lbcc.edu.

Complete and return your application, along with a $40 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
   or
   online at http://www.toefl.org.

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 $16,000 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 before a student may register for 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 convenience 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, online, or over the phone.

**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 $151 per unit and the normal enrollment fee of $26 per unit, for a total of $177 per unit (rate subject to change without notice). International students are required to pay the $151 non-resident fee, the $26 normal enrollment fee, and a capital outlay surcharge of $22 per unit, for a total of $199 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 $20 for fall and spring and $13 for summer sessions.

**Student Health Fee**: A health fee of $13 for the fall/spring semesters and $10 for the summer session will be charged upon registration, unless students meet one of the exemptions listed blow:

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.

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 will 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.

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 re-entry 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, 2001, 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 2001 group represents only 2% of the students enrolled at the college that term.

Based upon the group defined above, 30% attained a certificate, degree or became “transfer-prepared” during the three-year period (Fall 2001 to Spring 2004). Students who are “transfer prepared” have completed 56 transferable units with a GPA of 2.0 or better.

Based upon the group defined above, 18% 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 2002 to Spring 2004).

Of the students who entered the college in Fall 2001, 27% 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 open Monday-Thursday, 7:00 a.m. – 5:30 p.m., Friday 7:00 a.m. – 12:00 p.m. 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.

Student Success Transfer Services Center
The Student Success Transfer Services Center offers assistance to new students as well as those anticipating or in the process of transferring to a four-year school. Applications are available for CSU, UC, and private universities. Services available include Xpress counseling, which is a limited, ten-minute, drop-in counseling appointment; scheduling an assessment exam/orientation; assisting with online registration; providing curriculum guides; and sharing information about financial aid. Students may schedule appointments with transfer representatives from a variety of four-year public and private colleges and universities. The SSTSC is open Monday-Wednesday from 8:00 A.M.-7:00 P.M., Thursday from 8:00 a.m.-5:00 p.m., and Friday from 8:00 a.m.-4:30 p.m. There are Centers on both campuses; at the Liberal Arts Campus in A-156 and at the Pacific Coast Campus in GG-108. Appointments may be made in the Center at the LAC by calling (562) 938-4670 and at PCC by calling (562) 938-3920. Please visit our website at http://students.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 & Job Services Center
The Career & Job Services Centers at LBCC are here to assist individuals in their career planning and job search endeavors. This dynamic process is lifelong and can entail individual counseling or group counseling in a classroom setting.

The programs and services available to help in this personal exploration include: career assessments and counseling, an expansive career library, and a career lab equipped with computers, Internet access, and a VHS/DVD library or career related materials.

The opportunity to explore choices is what the centers are all about. The centers are staffed with counselors, a career technician, and student assistants who are available to assist you. The centers are located on the Liberal Arts Campus, L-102 Southeast corner of the library and the Pacific Coast Campus, AA-128 Administration building. For more information and hours, call: LAC (562) 938-4283 or PCC (562) 938-3915. You may also visit our website at http://careers.lbcc.edu.

Economic and Resource Development
Economic and Resource Development develops, implements, and administers multiple economic development grants and workforce preparation projects from a variety of government and private funding sources to enhance the College’s instructional programs and services to address regional workforce preparation needs. Economic Development grants are dedicated to business expansion in five core industry clusters – small business development, international trade, information technologies, transportation and healthcare. The grants and projects enable the college to enhance its full complement of services, including assessment, technical
Student and Community Services

education, training in workplace skills, internships, apprenticeships, and customized training to meet business-specific needs.

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.

ERD develops and maintains collaborative partnerships between education and local industry, through industry advisory groups to ensure the College’s curricula meets and exceeds industry standards. The office offers professional development courses for the community at large, customized training for business and industry, technical assistance, GED testing and employee assessment and skills development programs. For more information, please call (562) 938-5020.

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 (562) 938-4559 and PCC (562) 938-3922. The personal counseling is provided by a clinical psychologist and professional counselors from Family Service of Long Beach. Sessions are strictly confidential. Visit our website at http://couns.lbcc.cc.ca.us/personal_counseling/index.htm

Campus Security and Crime Awareness

It is the policy of the Long Beach Community College District to maintain a safe and secure environment for its students, staff, and visitors. Safety and security requires that everyone on campus be alert, aware, and responsible.

The Long Beach Police Department provides police services to the Long Beach Community College District through its City College Unit. The City College Unit is comprised of an assigned Lieutenant, four police officers, and 16 security officers that are assigned to both the Liberal Arts Campus and the Pacific Coast Campus.

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 questions or problems regarding security, lost and found items, thefts or other crimes. The LAC office is located north of the Library in Parking Lot C. Business hours are Monday through Friday, 8am to 5pm. After business hours call the General Service number or 911 (9911 for on-campus phones) for an emergency.

Evening Safety Escorts

Escorts are available to students at both LAC and PCC. Students should call the City College Unit through the General Service number to arrange for an escort to meet them on campus.

Parking and Traffic 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.

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. Parking permits are purchased each semester during registration. After registration, permits may be purchased from the Cashier's Office at either campus. For students who do not wish to purchase a semester parking permit, one-day parking permits are available at both campuses. Parking permit machines at LAC are located on the west side of parking lot ‘J’, on Lew Davis, and lot ‘E’. The PCC Machine is located on the south side of parking lot 3. Meter Parking is available in Lot F, G, H, and on Lew Davis at LAC. Meters are available Lot 2 at PCC. There are also 30 minute visitor parking zones along the north curb of Carson Street for 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. Student permits and daily permits do not authorize parking in staff or other reserved parking spaces except where posted otherwise.

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

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

6. 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.

7. Citations are issued by the Long Beach Police Department 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.

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

9. No adjustments will be made for parking citations at the Long Beach Police Department - College Unit. Individuals wishing to contest citations must do so by following your instructions on your citation or by calling (562) 570-6822.

10. 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. Motorcycles and mopeds may not be driven on campus or parked on sidewalks. Violators will be cited.

11. 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.

12. 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.

**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](http://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 Equivalence 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 $4050. 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 bulleted from the Financial Aid Office.

**USDE Student Guide**

*Financial Aid Workbook, 2005-2006*

**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  
4901 E. Carson Street  
Long Beach, CA 90808  
(562) 938-4257

Financial Aid Office  
Pacific Coast Campus  
1305 E. Pacific Coast Hwy  
Long Beach, CA 90806  
(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 have a successful college experience and complete their career goals.

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**

- Full payment......................... at least 12 units
- 3/4 payment.............................. at least 9 units
- 1/2 payment.............................. at least 6 units
- 1/4 payment.............................. at least 3 units

*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 3, 2005 and due December 15, 2005.

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 and job placement.
7. Specialized instruction for students with physical, learning, psychological and/or developmental disabilities.
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](https://onlinecounseling.lbcc.edu) or from the LBCC website, [http://www.lbcc.edu](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, Administrative Dean of Human Resources 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, Administrative Dean of Human Resources, 4901 E. Carson St., Long Beach, CA 90808, (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, Administrative Dean of Human Resources, 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, Administrative Dean of Human Resources, 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, Administrative Dean of Human Resources, 4901 E. Carson St., Long Beach, CA 90808, (562) 938-4095.

**Declaracon de Cumplimiento de los Derechos Civiles**

El distrito de la universidad de la comunidad de Long Beach no discrimina en sus normas de admisión, programas educativos, actividades o regulaciones de empleo en lo referente a raza, edad (más de 40 años), sexo, religión, ascendencia, color, nacionalidad, incapacidad, condición médica, estado civil, orientación sexual o por ser veterano de la guerra de Vietnam o por tener obligaciones con la Guardia Nacional o con las Fuerzas de Reserva de los Estados 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 Educativa de 1972, el Acta de Rehabilitación de 1973, secciones 503, 504 y el Acta de Americanos con Incapacidades de 1990.

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

Para hacer preguntas o presentar quejas por discriminación, pueden comunicarse con Irma Ramos, Administrative Dean of Human Resources, 4901 E. Carson St., Long Beach, CA 90808, (562) 938-4095.

**Artículo IX Prohibición de Discriminación Sexual en la Educación**

El distrito de la universidad de la comunidad de Long Beach está comprometido a apoyar todas las regulaciones del artículo IX que especifica que: Ninguna persona en los Estados Unidos, por condición de su sexo, podrá ser excluida de participar o ser negados los beneficios o ser sujeta a discriminación en ninguna actividad que se lleve a cabo en una institución educativa que reciba fondos federales.”

Para hacer preguntas o presentar quejas por discriminación, pueden comunicarse con Irma Ramos, Administrative Dean of Human Resources, 4901 E. Carson St., Long Beach, CA 90808, (562) 938-4095.

**Americanos con Incapacidades—Acta De 1990**

El Acta (ADA) de 1990 de Americanos con Incapacidades prohíbe la discriminación contra personas con incapacidades en el trabajo, servicios públicos incluyendo transportes públicos 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 hacer preguntas o presentar quejas de discriminación, pueden comunicarse con Irma Ramos, Administrative Dean of Human Resources, 4901 E. Carson St., Long Beach, CA 90808, (562) 938-4095.

**Declaracon de las Normas sobre Acoso Sexual**

El distrito de la universidad de la comunidad de Long Beach provee un ambiente para la educación, el empleo, y el trabajo que no permite insinuaciones sexuales no solicitadas, peticiones de favores sexuales, u otra conducta verbal, visual o física, o comunicaciones que constituyen el acoso sexual que se define y se prohíbe en los estatutos estatales y federales. El acoso sexual incluye la prohibición de acoso sexual, el acoso basado en el sexo de la persona, en el embarazo, en el parto, o en condiciones médicas relacionadas con ellos. El acoso sexual es una violación de los derechos civiles del individuo y no será tolerado.
Para hacer preguntas o presentar quejas por discriminación, pueden comunicarse con Irma Ramos, Administrative Dean of Human Resources, 4901 E. Carson St., Long Beach, CA 90808, (562) 938-4095.

**Seccion 504, Acta de Rehabilitacion**

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. Él 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 de la universidad de la comunidad de Long Beach anima a los estudiantes con incapacidades a que participen completamente en todas nuestras clases. La universidad ofrece servicios de apoyo para dar a los estudiantes una experiencia educativa completa. Los servicios para estudiantes incapacitados ofrecen intérpretes de lenguaje por señas, ayudantes que toman notas, lectores, consejeros sobre incapacidades, acomodación para tomar exámenes, servicios de dicción, equipo especiales y otros varios servicios.

Para hacer preguntas o presentar quejas por discriminación, pueden comunicarse con Irma Ramos, Administrative Dean of Human Resources, 4901 E. Carson St., Long Beach, CA 90808, (562) 938-4095.
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 10 a.m.-4 p.m.
For additional information or summer hours, call (562) 938-4232/4231.

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.

Basic Adult Learning Department
Learning Center
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.

Learning and Academic Resources Department
Center for Learning Assistance Services
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.

Liberal Arts Campus
North Wing of the L Building
(562) 938-4474
Hours: Monday-Thursday 8:00 a.m.-8:00 p.m.
Friday 8:00 a.m.-2:00 p.m.
Saturday 10:00 am.-2:00 p.m.

Pacific Coast Campus
GG Building
(562) 938-3991

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 Applications & Office Technology 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

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.

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.

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 am-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 audiovisual materials and books to assist students in learning 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, bones, microscopes and exhibits of plant and animal specimens as needed. In addition, Macintosh computers with CD-ROM drives are available. A collection of computer
software and courseware is provided for student use in the Learning Center.

The Life Science Learning Center is located in room D214, on the second floor of the Science Building (D) and is open only when staffing is available.

**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.
Academic Policies

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 may 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
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 semester grade, once determined by the instructor and reported, shall be final in the absence of mistake, fraud, bad faith or incompetency.

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 “Ws” 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).
Academic Policies

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 determining 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:

- A. Minimum full-time unit load: 12 units
- B. Normal full-time unit load: 15 units
- C. Maximum full-time unit load with waiver: 21 units

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:

- A. Minimum unit load for full-time summer status: 6 units
- B. Maximum full-time unit load: 10 units
- C. Minimum unit load for half-time summer status: 3 units

The requirements by residency category are as follows:

- A. **Residents of California** may enroll for up to the maximum full-time unit loads, as stated, during the academic year and summer school.
- 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.
- C. **High School Students**
  - During the academic year eligible high school students may enroll in a maximum of 12 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.

AP Courses and AA/AS Degree General Education Requirements

<table>
<thead>
<tr>
<th>AP Examination</th>
<th>LBCC Credits Granted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art History</td>
<td>ART 1P (3) and ART 99P (3)</td>
</tr>
<tr>
<td>Biology</td>
<td>BIO 41P (3), BIO 41LP (1) and BIO 99P (2)</td>
</tr>
<tr>
<td>Calculus AB</td>
<td>MATH 60P (5)</td>
</tr>
</tbody>
</table>

AP Examination

Calculus BC

Comparative Government/Politics

Computer Science A

Computer Science AB

English (Language and Composition and/or Literature and Composition†)

European History

French Language

French Literature

German Language

Latin/Vergil

Latin/Catullus, Horace

Macro-economics

Micro-economics

Music Listening and Literature

Music Theory

LBCC Credits Granted

Math 60P† (5) and Math 70P (5)

†Students who pass both the AB and BC exams receive credit for Math 60P once.

POLSC 2P (3)

ENGR 54P (3), and fulfills A.A./A.S. computer proficiency requirement

CBIS 9P (3), and fulfills A.A./A.S. computer proficiency requirement.

*ENGL 99P (6) with an AP score of 3

*Students who have earned a three on either English Advanced Placement exam and have qualified for ENGL on the basis of the English Placement Test may petition to have four units of elective credit substitute for ENGL 105.

ENGL 1P (3) and ENGL 99P (3) with an AP score of 4; ENGL 1P (3) and ENGL 2P (3) with an AP score of 5

†Students who pass both exams receive a maximum of six-units of credit.

HIST 1BP (3)

FREN 4P (5) and FREN 99P (1) with an AP score of 5

FREN 3P (5) and FREN 99P (1) with an AP score of 4

FREN 99P (6) with an AP score of 3

HUMAN 99P (3), to fulfill GE Humanities requirement and FREN 99P (3)

GER 4P (5) and GER 99P (1) with an AP score of 5

GER 3P (5) and GER 99P (1) with an AP score of 4

GER 99P (6) with an AP score of 3

HUMAN 99P (3) to fulfill GE Humanities requirement

HUMAN 99P (3) to fulfill GE Humanities requirement

ECON 1AP (3)

ECON 1BP (3)

Music 40P (3) and MUSIC 99P (3)

Music 1P (5) and MUSIC 99P (1)
Academic Policies

### AP Examination

**Physics B**
- PHYS 99P (4) with an AP score of 3
- PHYS 2AP (4) with an AP score of 4
- PHYS 2AP (4) and PHYS 2BP (4) with an AP score of 5

**Physics C Mechanics**
- PHYS 2AP (4) with an AP score of 3
- PHYS 3AP (5) with an AP score of 4 or 5

**Physics C Electricity/Magnetism**
- PHYS 99P (4) with an AP score of 3
- PHYS 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)

### 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. Courses identified in the High School Articulation Project, a description of the contents of the examination, as developed and approved in the articulation process, must be kept on file in the department.

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.

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 receive passing scores as stated in the LBCC catalogue may only qualify to receive AP credit as specified in the LBCC catalogue.

Students that 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.
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.

**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...
validating 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>Units</th>
<th>Paid Employment</th>
<th>Volunteer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 unit Work Experience Class</td>
<td>40 hours</td>
<td>24 hours</td>
</tr>
<tr>
<td>2 unit Work Experience Class</td>
<td>75 hours</td>
<td>60 hours</td>
</tr>
<tr>
<td>3 units Work Experience Class</td>
<td>150 hours</td>
<td>120 hours</td>
</tr>
<tr>
<td>4 units Work Experience Class</td>
<td>225 hours</td>
<td>180 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. Vocational Cooperative Work Experience operates without regard to race, age, sex, religion, color, national origin, handicap, sexual orientation, marital status, ancestry, medical condition (e.g., cancer related) or status 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 F 106, 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 graduation or advanced placement, 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 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 one-self 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.

Students shall respect and obey civil and criminal law and shall be subject to the legal penalties for violation of the laws of the city, county, state and nation.

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 disk 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 2005-2006

All students must consult a counselor when following Plans A, B or C
ALL INFORMATION CONTAINED HEREIN 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. Courses on this pattern are lower division general education breadth requirements unique to IGETC and 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 ABC 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. 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. To view the most current articulation agreements, log on to 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 used for Plan C or Plan A see RESIDENCY section). See a counselor for transfer and career preparation.

Associate of Arts (AA)/Science (AS) Degree General Information

☐ Recommended 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.

☐ DUAL MAJORS: See Counselor.

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.
### LONG BEACH CITY COLLEGE GENERAL EDUCATION PLANS

#### - PLAN A -

**Associate Degree** General Education requirements for graduation from Long Beach City College. A minimum of 18 units is required in Plan A.

- **ENGLISH**
  - COMPOSITION
    - One Class Required (3 Units Minimum)
      - English: 1, 1H, 105 or ESL: 34, 34-X

- **COMMUNICATION AND ANALYTICAL THINKING**
  - One Class Required (3 Units Minimum)
    - Computer & Business Information Systems: 3B, 11, 14A
    - English: 3, 3H or Reading: 82, 83, 84
    - Mathematics: 28, 36, 37, 37H, 40, 45, 47, 50, 60, 64, 70, 80, 85, 110, 110B, 112, 120, 130, 130B
    - Philosophy: 11, 12
    - Speech: 10, 20, 25, 30, 60
    - Statistics: 1, 1H

- **MATHEMATICS**
  - No Class Requirement. See AA/AS graduation proficiency requirements for math requirement.

- **NATURAL SCIENCES**
  - One Class Required (3 Units Minimum)
    - Physical Sciences:
      - Astronomy: 1, 1L
      - Chemistry: 1A, 1B, 2, 3A, 3B, 12A, 12B
      - Environmental Science: 1
      - Geology: 1, 1H, 2, 2F, 2L, 3, 3H, 4, 5, 7, 16, 17, 18
      - Physical Geography: 1
      - Physics: 2A, 2B, 3A, 3B, 3C, 10
    - Biological Sciences:
      - Anatomy: 1, 41
      - Biology: 1A, 1B, 2, 5, 11, 15, 18, 20, 20H, 22, 25, 28, 30, 31, 37, 41/41L, 41H/41L, 60, 60L, 61, 62
      - Physiology: 1

- **AMERICAN HISTORY**
  - One Class Required (3 Units Minimum)
    - History: (8A+8B), (8AH+8BH), 10, 11, 25, 27A, 27B
    - (Not required for the AS Degree)

- **POLITICAL SCIENCE**
  - One Class Required (3 Units Minimum)
    - Political Science: 1, 1H, 3
    - (Not Required for AS Degree)

- **PHYSICAL EDUCATION ACTIVITY**
  - 3 Units Minimum
    - Either: Two P.E. activity classes (a minimum of 1 semester units) and one of the following:
      - Health Education: 3, 4, 5
      - (No P.E. courses required if Health Ed. 3, 4, or 5 is taken)
    - Note: Meets Health Education requirement listed below

- **ANALYTICAL THINKING**
  - Area A2
    - One Class Required
      - English: 1, 1H

- **FOR ADMISSION**
  - Students transferring with 60 or more units will be expected to have completed with a “C” grade or better, 30 units of General Education, including all of areas A1, A2, A3, A4, A5, and A6.

### - 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.

#### Notes:
1. A single course may not meet more than one general education requirement.
2. To apply courses from other schools to this plan, students must see a counselor.

- **ENGLISH**
  - Area 1A
    - One Class Required for UC & CSU
      - English: 1*, 1H*

- **COMMUNICATION AND ANALYTICAL THINKING**
  - Area 1B
    - One Class Required for UC & CSU
      - English: 3*, 3H*
      - The combination of two courses identified on the 1991-92 edition will fulfill the requirement - if one has been taken before Summer, 1993

- **MATHEMATICS**
  - Area 1C
    - One Class Required (CSU ONLY)
      - Speech: 10, 30, 60

- **NATURAL SCIENCES**
  - Area 2
    - One Class Required (3 Units Minimum)
      - Mathematics: 28, 36, 37, 37H, 40, 45, 47, 50, 60, 70, 80, 84
      - Statistics: 1, 1H

- **AMERICAN HISTORY**
  - Area 3
    - One Class Required From Area B1: Physical Science
      - One Class Required From Area B1 Physical Science
        - Astronomy: 1, 1L
        - Chemistry: 1A, 1B, 2, 3A, 3B
        - Environmental Science: 1
        - Geology: 1, 1H, 2, 2F, 2L, 3, 3H, 4, 5, 7, 16, 17, 18
        - Physical Geography: 1
        - Physics: 2A, 2B, 3A, 3B, 3C, 10
      - Biology: 1A, 1B, 2, 5, 11, 15, 18, 20, 20H, 22, 25, 28, 30, 31, 37, 41/41L, 41H/41L, 60, 60L, 61, 62
      - Physiology: 1

- **POLITICAL SCIENCE**
  - Area 4
    - One Class Required From Area B2: Biological Science
      - Anatomy: 1, 41, 41H
      - Biology: 1A, 1B, 2, 5, 11, 15, 20, 20H, 22, 25, 30L, 30L, 41/41L, 41H/41L, 60, 60L, 61

- **PHYSICAL EDUCATION ACTIVITY**
  - Area 5
    - Two Classes Required (7 Units Minimum)
      - (For CSU Graduation Only)
      - Anthropology: 1, 1H
      - Biology: 1A, 1B, 2, 5, 11, 15, 20, 20H, 22, 25, 30L, 41/41L, 41H/41L, 60, 60L, 61
      - Physiology: 1

### - PLAN C -

**University of California and California State University Intersegmental General Education Transfer Curriculum (IGETC)** enables a student to fulfill the lower division general education requirements for either the CSU or UC institutions. A “C” grade minimum is required for each course.

- **ENGLISH**
  - Area 1A
    - One Class Required for UC & CSU
      - English: 1*, 1H*

- **COMMUNICATION AND ANALYTICAL THINKING**
  - Area 1B
    - One Class Required for UC & CSU
      - English: 3*, 3H*
      - The combination of two courses identified on the 1991-92 edition will fulfill the requirement - if one has been taken before Summer, 1993

- **MATHEMATICS**
  - Area 1C
    - One Class Required (CSU ONLY)
      - Speech: 10, 30, 60

- **NATURAL SCIENCES**
  - Area 2
    - One Class Required (3 Units Minimum)
      - Mathematics: 28, 36, 37, 37H, 40, 45, 47, 50, 60, 70, 80, 84
      - Statistics: 1, 1H

- **AMERICAN HISTORY**
  - Area 3
    - One Class Required From Area B1: Physical Science
      - One Class Required From Area B1 Physical Science
        - Astronomy: 1, 1L
        - Chemistry: 1A, 1B, 2, 3A, 3B
        - Environmental Science: 1
        - Geology: 1, 1H, 2, 2F, 2L, 3, 3H, 4, 5, 7, 16, 17, 18
        - Physical Geography: 1
        - Physics: 2A, 2B, 3A, 3B, 3C, 10
      - Biology: 1A, 1B, 2, 5, 11, 15, 20, 20H, 22, 25, 30L, 30L, 41/41L, 41H/41L, 60, 60L, 61
      - Physiology: 1

- **POLITICAL SCIENCE**
  - Area 4
    - One Class Required From Area B2: Biological Science
      - Anatomy: 1, 41, 41H
      - Biology: 1A, 1B, 2, 5, 11, 15, 20, 20H, 22, 25, 30L, 41/41L, 41H/41L, 60, 60L, 61
      - Physiology: 1

- **PHYSICAL EDUCATION ACTIVITY**
  - Area 5
    - Two Classes Required (7 Units Minimum)
      - (For CSU Graduation Only)
      - Anthropology: 1, 1H
      - Biology: 1A, 1B, 2, 5, 11, 15, 20, 20H, 22, 25, 30L, 41/41L, 41H/41L, 60, 60L, 61
      - Physiology: 1
**Area A**

One Class Required (3 Units Minimum)

Art: 1,1H, 2, 2H, 3, 3H, 4, 4H, 5, 5H, 6, 7, 8, 9, 10, 11, 1H, 15, 23, 24, 26A, 30, 31, 34A, 35A, 50, 51AD, 60AD, 70AD, 71AD, 80

Chinese: 1, 1A, 1B, 2

Creative Arts: 41

Dance: 1

English: 2, 26, 32, 33, 35, 36, 37, 38, 39, 41, 42A, 43A, 43B, 44, 44H, 45, 46, 47, 48, 49, 52A, 52D, 72AD, 79

Film: 1

French: 1, 1A, 1B, 2, 2A, 2B, 3, 4, 8AD, 25A-D

German: 1, 1A, 1B, 2, 2A, 2B, 3, 4, 4H, 8AD, 25A-D

Humanities: 1, 1H, 3*, 7*

Interior Design: 80, 90

Italian: 1, 1A, 1B

Japanese: 1, 1A, 1B, 2

Music: 6, 30A, 30B, 31, 33A-D, 35, 40, 40H

Psychology: 3*, 6, 6H, 7, 7H, 8, 9, 14

R/TV: 1

Speech: 1, 1A, 1B, 2, 2A, 2B, 3, 3H, 4, 8AD, 9, 10, 25A-D

Theater Arts: 1, 25, 30

Vietnamese: 1, 1A, 1B

**Area B**

Three Classes Required (9 Units Minimum)

NOTE: ONE CLASS IN AREA C) AND ONE IN C2 WITH A THIRD COURSE FROM EITHER AREA.

**Area C**

Art: 1, 1H, 2, 2H, 3, 3H, 4, 4H, 5, 5H, 6, 7, 8, 9, 10, 11, 1H, 30, 31, 80

Creative Arts: 41

Dance: 1

Film: 1

Interior Design: 80, 90

Music: 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, 42A, 43A, 43B, 44, 44H, 45, 46, 47, 48, 49, 52A, 52D, 72AD, 79

French: 1, (1A+1B), 2, (2A+2B), 3, 4, 25A-D

German: 1, (1A+1B), 2, (2A+2B), 3, 3H, 4, 4H, 25A-D

History: 1A, 1AH, 1B, 1BH, 2A, 2B, 2C, 2CH, 5A, 5B, 6, 8A, 8AH, 8B, 8BH, 9A-C, 10*, 11*, 18, 25, 27A, 27B

Social Sciences: 1, 1H, 7*

Humanities: 1, 1H, 3*, 7*

Italian: 1, (1A+1B)

Japanese: 1, (1A+1B), 2

Philosophy: 3*, 6H, 7H, 8, 9, 14

Spanish: 1, (1A+1B), 2, (2A+2B), 3, 3H, 4, 9, 10, 25A-D

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, 2, 2H, 3, 10

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

D3 History: 27A, 27B, Sociology: 13

D4 History: 25

D5 Geography: 2, 40

D6 Political Science: 2, 3, 9, 10, 11

D7 Humanities: 1, 1H, 3*, 7*

D8 Political Science: 1*, 1H, 7*, 9*, Speech: 25

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

D10 Sociology: 1*, 1H, 2, 11, 13

**Area E**

E-Lifelong Understanding & Self-Development

Three Units Required

Select one course from: CDECE 47, COUNS 7, F & N 20, HLED 3, 4, 5, 10, Psychology 4, 10 OR Select one course from: HLED 2, PEP 7AD, PEP 41 AND 1 unit of P.E. Activity

**Area F**

Foreign Language Proficiency - See Reverse

**Area G**

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 H**

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.

Arts (Plan C Minimum Required)

Art: 1*, 1H, 2*, 2H*, 3*, 3H*, 4*, 4H*, 5*, 5H*, 10, 11*, 1H*

Creative Arts: 41

Dance: 1

Film: 1

Music: 30A, 30B, 31, 35, 40*, 40H*

Theater Arts: 25, 30

**Humanities (Plan C Minimum Required)**


French: 3, 4, 25A-D

German: 3*, 3H*, 4*, 4H*, 25A-D


Humanities: 1*, 1H*, 2*, 4*, 7*

Philosophy: 3*, 6*, 6H*, 7, 7H, 8, 9, 14*

Social Sciences: 1, 1H*, 7*,

Spanish: 3*, 3H*, 4*, 9*, 10*, 25A-D

**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 UCTCA, which is available on the ASSIST website or consult a counselor.

■ = Acceptable for use in this category only if not used in fulfillment of the United States History, Constitution, and American Ideals requirement.

* = 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 OR can it be used to certify more than one area on Plans B or C.

HUMAN 1 = SOCI 1H: Comparative World Cultures

HUMAN 1H = SOCI 1H: Honors Comparative World Cultures

HUMAN 3 = PSYC 3: Intro to Issues/Phil, Psych & Religion

HUMAN 7 = SOCI 7: American Pluralism and Identity
**CONTINUOUS ENROLLMENT AND CONTINUOUS ATTENDANCE**

- Requires a "C" or better in each class.

**UNITS**

- **REQUIREMENT**
  - UNITS
  - REQUIREMENT
  - AVERAGE (G.P.A)
  - CERTIFICATION
  - ATTENDANCE
  - CONTINUOUS
  - ENROLLMENT
  - CONTINUOUS
  
**PROFICIENCIES**

- **MATHEMATICS**: A qualifying score on the LBCC Assessment Test or successful completion with a grade of "C" or higher in a college math course at the level of MATH 110 or Math 110B or higher in ELECT 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**: Fulfill requirements of ENGLISH COMPOSITION section above.

- **A Bachelor's Degree from an accredited college or university.**

- **COMPUTER**: Completion of any one of the following LBCC courses:
  - A) A qualifying score on the LBCC Assessment Test or successful completion with a grade of "C" or higher in a college math course at the level of MATH 110 or Math 110B or higher in ELECT 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.
  - B) Writing proficiency tested and schedule of classes. Some fields may have additional G.P.A. requirements; check the appropriate curriculum guide.

**RESIDENCY**

- 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.

**GRADE POINT AVERAGE (G.P.A) REQUIREMENT**

- **FOR GRADUATION**: Overall G.P.A. of 2.0 ("C" average) based on all grades from all courses from which courses are applied to LBCC degree. Some fields may have additional G.P.A. requirements; check the appropriate curriculum guide.

- **FOR ADMISSION**: A minimum of 2.4 G.P.A. in transferable units. (LBCC courses numbered 1-99 are transferable). Some majors may require a higher G.P.A. (See application and major requirements for more information).

**CERTIFICATION**

- Not applicable

**FOR GRADUATION**: Minimum of 60 AA/AS applicable units (1-599); some fields of concentration may require more units-consult appropriate curriculum guide.

- Some courses do not apply toward the 60 unit minimum.

**FOR ADMISSION**: Effective Fall 2005, the CSU requires the completion of a minimum of 60 transferable units for junior standing for students not eligible for admission to CSU from high school. LBCC courses numbered 1-99 will transfer to all CSU's. (See CSU application or visit www.csumentor.edu for information).

- A maximum of 70 transferable semester units earned at a California community college will be accepted by a CSU toward a Bachelor's Degree.

**PLAN A - ASSOCIATE DEGREES (AA/AS)**

- **CONTINUOUS ENROLLMENT AND CONTINUOUS ATTENDANCE** 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.

**PLAN B - CALIFORNIA STATE UNIVERSITY (CSU GE-Breadth)**

- **CONTINUOUS ENROLLMENT AND CONTINUOUS ATTENDANCE** is enrollment at an accredited college for at least one semester or two quarters in any one CALENDAR year (January to December) to insure catalog rights.

**PLAN C - INTERSEGMENTAL GENERAL EDUCATION CURRICULUM (IGETC)**

- **CONTINUOUS ENROLLMENT AND CONTINUOUS ATTENDANCE** is enrollment at a campus of the University of California and at a campus of the California State University.

**FOR ADMISSION**: A minimum of 2.4 G.P.A. in transferable units (CSU transferable courses noted in LBCC catalog and schedule of classes). Some majors require a higher G.P.A. (See application and major requirements for more information). For CSU, see Plan B.

**FOR ADMISSION**: A Bachelor's Degree from an accredited college or university prior to transfer. This means that courses may be transferred from one community college or university to another and used for transfer, provided 50% or more of the work is from a California community college (Pass Arrond allowed). Students who begin their college work at any UC may NOT use the IGETC for transfer back to the same UC. All course work must be completed and certified prior to transfer.

**FOR ADMISSION**: The UC and CSU systems require a minimum of 60 transferable units for admission for students not eligible for admission from high school.

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**FOR ADMISSION**: A minimum of 2.4 G.P.A. in transferable units (CSU transferable courses noted in LBCC catalog and schedule of classes). Some majors require a higher G.P.A. (See application and major requirements for more information). For CSU, see Plan B.

**FOR ADMISSION**: A Bachelor's Degree from an accredited college or university prior to transfer. This means that courses may be transferred from one community college or university to another and used for transfer, provided 50% or more of the work is from a California community college (Pass Arrond allowed). Students who begin their college work at any UC may NOT use the IGETC for transfer back to the same UC. All course work must be completed and certified prior to transfer.

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**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 ADVISED THAT THE ASSOCIATE DEGREE COMPRISSES TWO MAJOR COMPONENTS: A GENERAL EDUCATION PATTERN AND A FIELD OF CONCENTRATION. A TRANSFER PROGRAM COMPRISSES 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
Degrees and Programs

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).

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 Obipso, 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
Degrees and Programs

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 towards the baccalaureate degree.

Some programs are impacted at various CSU campuses when the number of applicants received in the first month of the admission filing period is greater than the number of spaces available. For these programs, students are urged to consult with a Long Beach City College counselor to be aware of the filing deadlines and any supplemental admissions criteria.

Plan C

Additional Information for University of California

A student who plans to transfer to one of the nine campuses of the University of California system (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.
Degrees and Programs

(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, Student Success & Transfer Services, and Career & Job Services 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 lists(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

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SCHOOL OF CREATIVE ARTS & APPLIED SCIENCE

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## Degrees and Programs

### Fine Arts
- Desktop/Media Publishing
- Photography

### Music/Radio/Television
- Commercial Music: Composer/Arranger
- Commercial Music: Professional Instrumentalist
- Commercial Music: Professional Technology

### Applied Sciences
- Child Development
- Early Childhood Education
- School Age Child Care
- Special Education Assistant
- Dietetics Program: Dietetic Tech & Dietetic Service Supervisor
- Fashion Design
- Fashion Design – Asst Designer
- Fashion Design – Patternmaker
- Fashion Design – Samplemaker
- Fashion Merchandising
- Floral Design
- Interior Design
- Interior Design: Technical Skills

### Nursing & Allied Health
- Medical Assisting: Clinical and/or Administrative Certificate
- Diagnostics Medical Imaging
- Associate Degree (RN Program)
- LVN to RN Career Ladder Program
- Vocational

### School of Language Arts
- Desktop/Media Publishing
- English Language & Literature, Creative Writing Sequence
- Journalism
- Photojournalism

### School of Learning Resources, Teaching & Technologies
- Library Technician

### School of Physical Education & Athletics
- Physical Education/Recreation

### School of Trades & Industrial Technologies
- Aviation (Professional Pilot)
- Auto Body Repair
- Auto Mechanics/Diesel
- Advanced Transportation Technology: Alternate Fuels
- Advanced Transportation Technology: Electric Vehicles
- Auto Mechanics
- Diesel Mechanics
- Air Conditioning/Refrigeration-Theory and Practical Experience
- Air Conditioning/Refrigeration-Theory Only
- Cabinet Making/Furniture Making
- Carpentry Tech/Trade Home Remodel & Repair
- Horticulture
- Mechanical Maintenance Tech
- Architectural Design (Transfer)
- Drafting – Architectural (Occupational)
- Drafting – Mechanical & Design (Occupational)
## Degrees and Programs

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### INTERDISCIPLINARY STUDIES

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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.:

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

**CURRICULUM GUIDES**
- Drafting, Mechanical Design
- Drafting, Mechanical Design
- Drafting, Mechanical Design
- Child Development
- Advanced Transportation Technology, Auto Mechanics
- Advanced Transportation Technology, Auto Mechanics
- Travel Industry
- Computer and Business Information Systems
- Music
- Drafting, Mechanical Design
- Drafting, Mechanical Design
- Drafting, Mechanical Design
- Baking, Culinary Arts
- Baking, Culinary Arts
- Administrative Assistant, Word Processing
- Administrative Assistant, Computer Applications
- Administrative Assistant, Office Assistant
- Customer Service Representative
- Customer Service Representative, Data Entry
- Legal Secretary
- Administrative Assistant, Computer Applications
- Specialist, Customer Service Representative, Data Entry, Office Assistant
- Office Assistant, Word Processing
- Administrative Asst, Legal Secretary, Office Assistant
- Medical Transcription, Office Assistant, Word Processing
- Cabinet/Furniture Making
- Drafting, Mechanical Design
- Carpentry
- Vocational Nursing
- Human Services
- Child Development: Early Childhood Education
- Child Development: Early Childhood Education
- Child Development: Early Childhood Education
Degrees and Programs

**COMPLETION CERTIFICATE**
- Cruise Specialist
- Emergency Medical Technician
- 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
- Information Security
- Introduction to Baking
- Introduction to Chocolate
- Java Web Programmer
- Mammography
- Medical Insurance Billing
- Microsoft Access
- Microsoft Excel

**CURRICULUM GUIDES**
- Travel Industry
- Medical 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
- Computer and Business Information Systems
- Baking, Culinary Arts
- Baking, Culinary Arts
- Computer and Business Information Systems
- Diagnostic Medical Imaging
- Medical Assistant
- Administrative Assistant, Computer Application Specialist, Data Entry
- Administrative Assistant, Computer Application Specialist, Customer Service Representative, Data Entry, Office Assistant, Word Processing
- Computer and Business Information Systems
- Administrative Assistant, Computer Application Specialist, Customer Service Representative, Legal Secretary, Office Assistant, Word Processing
- Electrical Technology
- Electrical Technology
- Electrical Technology
- Culinary Arts
- Computer and Business Information Systems
- Computer and Business Information Systems
- Computer and Business Information Systems
- Medical Assistant
- Carpentry
- Culinary Arts
- Commercial Music: Recording Engineer, Record Producer
- Auto Mechanics
- Auto Mechanics
- Auto Mechanics
- Commercial Music: Recording Engineer, Record Producer
- 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

Techniques
- Network Cabling Specialist
- Network Installation
- Network Installation and Design
- 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
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).
■ Identifies the courses need for an Associate Degree in that area.
* This course is an exception to the “double counting” rule; it may be double counted.
●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) 938-4473.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 1A Principles of Accounting</td>
<td>4</td>
</tr>
<tr>
<td>†ACCTG 1B Principles of Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ACCTG 205 Fundamentals of Tax</td>
<td>3</td>
</tr>
<tr>
<td>†ACCTG 228 Computerized Gen Ledger Acct Systems</td>
<td>2</td>
</tr>
<tr>
<td>†ACCTG 229 Spreadsheet Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCTG 230 Quickbooks Accounting</td>
<td>1</td>
</tr>
<tr>
<td>•CAOTC 35 Microsoft Office</td>
<td>3</td>
</tr>
<tr>
<td>CAOTO 15 Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>GBUS 5 Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>LAW 18A Business Law</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS 18

RECOMMENDED but not required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 200A Introduction to Accounting</td>
<td>3</td>
</tr>
<tr>
<td>†ACCTG 228 Computerized Gen Ledger Acct Systems</td>
<td>2</td>
</tr>
<tr>
<td>ACCTG 230 Quickbooks Accounting</td>
<td>1</td>
</tr>
<tr>
<td>•CAOTC 35 Microsoft Office</td>
<td>3</td>
</tr>
<tr>
<td>CAOTO 15 Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>GBUS 5 Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>LAW 18A Business Law</td>
<td>3</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</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 200A Introduction to Accounting</td>
<td>3</td>
</tr>
<tr>
<td>†ACCTG 228 Computerized Gen Ledger Acct Systems</td>
<td>2</td>
</tr>
<tr>
<td>ACCTG 230 Quickbooks Accounting</td>
<td>1</td>
</tr>
<tr>
<td>•CAOTC 35 Microsoft Office</td>
<td>3</td>
</tr>
<tr>
<td>CAOTO 15 Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>GBUS 5 Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>GBUS 251 Business Mathematics</td>
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</table>

TOTAL UNITS 18

RECOMMENDED but not required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 1A Principles of Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ACCTG 205 Fundamentals of Tax</td>
<td>3</td>
</tr>
<tr>
<td>†ACCTG 229 Spreadsheet Accounting</td>
<td>3</td>
</tr>
<tr>
<td>LAW 18A Business Law</td>
<td>3</td>
</tr>
</tbody>
</table>

ADMINISTRATION OF JUSTICE
Associate in Arts/Career or Completion Certificate
Students are educated and trained for immediate employment in the criminal justice system. Technical education courses prepare students in the concepts and methodologies of the disciplines. This program also provides partial lower division preparation for the baccalaureate degree in this field. This certificate will prepare students for an entry-level position in a variety of 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) 938-4399.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ADJUS 2 Introduction to Administration of Justice</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 3 Introduction to Criminal Procedures</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 4 Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 5 Community and Human Relations</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 6 Introduction to Evidence</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 8 Introduction to Investigation</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal units 18

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJUS 10 Writing for Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 12 Crime and Delinquency</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 14 Juvenile Law and Procedure</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 16 Vice, Narcotics and Organized Crime</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 17 Computer Use in Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 18 Police Field Operations</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 19 Fingerprint Classif &amp; Identification</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 20 Introduction to Corrections</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 40 Street Gangs and Law Enforcement</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 45 Drug Abuse and Law Enforcement</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 250 Basic Law Enforcement Training</td>
<td>16</td>
</tr>
<tr>
<td>ADJUS 253 Understanding Domestic Violence</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 269 Pre-Employ Prep for Law Enforcement</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 271AD or 272AD or 273AD – Work Experience - Adm. Of Justice</td>
<td>2 or 3 or 4</td>
</tr>
<tr>
<td>PUBAD 1 Introduction to Public Administration</td>
<td>3</td>
</tr>
<tr>
<td>PUBAD 4 Fundamentals of Supervision</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal units 6

TOTAL UNITS 24

NOTE: Any 200, 300 or 400 band course in Administration of Justice or Public Administration can
be applied as an elective to a degree or certificate for this program.

**CAREER CERTIFICATE**

**REQUIRED CORE COURSES** | **UNITS**
--- | ---
ADJUS 2 Introduction, Administration of Justice | 3
ADJUS 3 Introduction to Criminal Procedures | 3
ADJUS 4 Criminal Law | 3

**Subtotal units** | **9**

**Complete SIX (6) units from ADJUS and PUBAD courses listed for Associate Degree.**

**Select SIX (6) units from the following:**

- +ENGL 1 Reading & Composition | 3
- +ENGL 105 Fundamentals of Writing | 4
- POLSC 1 Introduction to Government | 3
- PSYCH 1 Introduction to Psychology | 3
- SOCIO 1 Introduction to Sociology | 3
- +SP 10 Elements of Public Speaking | 3
- +SP 30 Elements of Group Discussion | 3

**Subtotal units** | **6**

**ALSO complete SIX (6) units from any Foreign Language, Computer/BIS, or other Administration of Justice courses.**

**Subtotal units** | **6**

**TOTAL UNITS (for Career Certificate)** | **30**

**NOTE:** Any 300 or 400 band course in Administration of Justice or Public Administration can be applied as an elective to a degree or certificate.

**CERTIFICATE OF COMPLETION**

**Criminal Forensics Certificate**

**REQUIRED COURSES** | **UNITS**
--- | ---
ADJUS 6 Introduction to Evidence | 3
ADJUS 8 Introduction to Investigations | 3
ADJUS 19 Fingerprint Classif & Identification | 3
ADJUS 255 Introduction to Forensics | 3

**Subtotal units** | **12**

**IN ADDITION, select ONE of the following:**

- ADJUS 3 Criminal Procedures OR | 3
- ADJUS 4 Criminal Law OR | 3
- ADJUS 10 Writing for Criminal Justice OR | 3
- ADJUS 17 Computer Usage in Criminal Justice | 3

**Subtotal Units** | **3**

**TOTAL UNITS** | **15**

**ADMINISTRATIVE ASSISTANT**

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

Students develop computer and interpersonal skills for an intermediate-level administrative assistant position: composing correspondence; compiling financial reports; coordinating workflow, appointments, and confidential data. This certificate prepares students for an intermediate-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 Sys, Beg 1 | 1:1
• CAOTC 39C, D Microsoft Word for Office | 1:1
• CAOTC 41F Excel for Windows - Intermediate | 1
• CAOTC 44D PowerPoint for Windows, Beginning | 1
• CAOTC 45 Internet for Office and Personal Use | 2
• CAOTC 47A Access for Office Applications, Beg | 3
• CAOTC 215A Microsoft Outlook | 2
• CAOTC 246 Financial Applications | 3
• CAOTO 15 Business Communications | 3
• CAOTO 214A Filing | 1
• CAOTO 216 Proofreading Skills | 1
• CAOTO 260 Business Telephone Procedures | 1
• CAOTO 261 Business English | 3
• CAOTO 263 Customer Service | 1
• CAOTO 272AD Work Experience-CAOT | 3
• CAOTT 201 Intermediate Typing/Keyboarding | 2

**Subtotal Units** | **30**

**REQUIRED COMPETENCIES:**

1. Typing certificate of at least 45 words per minute for 5 minutes with 5 or fewer errors by the end of the program.
2. 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 any THREE (3) units from the following:**

- CAOTC31B Microsoft Windows Operating Sys, Adv 1
- CAOTC34 Introduction to Computers & Applications3
- CAOTC 35 Microsoft Office | 3
- CAOTC 39A, B Microsoft Word for Office | 1:1
- CAOTC 41E, J Excel for Windows | 1:1
- CAOTC 42A, B Desktop Publishing-Small Business1:1
- CAOTC 44E PowerPoint for Windows, Advanced | 1
- CAOTC 47B Access for Office Applications, Intern | 3
- CAOTC 215B Electronic Records Management | 2
- CAOTC 215C Lotus Notes | 3
- CAOTC 236A, B, C, D Word Processing-WordPerfect1
- CAOTC 265 Computer Transcription | 2
- CAOTO 30 Business Calculating Machines | 2
- CAOTO 222 Job Search Skills | 3
- CAOTO 262 Professional Development | 1
- CAOTO 264 Call Centers | 1
- CAOTO 265 Customer Conflict Management | 1
- CAOTO 272AD Work Experience - CAOT | 3:3:3
- CAOTT 209AB Speed/Accuracy Bldg for Typists | 1:1

**Subtotal Units** | **3**

**TOTAL UNITS** | **33**

**CERTIFICATES OF COMPLETION:**

**Basic Business Communications Certificate**

**REQUIRED COURSES** | **UNITS**
--- | ---
• CAOTC 39A Microsoft Word for Office, Beginning | 1
• CAOTC 44D PowerPoint for Windows, Beginning | 1
• CAOTO 15 Business Communications | 3
• CAOTO 261 Business English | 3
• CAOTO 262 Professional Development | 1

**TOTAL UNITS** | **9**

**Basic Computing and Internet Literacy**

**REQUIRED COURSES** | **UNITS**
--- | ---
• CAOTC 34 Introduction to Computers & Applications | 3
• CAOTC 35 Microsoft Office | 3

**Consult guides available in Counseling Centers for specific general education and required grades.**
Basic Microsoft Office Certificate

**REQUIRED COURSES**
- CAOTC 35 Microsoft Office 3

**TOTAL UNITS** 3

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

**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 35 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

Microsoft Word Certificate

**REQUIRED COURSES**
- CAOTC 39A Microsoft Word for the Office, Beg 1
- CAOTC 39B Microsoft Word for the Office, Int 1
- CAOTO 39C Microsoft Word for the Office, Adv 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.

ADVANCED TRANSPORTATION TECHNOLOGY

ALTERNATE FUELS

**Associate in Science/Career or Completion 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 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

CERTIFICATES OF COMPLETION:

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**
- 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.

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
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</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>
<tr>
<td>AMECH 483 Competition Electric Vehicles</td>
<td>3</td>
</tr>
<tr>
<td>AMECH 490 Introduction to Alternative Fuels</td>
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</tr>
<tr>
<td>Subtotal Units</td>
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</tr>
</tbody>
</table>

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 438E 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 1 5
- SHMET 420AD Sheet Metal Fabrication 3

Subtotal Units 6

**TOTAL UNITS 18.5**

**CERTIFICATES OF COMPLETION:**

- Advanced Transportation Technology–Electric Vehicle Certificate

### AIR CONDITIONING/REFRIGERATION

**THEORY ONLY**

**Associate in Science/Career Certificate**

Students are 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.

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>†AC_R 211 Air Conditioning &amp; Refrigeration Fundamentals 10</td>
<td></td>
</tr>
<tr>
<td>AC_R 212 Electrical Theory &amp; Component App</td>
<td>10</td>
</tr>
<tr>
<td>†AC_R 213 Psychrometrics, Ducting &amp; Load Calc</td>
<td>10</td>
</tr>
<tr>
<td>†AC_R 214 Troubleshooting Total Comfort Systems 10</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL UNITS</strong></td>
<td>40</td>
</tr>
</tbody>
</table>

**REQUIRED COURSES**

**UNITS**

- AC_R 420AD Air Condition/Refrig Service 6:6:6:6

Subtotal Units 24

Select SIX (6) units from the following courses:

- †AC_R 421A-B Controls for HVAC 3:3
- †AC_R 422 Air Conditioning System Design & Install 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)

**Associate in Science/Career Certificate**

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.

Complete with a “C” average TWENTY FOUR (24) units from the following:

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>†ARCHT 60, Architectural Design OR</td>
<td>8</td>
</tr>
<tr>
<td>†ARCHT 61, Architectural Design</td>
<td>4</td>
</tr>
<tr>
<td>and</td>
<td></td>
</tr>
<tr>
<td>†ARCHT 62, Architectural Design</td>
<td>4</td>
</tr>
</tbody>
</table>

Consult guides available in Counseling Centers for specific general education and required grades.
## 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</td>
<td>3</td>
</tr>
<tr>
<td>ART 2 Art and Civilization</td>
<td>3</td>
</tr>
<tr>
<td>ART 15 Beginning Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 23 Beginning Painting</td>
<td>3</td>
</tr>
<tr>
<td>ART 30 Fundamentals of Art: Volume, Plane &amp; Form</td>
<td>3</td>
</tr>
<tr>
<td>ART 31 Fundamentals of Art: Composition &amp; Color</td>
<td>3</td>
</tr>
<tr>
<td>ART 35AD Jewelry/Metalsmithing I</td>
<td>3</td>
</tr>
<tr>
<td>•ART 41 Introduction to Computergraphics</td>
<td>3</td>
</tr>
<tr>
<td>ART 50 Ceramics I</td>
<td>3</td>
</tr>
<tr>
<td>ART 60 Beginning Sculpture</td>
<td>3</td>
</tr>
<tr>
<td>ART 81AD Introduction to Fine Art Photography</td>
<td>3</td>
</tr>
<tr>
<td>ART 292 Professional Skills for Artists</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal CORE Units**  
36

### RECOMMENDED courses based on area of interest:

#### ART HISTORY

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

#### CERAMICS

- ART 51AD Ceramics II  3
- ART 52AD Ceramics III  3
- •ART 53AD Ceramics IV  3

#### COMPUTER ART

- •ART 42 Intro to 3D & Multimedia Computergraphics  3
- •ART 43AD Computer Art for the Internet  3
- •ART 44AD Computer Art for Graphic Design  3
- •ART 45AD Computer Art for Drawing & Painting  3
- •ART 46AD Computer Art & Design in 3D Modeling  3
- •ART 47AD Computer Art & Design for Multimedia  3

#### DRAWING AND PAINTING

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 14AD Beginning Drawing, Overview</td>
<td>1.5</td>
</tr>
<tr>
<td>•ART 16AD Intermediate Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 19AD Life Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 22AD Painting Overview</td>
<td>1.5</td>
</tr>
<tr>
<td>ART 24 Beginning Watercolor</td>
<td>3</td>
</tr>
<tr>
<td>•ART 26AD Figure Painting</td>
<td>3</td>
</tr>
<tr>
<td>•ART 27AD Intermediate Painting</td>
<td>3</td>
</tr>
<tr>
<td>ART 28AD Portrait Drawing &amp; Painting</td>
<td>1.5</td>
</tr>
</tbody>
</table>

#### DESIGN

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 32 Intermediate Design</td>
<td>3</td>
</tr>
<tr>
<td>•ART 43AD Computer Art for the Internet</td>
<td>3</td>
</tr>
<tr>
<td>•ART 44AD Computer Art for Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td>•ART 55AD Introduction to Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 56AB Intro to Typography (One semester only)</td>
<td>1.5</td>
</tr>
</tbody>
</table>

#### ILLUSTRATION

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 17AD Illustration I: Perspective</td>
<td>3</td>
</tr>
<tr>
<td>ART 18AD Illustration II: Rendering</td>
<td>3</td>
</tr>
<tr>
<td>ART 19AD Life Drawing (One semester only)</td>
<td>3</td>
</tr>
<tr>
<td>•ART 26AD Figure Painting</td>
<td>3</td>
</tr>
<tr>
<td>•ART 45AD Computer Art for Drawing &amp; Painting</td>
<td>3</td>
</tr>
</tbody>
</table>

#### JEWELRY/METALSMAITHING

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 33AD Exploration of the Decorative Arts</td>
<td>0.5</td>
</tr>
<tr>
<td>ART 34AD Applied Design/Crafts</td>
<td>3</td>
</tr>
<tr>
<td>•ART 36AD Jewelry/Metalsmithing 2</td>
<td>3</td>
</tr>
<tr>
<td>•ART 37AD Jewelry/Metalsmithing 3</td>
<td>3</td>
</tr>
<tr>
<td>•ART 38AD Jewelry/Metalsmithing 4</td>
<td>3</td>
</tr>
</tbody>
</table>

#### PHOTOGRAPHY

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

#### PRINTMAKING

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 70AD Printmaking, Silkscreen</td>
<td>3</td>
</tr>
<tr>
<td>ART 71AD Printmaking, Intaglio</td>
<td>3</td>
</tr>
<tr>
<td>•ART 72AD Printmaking, Advanced</td>
<td>3</td>
</tr>
<tr>
<td>ART 74AD Advanced Printmaking Overview</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</td>
<td>3</td>
</tr>
<tr>
<td>ART 62AD Sculpture - Metal Fabrication</td>
<td>3</td>
</tr>
<tr>
<td>ART 63AD Sculpture - Metal</td>
<td>3</td>
</tr>
</tbody>
</table>

#### AUTO BODY REPAIR

Associate in Science/Career Certificate

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 Intro. Basic Auto Body Repair</td>
<td>9</td>
</tr>
<tr>
<td>•ABODY 212 Minor Collision Repair</td>
<td>9</td>
</tr>
</tbody>
</table>
Curriculum Guides

†ABODY 213 Major Collision Repair       9
†ABODY 214 Painting Techniques          9
AMECH 421 Auto Mechanics I             3
*CAOTC31A Microsoft Windows Operating System 1
*CAOTT 200A Beginning Typing/Keyboarding 1
SHMET 220A Surface Development & Fabrication 5
WELD450AB Welding (Inert Gas)          2
TOTAL UNITS                             48

AUTO MECHANICS

Associate in Science/Career or Completion Certificate

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     UNITS
†AMECH231 Engine Repair & Auto Transmission OR9
AMECH 434 Engine Repair                                       6
and
†AMECH 436 Automatic & Standard Transmission                   6
†AMECH 232 Brakes/Steering Systems OR9                         9
AMECH 430 Auto Wheel Alignment                                    6
and
AMECH 432 Automotive Brake Systems                              6
†AMECH 233 Auto Electrical & Fuel Systems OR9                  9
AMECH 442 Automotive Fuel Systems                               6
and
AMECH 444 Automotive Electrical Systems                        6
†AMECH236 Auto Emission & Computer Control OR9                 9
AMECH 438 Auto Emission Controls                                  6
and
AMECH 440 Automotive Computer Systems                           6
MACHT 50A Machine Tool Operations and Practices                3
WELD 460AD Welding (General)                                    2
TOTAL UNITS                                                  41-53

CERTIFICATES OF COMPLETION:

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

Advanced Transportation Technology–Light–Medium Duty Alternate Fuels Certificate

REQUIRED COURSES     UNITS
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

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     UNITS
AMECH 803 Quick Service Tech–Brake Inspection                   2
TOTAL UNITS                                                  2

Quick Service Technician – Lubrication Service Certificate

REQUIRED COURSES     UNITS
AMECH 801 Quick Service Tech-Lubrication Service                 2
TOTAL UNITS                                                  2

Quick Service Technician – Tire Service Certificate

REQUIRED COURSES     UNITS
AMECH 802 Quick Service Tech – Tire Service                          2
TOTAL UNITS                                                  2

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     UNITS
ACCTG 1A Principles of Accounting                               4
AVPLT 50 Basic Aeronautical Ground School                        5
AVPLT 51 Commercial Ground School                                 3
AVPLT 52 Instrument Ground School                                 3
AVPLT 54 Navigation                                              3
AVPLT 56 Meteorology                                             3
AVPLT 57 Aircraft Engines & Related Systems OR9                 3
AVPLT 59 Aero Systems                                            3
*CBIS 6A Intro to IT Concepts and Applications                   4
Subtotal Units                                                 28

Select FOUR (4) UNITS from the following courses:

AVPLT 49 Professional Pilot Career Orientation                  1
oAVPLT 57 Aircraft Engines & Related Systems OR9                 3
oAVPLT 59 Aero Systems                                          3
AVPLT 60 AeroLaw                                                 2
AVPLT 61 Basic Simulator Flight Training                         2
AVPLT 62AD Instrument Rating Simulator Pilot Tng                 2
AVPLT63AD Adv Instrument Simulator Pilot Tng                      2
AVPLT 65AD Commercial-IFR Pilot Multi-Eng Sim                    2
†AVPLT 66AD Airline Transport Pilot Multi-Eng Sim2               2
AVPLT 71 Flight & Ground Instructor                              3
AVPLT 74 Transport Category Jet Aircraft Systems                 6
PEPF 70A Physical Fitness for Aviators                           1
PEPF 70B Physical Fitness for Aviators                           1
Subtotal Units                                                 4
TOTAL UNITS                                                   32

o Whichever course is used not used as part of the required courses

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

52
AVIATION MAINTENANCE  
(Airframe/Powerplant Mechanic)  
Associate in Science/Career Certificate  

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**  

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVMNT 211 General Aviation Maintenance Tech.</td>
<td>7</td>
</tr>
<tr>
<td>AVMNT 241 Airframe Structures</td>
<td>8</td>
</tr>
<tr>
<td>AVMNT 242 Aircraft Systems/Components 1</td>
<td>8</td>
</tr>
<tr>
<td>AVMNT 243 Aircraft Systems/Components 2</td>
<td>8</td>
</tr>
<tr>
<td>AVMNT 251 Powerplant Theory &amp; Maintenance</td>
<td>8</td>
</tr>
<tr>
<td>AVMNT 252 Powerplant Systems/Components 1</td>
<td>8</td>
</tr>
<tr>
<td>AVMNT 253 Powerplant Systems/Components 2</td>
<td>8</td>
</tr>
<tr>
<td><strong>TOTAL UNITS</strong></td>
<td><strong>55</strong></td>
</tr>
</tbody>
</table>

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

AVIATION PROFESSIONAL PILOT  
(Transfer)  
Associate in Science/Career Certificate  

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**  

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVPLT 49 Professional Pilot Career Orientation</td>
<td>1</td>
</tr>
<tr>
<td>AVPLT 50 Basic Aeronautical Ground School</td>
<td>5</td>
</tr>
<tr>
<td>AVPLT 51 Commercial Ground School</td>
<td>3</td>
</tr>
<tr>
<td>AVPLT 52 Instrument Ground School</td>
<td>3</td>
</tr>
<tr>
<td>AVPLT 54 Navigation</td>
<td>3</td>
</tr>
<tr>
<td>AVPLT 56 Meteorology</td>
<td>3</td>
</tr>
<tr>
<td>AVPLT 57 Aircraft Engines &amp; Related Systems OR</td>
<td>3</td>
</tr>
<tr>
<td>AVPLT 59 Aero Systems</td>
<td>3</td>
</tr>
<tr>
<td>*PEPF 70A Physical Fitness for Aviators</td>
<td>1</td>
</tr>
<tr>
<td><strong>Subtotal Units</strong></td>
<td><strong>22</strong></td>
</tr>
</tbody>
</table>

Select **FIVE** (5) units from the following courses:  
(maximum of four (4) units from simulator courses):  
0 AVPLT 57 Aircraft Engines & Related Systems OR | 3 |
0 AVPLT 59 Aero Systems | 3 |
AVPLT 60 Aero Law | 2 |
AVPLT 61 Basic Simulator Flight Training (Fe, Se) | 2 |
AVPLT 62AD Instrument Rating Simulator Pilot Tng | 2 |
AVPLT63AD Adv Instrument Simulator Pilot Tng | 2 |
AVPLT 65AD Commercial-IFR Pilot Multi-Eng Sim | 2 |
†AVPLT 66AD Airline Transport Pilot Multi-Eng Sim | 2 |
AVPLT 71 Flight & Ground Instructor | 3 |
AVPLT 74 Transport Category Jet Aircraft Systems | 6 |
*PEPF 70B Physical Fitness for Aviators | 1 |

**NOTE:** Students should take PEPF 70A and PEPF 70B during their first two semesters (in either order). The required course, PEPF 70A, is only offered in fall semesters. PEPF 70B is only offered in spring semesters.

**Subtotal Units** | **5**  
**TOTAL UNITS** | **27**  

**RECOMMENDED COURSES**  

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 10 Conceptual Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

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 938-4328.

**REQUIRED COURSES**  

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>F_N 250 Nutrition for Culinary</td>
<td>2</td>
</tr>
<tr>
<td>CULAR 20 App Food Service Sanit Hotel/Rest Mgmt 3</td>
<td>3</td>
</tr>
<tr>
<td>CULAR 200AD Introduction to Chocolate</td>
<td>1</td>
</tr>
<tr>
<td>CULAR 204 Introduction to Baking</td>
<td>5</td>
</tr>
</tbody>
</table>
†CULAR 205 Baking & Pastry I | 5 |
†CULAR 206 Baking & Pastry II | 5 |
CULAR 207 Commercial Cake Decorating | 5 |
†CULAR 213A Food Preparation 1 | 11.5 |
†CULAR 271AD Work Experience: Food Services | 2 |
| **TOTAL UNITS** | **43.5** |

**CERTIFICATES OF COMPLETION:**  
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>5</td>
</tr>
<tr>
<td><strong>TOTAL UNITS</strong></td>
<td><strong>5</strong></td>
</tr>
</tbody>
</table>

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>5</td>
</tr>
</tbody>
</table>
†CULAR 205 Baking and Pastry I | 5 |
| **TOTAL UNITS** | **10** |

Baking and Pastry 2 Certificate  

**REQUIRED COURSE**  

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CULAR 204 Intro to Baking</td>
<td>5</td>
</tr>
</tbody>
</table>
†CULAR 206 Baking and Pastry 2 | 5 |
| **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>
<tr>
<td><strong>TOTAL UNITS</strong></td>
<td><strong>5</strong></td>
</tr>
</tbody>
</table>

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>
<tr>
<td><strong>TOTAL UNITS</strong></td>
<td><strong>11.5</strong></td>
</tr>
</tbody>
</table>
Food Service Sanitation Certificate

REQUIRED COURSE UNITS
CULAR 20 App Food Serv Sanit Hotel/Rest Mgmt 3
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 UNITS
Select courses from the following to total 18 units
Complete 9 - 12 units in courses from any of the following biological science programs:
ANAT
BIO (excluding BIO 47, 48 or 49)
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)

Associate in Arts/Career Certificate

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 certificate 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 UNITS
GBUS 5 Introduction to Business 3
LAW 18A Business Law 3
MGMT 49A Introduction to Management 3
MKTG 47 Essentials of Marketing 3
Subtotal units 12
Select ONE of the following courses:
ACCTG 1A Principles of Accounting 4
ACCTG 200A Introduction to Accounting 3
Subtotal units 3-4

BUSINESS GENERAL

Associate in Arts/Career Certificate

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, such as Accounting or Business Administration (transfer). This certificate 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 UNITS
GBUS 5 Introduction to Business 3
LAW 18A Business Law 3
MKTG 47 Essentials of Marketing 3
Subtotal units 12
Select ONE of the following courses:
ACCTG 1A Principles of Accounting 4
ACCTG 200A Introduction to Accounting 3
Subtotal units 3-4

TOTAL UNITS 18-20

RECOMMENDED courses but not required:
†ACCTG 1B Principles of Accounting 4
†*ECON 1A-B Principles of Economics(Macro/Micro) 5
LAW 18A Business Law 3

Select ONE of the following options:
CBIS 8B Visual BASIC Programming 4
†CBIS 208B Advanced Visual BASIC Programming 4
•CBIS 6B Intermediate Business Applications 3
•CBIS 6A Intro to IT Concepts and Applications 4

Select ONE of the following courses:
† *MATH 37 Finite Mathematics 3
† *MATH 47 Calculus for Business 3
†*MATH 50 Prealculus Mathematics 4
†*MATH 60 First Calculus Course 5

TOTAL UNITS 23-26

Recommended courses not required:
†ACCTG 1B Principles of Accounting 4

Consult guides available in Counseling Centers for specific general education and required grades.
**BUSINESS INTERNATIONAL**  
**Associate in Arts/Career Certificate**

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 Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBUS 1</td>
<td>Introduction to International Business</td>
<td>3</td>
</tr>
<tr>
<td>IBUS 20</td>
<td>Export-Import Business Practice</td>
<td>3</td>
</tr>
<tr>
<td>IBUS 30</td>
<td>International Business Management</td>
<td>3</td>
</tr>
<tr>
<td>IBUS 40</td>
<td>International Banking &amp; Finance</td>
<td>3</td>
</tr>
<tr>
<td>IBUS 52</td>
<td>International Marketing</td>
<td>3</td>
</tr>
<tr>
<td>IBUS 60</td>
<td>International Business Law</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal units**  
18

Complete 3 units from the list of authorized electives listed below:
- ACCTG (Any) Accounting 3
- CAOT (Any) Computer Applications & Office Tech: 3 (see recommendations below)
- CBIS (Any) Computer/Business Information Systems 3 (see recommendations below)
- ECON (Any) Economics 3
- FOREIGN LANGUAGE (Any-including ESL classes) 3
- FRSTU (Any) Foreign Studies 6
- GBUS 5 Introduction to Business 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**  
18

**TOTAL UNITS**  
21

**RECOMMENDED courses:**
- IBUS 273AD Work Experience 4
- GEOG 40 World Regional Geography 3
- CAOT 15 Business Communications 3
- CAOTC 35 Microsoft Office OR 3
- CBIS6A Introduction to IT Concepts & Apps OR 4
- COMIS 1 Computer Information Competency 1

**BUSINESS MANAGEMENT**  
**Associate in Arts/Career Certificate**

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) 938-4328 or 938-4941.

**REQUIRED COURSES**  
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT 49A</td>
<td>Introduction to Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 49B</td>
<td>Human Resources Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 58</td>
<td>Leadership and Supervision</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 60</td>
<td>Management &amp; Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 80</td>
<td>Small Business Entrepreneurship</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal Units**  
15

Select TWO (2) classes from the following:
- IBUS 1 Introduction to International Business 3
- IBUS 30 International Business Management 3
- MGMT 273AD Work Experience 4
- MKTG 47 Essentials of Marketing 3

**Subtotal Units**  
6-7

**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. For more departmental information call (562) 938-3064 or 938-3054.

**REQUIRED COURSES**  
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CABMK 201</td>
<td>Intro to Wood Products Manufacturing</td>
<td>9</td>
</tr>
<tr>
<td>CABMK 202</td>
<td>Traditional Wood Products Mfg</td>
<td>9</td>
</tr>
<tr>
<td>CABMK 203</td>
<td>Contemporary Wood Products Mfg</td>
<td>9</td>
</tr>
</tbody>
</table>

**TOTAL UNITS**  
27

**CERTIFICATES OF COMPLETION:**
- Cabinetmaker Trainee Certificate

**REQUIRED COURSES**  
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CABMK 301</td>
<td>Introduction to Wood Products Mfg</td>
<td>4</td>
</tr>
</tbody>
</table>
CABMK 302 Millwork and Cabinet Making 2  4
CABMK 303 Millwork and Cabinet Making 3  4
CABMK 304 Millwork and Cabinet Making 4  4
TOTAL UNITS 16

Carpentry Technology/Trade
Home Remodeling & Repair
Associate in Science/Career or Completion Certificate

Students prepare for jobs in the carpentry industry. Students can earn an Associate of Science Degree or Career Certificate in Carpentry Technology, a Completion Certificate in Carpentry Trainee or a Completion Certificate in Home Remodeling and Repair. For more departmental information call (562) 938-3091 or 938-3055.

Carpentry Technology
REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARP 211</td>
<td>Carpentry 1</td>
<td>10</td>
</tr>
<tr>
<td>CARP 212</td>
<td>Carpentry 2</td>
<td>10</td>
</tr>
<tr>
<td>CARP 213</td>
<td>Carpentry 3</td>
<td>10</td>
</tr>
<tr>
<td>CARP 440</td>
<td>Blueprint Reading</td>
<td>3</td>
</tr>
<tr>
<td><strong>Subtotal Units</strong></td>
<td></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>

Select SEVEN (7) units from the following:

- CARP 219 Residential Roof Framing  4
- CARP 222 Residential Stairs  4
- CARP 225 Metal Framing  4
- CARP 230 Cost Estimating  4
- CARP 240 Safety for the Building Trades  2
- HORT 223AD Landscape Construction  4
- MGMT 80 Small Business Entrepreneurship  4

Subtotal Units 7
TOTAL UNITS 40

Certificates of Completion:
Carpenter Trainee Certificate

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARP 311</td>
<td>Carpentry Trade 1</td>
<td>3</td>
</tr>
<tr>
<td>CARP 312</td>
<td>Carpentry Trade 2</td>
<td>3</td>
</tr>
<tr>
<td>CARP 313</td>
<td>Carpentry Trade 3</td>
<td>3</td>
</tr>
<tr>
<td>CARP 314</td>
<td>Carpentry Trade 4</td>
<td>3</td>
</tr>
<tr>
<td><strong>Subtotal Units</strong></td>
<td></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

Select 3-4 Units from the Following Courses:

- ARCHT360M1 Basic AutoCAD for Architecture  1.5
- ARCHT 360M2 Architecture Design–AutoCAD  1.5
- CABMK 301 Millwork & Cabinet Making I  4
- CARP 230 Cost Estimating  4
- ELECT 240 Electrical Code-Residential  3
- HORT 223AD Landscape Construction  4
| **Subtotal Units** |                         | **15-16** |

Home Remodeling & Repair Technician Certificate

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARP 415A</td>
<td>Home Remodeling &amp; Repair</td>
<td>2</td>
</tr>
<tr>
<td>CARP 415B</td>
<td>Home Remodeling &amp; Repair</td>
<td>2</td>
</tr>
<tr>
<td>CARP 415C</td>
<td>Home Remodeling &amp; Repair</td>
<td>2</td>
</tr>
<tr>
<td>CARP 415D</td>
<td>Home Remodeling &amp; Repair</td>
<td>2</td>
</tr>
<tr>
<td><strong>Subtotal Units</strong></td>
<td></td>
<td><strong>8</strong></td>
</tr>
</tbody>
</table>

Select 3-4 Units from the Following Courses:

- ARCHT360M1 Basic AutoCAD for Architecture or
- ARCHT 360M2 Architecture Design–AutoCAD  1.5
- CABMK 301 Millwork & Cabinet Making I  4
- CARP 230 Cost Estimating  4
- ELECT 240 Electrical Code-Residential  3
- HORT 223AD Landscape Construction  4
| **Subtotal Units** |                         | **11-12** |

Pre-apprenticeship Training Certificate

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARP 250</td>
<td>Pre-apprenticeship Training</td>
<td>5.5</td>
</tr>
<tr>
<td><strong>TOTAL UNITS</strong></td>
<td></td>
<td><strong>5.5</strong></td>
</tr>
</tbody>
</table>

Child Development
Associate in Arts/Completion Certificate

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.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDECE 45</td>
<td>Child Development OR</td>
<td>3</td>
</tr>
<tr>
<td>CDECE 47</td>
<td>Human Development</td>
<td>3</td>
</tr>
<tr>
<td>CDECE48</td>
<td>Child, Family &amp; Community</td>
<td>3</td>
</tr>
<tr>
<td>CDECE 66</td>
<td>The Preschool Child</td>
<td>3</td>
</tr>
<tr>
<td>HUMAN 1</td>
<td>Comparative World Cultures</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 1</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td><strong>Complete THREE (3) units minimum in any other Child Development course.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal Units</strong></td>
<td></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

Select ONE of the following courses:

- SOCI 1 Introduction to Sociology  3
- ANTHR 2 Cultural Anthropology  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
- F_N 255C Nutrition for Adults and Aging  1
- CDAD 273AD Work Experience OR  4
- HS 73AD Work Experience  4
- CDAD 270 Adult Development OR  3
- HS 26 Introduction to Gerontology  3

Certificates of Completion:
Adult and Elder Care Certificate

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS 50</td>
<td>Laws and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>CDAD 273AD</td>
<td>Work Experience OR</td>
<td>4</td>
</tr>
<tr>
<td>HS 73AD</td>
<td>Work Experience</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td></td>
<td><strong>26</strong></td>
</tr>
</tbody>
</table>

Consult guides available in Counseling Centers for specific general education and required grades.
CPR certification is required prior to enrolling in any of the classes listed below:

- CDAD 270 Adult Development OR 3
- HS 26 Introduction to Gerontology 3
- F_N 255C Nutrition for Adults and Aging 1
- PSYCH 1 Introduction to Psychology 3
- SOCI 1 Introduction to Sociology 3

**TOTAL UNITS 17**

**Family Development Certificate**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDECE 47 Human Development</td>
<td>3</td>
</tr>
<tr>
<td>CDECE48 Child, Family &amp; Community</td>
<td>3</td>
</tr>
<tr>
<td>CDF 210A Skills &amp; Strategies for Family Workers I</td>
<td>3</td>
</tr>
<tr>
<td>CDF 210B Skills &amp; Strategies for Family Workers II</td>
<td>3</td>
</tr>
</tbody>
</table>

**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 Early Childhood Certificate program, plus 16 units in general education including one course in humanities, social sciences, mathematics, and/or science, and English, and an experience component, satisfies the requirements for a Child Development Permit required to teach in subsidized early childhood education programs (State or Headstart preschool programs run by school districts). For more departmental information call (562) 938-4549 or 938-4454.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>†CDECE 45 Child Development OR</td>
<td>3</td>
</tr>
<tr>
<td>CDECE 47 Human Development</td>
<td>3</td>
</tr>
<tr>
<td>CDECE 48 Child, Family, and Community</td>
<td>3</td>
</tr>
<tr>
<td>CDECE 59 Child Behavior</td>
<td>3</td>
</tr>
<tr>
<td>CDECE 66 The Preschool Child</td>
<td>3</td>
</tr>
<tr>
<td>†#CDECE 68 Early Child. Ed. Practicum D3</td>
<td>3</td>
</tr>
<tr>
<td>CDSED 67 The Exceptional Child</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal Units 18**

Select **NINE** (9) units from the following options:

- CDECE 1 The Developing Professional 1
- CDECE 19 Child Nutrition & Safety 2
- CDECE 31 Adult Supervision 2
- CDECE 34 Children’s Literature 3
- CDECE 40 Infant Development and Educaring 3
- CDECE 41 Toddler Development and Educaring 3
- CDECE 53 Intro. to Early Childhood Education 3
- CDECE54 Art & Creative Dev in Early Childhood D3 3
- CDECE55 Music & Movement in Early Childhood D33 3
- CDECE 57 Science & Math in Early Childhood D3 3
- †CDECE60A Admin. of Child Development Programs 3
- †CDECE 60B Advanced Supervision of E.C.E. D6 3
- CDECE 61 Child in the Multicultural Classroom D3 3
- CDECE 71AD OR 72AD OR 73AD Work Experience (not to exceed 4 units) 2, 3 or 4
- CDECE 201 Literacy in Early Childhood 3
- CDECE 252 Computers in the EC Classroom 2
- CDFDC 212 Family Child Care Management 3
- CDLL51A-D Ecology Early Childhood–Whole Child 2
- CDLL 52A-D Preschool Child Techniques 2

**TOTAL UNITS 27**

**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
- F_N 255C Nutrition for Adults and Aging 1
- CDAD 273AD Work Experience OR 4
- HS 73AD Work Experience 4
- CDECE 201 Literacy in Early Childhood 3
- CDF 210A Skills & Strategies for Family Workers I 3
- CDF 210B Skills & Strategies for Family Workers II 3
- HS 50 Laws and Ethics 3
- F_N 255C Nutrition for Adults and Aging 1
- CDAD 273AD Work Experience OR 4
- HS 73AD Work Experience 4
- CDECE 201 Literacy in Early Childhood 3
- CDF 210A Skills & Strategies for Family Workers I 3
- CDF 210B Skills & Strategies for Family Workers II 3
- HS 50 Laws and Ethics 3
- F_N 255C Nutrition for Adults and Aging 1
- CDAD 273AD Work Experience OR 4
- HS 73AD Work Experience 4
- CDECE 201 Literacy in Early Childhood 3
- CDECE 45 Child Development OR 3
- CDECE 47 Human Development 3
- CDECE 48 Child, Family and Community 3

**CERTIFICATES OF COMPLETION:**

**Early Childhood Education Assistant Teacher Certificate**

May assist in the instruction of children under supervision of Associate Teacher or above.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>†CDECE 45 Child Development OR</td>
<td>3</td>
</tr>
<tr>
<td>CDECE 47 Human Development</td>
<td>3</td>
</tr>
<tr>
<td>CDECE 48 Child, Family and Community</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal Units 6**

**Early Childhood Education Associate Teacher Certificate**

May provide instruction and supervise Assistant.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>†CDECE 45 Child Development OR</td>
<td>3</td>
</tr>
<tr>
<td>CDECE 47 Human Development</td>
<td>3</td>
</tr>
<tr>
<td>CDECE 48 Child, Family and Community</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal Units 6**

Select **SIX** (6) units from the following options:

- CDECE 19 Child Nutrition & Safety D7 2
- CDECE 31 Adult Supervision 2
- CDECE 40 Infant Development and Educaring D4 3
- CDECE 41 Toddler Development and Educaring D4 3
- CDECE 53 Intro. to Early Childhood Education 3
- CDECE54 Art & Creative Dev in Early Childhood D3 3
- CDECE55 Music & Movement in Early Childhood D33 3
- CDECE 57 Science & Math in Early Childhood D3 3
- CDECE 58 Language Arts for Young Children D3 3
- CDECE 59 Child Behavior D3 3
- †CDECE60A Admin. of Child Development Programs 3
- †CDECE 60B Advanced Supervision of E.C.E. D6 3
- CDECE 61 Child in the Multicultural Classroom D3 3

57
Consult guides available in Counseling Centers for specific general education and required grades.
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

**COMPUTER APPLICATIONS SPECIALIST**

Associate in Arts/Career or Completion Certificate

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**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBIS 6A</td>
<td>Intro to IT Concepts &amp; Applications</td>
<td>4</td>
</tr>
<tr>
<td>CAOTO 15</td>
<td>Business Communications</td>
<td>3</td>
</tr>
</tbody>
</table>

**SELECT ONE FROM THE FOLLOWING:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>• CBIS 3A</td>
<td>Windows Command Line</td>
<td>1</td>
</tr>
<tr>
<td>• CBIS 3B</td>
<td>Advanced Operating Systems MS Windows</td>
<td>1</td>
</tr>
<tr>
<td>• CBIS 6B</td>
<td>Intermediate Business Applications</td>
<td>3</td>
</tr>
<tr>
<td>• CBIS 6C</td>
<td>Advanced Business Applications</td>
<td>3</td>
</tr>
<tr>
<td>• CBIS 8B</td>
<td>Visual BASIC Programming</td>
<td>4</td>
</tr>
<tr>
<td>• CBIS 38</td>
<td>Database Concepts</td>
<td>4</td>
</tr>
<tr>
<td>• CBIS 206A</td>
<td>Internet Basics</td>
<td>1</td>
</tr>
<tr>
<td>• CBIS 207AD</td>
<td>Web Construction 1</td>
<td>2</td>
</tr>
</tbody>
</table>

**TOTAL UNITS 7**

**CHOOSE ONE AREA OF CONCENTRATION (CBIS OR CAOT)**

**CONCENTRATION IN COMPUTER BUSINESS INFORMATION SYSTEMS (CBIS)**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>• CBIS 3A</td>
<td>Windows Command Line</td>
<td>1</td>
</tr>
<tr>
<td>• CBIS 3B</td>
<td>Advanced Operating Systems MS Windows</td>
<td>1</td>
</tr>
<tr>
<td>• CBIS 6B</td>
<td>Intermediate Business Applications</td>
<td>3</td>
</tr>
<tr>
<td>• CBIS 6C</td>
<td>Advanced Business Applications</td>
<td>3</td>
</tr>
<tr>
<td>• CBIS 8B</td>
<td>Visual BASIC Programming</td>
<td>4</td>
</tr>
<tr>
<td>• CBIS 38</td>
<td>Database Concepts</td>
<td>4</td>
</tr>
<tr>
<td>• CBIS 206A</td>
<td>Internet Basics</td>
<td>1</td>
</tr>
<tr>
<td>• CBIS 207AD</td>
<td>Web Construction 1</td>
<td>2</td>
</tr>
</tbody>
</table>

**TOTAL UNITS 19**

**Required Work Experience in the Computer Labs:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>• CBIS 71AD</td>
<td>Work Experience-Comp Bus Sys</td>
<td>2</td>
</tr>
<tr>
<td>• CBIS 72AD</td>
<td>Work Experience - Comp Bus Sys</td>
<td>3</td>
</tr>
<tr>
<td>• CBIS 73AD</td>
<td>Work Experience - Comp Bus Sys</td>
<td>4</td>
</tr>
</tbody>
</table>

**TOTAL UNITS 2-4**

---

**CERTIFICATES OF COMPLETION:**

**Family Development Certificate**

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDECE 47 Human Development</td>
<td>3</td>
</tr>
<tr>
<td>CDECE48 Child, Family &amp; Community</td>
<td>3</td>
</tr>
<tr>
<td>CDF 210A Skills &amp; Strategies for Family Workers I</td>
<td>3</td>
</tr>
<tr>
<td>CDF 210B Skills &amp; Strategies for Family Workers II</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS 12**

**SPECIAL EDUCATION ASSISTANT**

**Associate in Arts/Career Certificate**

Students prepare to work as an assistant with children who have special 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.

**SPECIAL EDUCATION**

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDSED 5 Community Resources/Special Educ</td>
<td>3</td>
</tr>
<tr>
<td>CDSED 67 The Exceptional Child</td>
<td>3</td>
</tr>
<tr>
<td>†CDSED 69 Special Education Practicum</td>
<td>3</td>
</tr>
<tr>
<td>†CDSED 70 Teaching Exceptional Students</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS 12**
CONCENTRATION IN COMPUTER APPLICATIONS AND OFFICE TECHNOLOGY

(CAOT) REQUIRES: UNITS
• CAOTC 31A, B Microsoft Windows Operating System, Levels 1, 2 1:1
• CAOTC 35 Microsoft Office 3
• CAOTC 39B, C, D Microsoft Word for Office, Levels 2, 3, 4 1:1:1
• CAOTC 41F, J Excel for Windows, Levels 2, 3 1:1
• CAOTC 44E PowerPoint for Windows, Advanced 1
• CAOTC 45 Internet for Office and Personal Use 2
• CAOTC 47A Access for Office Applications, Beg 3
• CAOTC 215A Microsoft Outlook 2
Subtotal Units 18

Electives for CAOT Concentration
Select any THREE (3) units from the following:
• CAOTC 34 Introduction to Computers & Applications 3
• CAOTC 41E Excel for Windows - Beginning 1
• CAOTC 42A, B Desktop Publishing-Small Business 1
• CAOTC 44D PowerPoint for Windows, Beginning 1
• CAOTC 47B Access for Office Applications, Intern 3
• CAOTC 243 Microsoft Office Exam Prep - Access 0.5
CAOTO 272AD Work Experience - CAOT 3
Subtotal Units 3
TOTAL UNITS 29-31

CERTIFICATES OF COMPLETION:
Basic Computing and Internet Literacy Certificate
REQUIRED COURSES UNITS
CAOTC 34 Intro to Computers & Applications 3
CAOTC 35 Microsoft Office 3
CAOTC 45 Internet for Office and Personal Use OR 2
• CBIS 6A Intro to IT Concepts & Applications 4
• CBIS 6B Intermediate Business Applications 3
• CBIS 206A Internet Basics 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

Microsoft Access Certificate
REQUIRED COURSES UNITS
CAOTC 47A Access for Office Applications, Beg. 3
CAOTC 47B Access for Office Applications, Intern. 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 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

Microsoft Word Certificate
REQUIRED COURSES UNITS
CAOTC 39A Microsoft Word for the Office, Begin 1
CAOTC 39B Microsoft Word for the Office, Intern. 1
CAOTC 39C Microsoft Word for the Office, Adv 1
CAOTC 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.
Required Work Experience in the CBIS Computer Labs - Choose a minimum of two units:
†CBIS 71AD Work Experience - CBIS (60 Hours) 2
†CBIS 72AD Work Experience - CBIS (120 Hours) 3
†CBIS 73AD Work Experience - CBIS (180 Hours) 4
Subtotal Units 2-4
TOTAL UNITS FOR TRACK 1 25.5-27.5

Recommended but not required course(s):
†CBIS 36 Systems Analysis and Design 3
CBIS 211AD Web Construction II 2
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 Interpersonal 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 1
CBIS 3B Advanced Operating Systems MS Windows 1
•CBIS 6A Intro to IT Concepts & Applications 4
CBIS 7 Business Programming Logic & Design 1
†CBIS 36 Systems Analysis & Design 3
CBIS 38 Database Concepts 4
CBIS 223 Unix/Linux Fundamentals 3
Subtotal Units 17

Choose one series of the following:
•CBIS 8B Visual BASIC Programming 4
and
CBIS 208B Advanced Visual Basic Programming OR 4
CS 11 Computer Programming/C++ I 3.5
and
†CS 12 Computer Programming/C++ II 3.5
and
CS 13 C++ Data Structures and Algorithms OR 3.5
CS 21 Introduction to Computer Science I 3.5
and
†CS 22 Introduction to Computer Science II 3.5
and
†CS 23 Fundamental Data Structures (F) 3.5
Subtotal Units 8-10.5

Choose one of the following alternative languages:
•CBIS 8B Visual BASIC Programming 4
CS 11 Computer Programming/C++ I 3.5
and
†CS 21 Introduction to Computer Science I 3.5
and
†CS 22 Introduction to Computer Science II 3.5
and
†CS 23 Fundamental Data Structures (F) 3.5
Subtotal Units 2.5-4

TOTAL UNITS FOR TRACK 3 27.5-31.5

Recommended but not required course(s):
†¶MATH 60 First Calculus Course 5
†MATH 70 Second Calculus Course 5
†MATH 80 Third Calculus Course 5
†MATH 55A Discrete Mathematics I 4
†MATH 55B Discrete Mathematics II 3
†PHYS 3A Physics for Sci & Eng-Mechanics 5
†PHYS 3B Physics for Sci & Eng - E & M 4
†PHYS 3C Physics for Sci and Eng – Modern Physics 4
CS 51 Introduction to Computer Architecture 3.5
†CS 52 Introduction to Software Engineering 3.5

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBIS 3A Windows Command Line</td>
<td>1</td>
</tr>
<tr>
<td>CBIS 6A Intro to IT Concepts &amp; Applications</td>
<td>4</td>
</tr>
<tr>
<td>CBIS 41 Networking Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CBIS 200 Computer Technician Hardware Basics</td>
<td>3.5</td>
</tr>
<tr>
<td>CBIS 212 Wireless Communications</td>
<td>1.5</td>
</tr>
<tr>
<td>CBIS 220 i-Net+ Internet Technologies</td>
<td>3</td>
</tr>
<tr>
<td>CBIS 223 Unix/Linux Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CBIS 225 Microsoft Windows Client O.S.</td>
<td>2.5</td>
</tr>
<tr>
<td>CBIS 226 Microsoft Windows Server O.S.</td>
<td>2.5</td>
</tr>
<tr>
<td>CBIS 227 Microsoft Windows Networking</td>
<td>2.5</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR TRACK 4**: 26.5

**Recommended but not required course(s):**

- CBIS 71AD Work Experience – CBIS (60 Hours) | 2
- CBIS 72AD Work Experience – CBIS (120 Hours) | 3
- CBIS 73AD Work Experience – CBIS (180 Hours) | 4
- CBIS 228 Microsoft Windows Directory Services | 2.5
- CBIS 229 Microsoft ISA Server | 2.5
- CBIS 270 Introduction to Information Security | 1
- CBIS 271 Network Security Fundamentals | 3
- CISCO 250 Networking Wiring Installation | 1
- CISCO 251 Cisco Networking I, Introduction | 3
- CISCO 252 Cisco Networking II, Routers | 3
- CISCO 253 Cisco Networking III, LAN | 3
- CISCO 254 Cisco Networking III, WAN | 3

**CERTIFICATES OF COMPLETION:**

**Application Developer Certificate**

<table>
<thead>
<tr>
<th>REQUIRED COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>†CBIS 6A Intro to IT Concepts &amp; Applications</td>
<td>4</td>
</tr>
<tr>
<td>CBIS 7 Business Programming Logic &amp; Design</td>
<td>1</td>
</tr>
<tr>
<td>CBIS 6B Intermediate Business Applications</td>
<td>3</td>
</tr>
<tr>
<td>CBIS 6C Advanced Business Applications</td>
<td>3</td>
</tr>
<tr>
<td>CBIS 6B Visual Basic Programming</td>
<td>4</td>
</tr>
<tr>
<td>†CBIS 71AD Work Experience - CBIS</td>
<td>2</td>
</tr>
</tbody>
</table>

**TOTAL UNITS**: 17

**Information Security Certificate**

<table>
<thead>
<tr>
<th>REQUIRED COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBIS 41 Networking Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CBIS 220 i-Net+ Internet Technologies</td>
<td>3</td>
</tr>
<tr>
<td>CBIS 270 Introduction to Information Security</td>
<td>1</td>
</tr>
<tr>
<td>CBIS 271 Network Security Fundamentals</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS**: 10

**Recommended but not required course(s):**

- CBIS 223 Unix/Linux Fundamentals | 3
- CBIS 225 MS Windows Client OS | 2.5
- CBIS 226 MS Windows Server OS | 2.5
- CBIS 227 MS Windows Networking | 2.5

**Java Web Programmer Certificate**

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>†CBIS 7 Business Programming Logic &amp; Design</td>
<td>1</td>
</tr>
<tr>
<td>CBIS 14 Introduction to Java Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>CBIS 38 Database Concepts</td>
<td>4</td>
</tr>
<tr>
<td>CBIS 220 i-Net+ Internet Technologies</td>
<td>3</td>
</tr>
<tr>
<td>CBIS 207AD Web Construction I</td>
<td>2</td>
</tr>
</tbody>
</table>

**TOTAL UNITS**: 13.5

**Microsoft Windows System Administration Certificate**

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBIS 225 Microsoft Windows Client OS (F)</td>
<td>2.5</td>
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</tbody>
</table>

**TOTAL UNITS**: 14.5

### Oracle Developer Associate Certificate

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBIS 38 Database Concepts</td>
<td>4</td>
</tr>
<tr>
<td>CBIS 242 Introduction to Oracle: SQL</td>
<td>2.5</td>
</tr>
<tr>
<td>CBIS 243 Program with Oracle PL/SQL</td>
<td>2.5</td>
</tr>
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</table>

**TOTAL UNITS**: 9

### Oracle Developer Professional Certificate

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>†CBIS 36 System Design and Analysis</td>
<td>3.0</td>
</tr>
<tr>
<td>CBIS 38 Database Concepts</td>
<td>4</td>
</tr>
<tr>
<td>CBIS 242 Introduction to Oracle: SQL</td>
<td>2.5</td>
</tr>
<tr>
<td>CBIS 243 Program with Oracle PL/SQL</td>
<td>2.5</td>
</tr>
<tr>
<td>CBIS 244 Oracle Forms: Build Internet Apps I</td>
<td>2.5</td>
</tr>
</tbody>
</table>

**TOTAL UNITS**: 14.5

### Oracle Database Administrator (DBA) Associate Certificate

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBIS 38 Database Concepts</td>
<td>4</td>
</tr>
<tr>
<td>CBIS 242 Introduction to Oracle: SQL</td>
<td>2.5</td>
</tr>
<tr>
<td>CBIS 246 Oracle DBA Fundamentals</td>
<td>2.5</td>
</tr>
</tbody>
</table>

**TOTAL UNITS**: 9

### Web Construction Certificate

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBIS 207AD Web Construction I</td>
<td>2.0</td>
</tr>
<tr>
<td>CBIS 220 i-Net+ Internet Technologies</td>
<td>3.0</td>
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<tr>
<td>CBIS 207E Advanced Web Construction</td>
<td>2.5</td>
</tr>
<tr>
<td>CBIS 206C World Wide Web Database Programming</td>
<td>2.5</td>
</tr>
<tr>
<td>CBIS 211AD Web Construction II</td>
<td>2</td>
</tr>
</tbody>
</table>

**TOTAL UNITS**: 12

**Recommended but not required course(s):**

- †CBIS 6A Intro to IT Concepts & Applications | 4
- CBIS 41 Networking Fundamentals | 3

### Windows Network Administrator Certificate

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBIS 3A Windows Command Line</td>
<td>1</td>
</tr>
<tr>
<td>CBIS 41 Networking Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CBIS 212 Wireless Communications</td>
<td>1.5</td>
</tr>
<tr>
<td>CBIS 225 Microsoft Windows Client OS</td>
<td>2.5</td>
</tr>
<tr>
<td>CBIS 226 Microsoft Windows Server OS</td>
<td>2.5</td>
</tr>
<tr>
<td>CBIS 227 Microsoft Windows Networking</td>
<td>2.5</td>
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</tbody>
</table>

**TOTAL UNITS**: 14

### 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.

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*Consult guides available in Counseling Centers for specific general education and required grades.*
### REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>F_N 250</td>
<td>Nutrition for Culinary Arts</td>
<td>2</td>
</tr>
<tr>
<td>CULAR 20</td>
<td>App Food Serv Sanit in Hotel/Rstr Mgt</td>
<td>3</td>
</tr>
<tr>
<td>CULAR 200A</td>
<td>Introduction to Chocolate</td>
<td>1</td>
</tr>
<tr>
<td>CULAR 204</td>
<td>Introduction to Baking</td>
<td>5</td>
</tr>
<tr>
<td>†CULAR 213A</td>
<td>Food Preparation 1</td>
<td>11.5</td>
</tr>
<tr>
<td>†CULAR 213B</td>
<td>Food Preparation 2</td>
<td>11.5</td>
</tr>
<tr>
<td>†CULAR 213C</td>
<td>Food Preparation 3</td>
<td>11.5</td>
</tr>
</tbody>
</table>

**Subtotal Units:** 44.5

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

- †CULAR 271AD Work Experience: Food Service 2
- †CULAR 272AD Work Experience: Food Services 3
- †CULAR 273AD Work Experience: Food Services 4

**Subtotal Units:** 4

**TOTAL UNITS:** 48.5

### RECOMMENDED but not required courses:

- †CULAR 205 Baking and Pastry I 5
- †CULAR 206 Baking and Pastry II 5
- CULAR 207 Commercial Cake Decorating 5
- CULAR 214 Professional Gourmet Cooking 2
- CULAR 215 Commercial Formal Buffet 2
- THRFB 18 Food Production Principles 3
- THRFB 19 Food & Beverage Purchasing 3
- THRFB 32 Catering for Hotel and Restaurant 3

**CERTIFICATES OF COMPLETION:**

- **Hotel, Restaurant: Institutional Cooking 1 Certificate**
  - REQUIRED COURSE | UNITS |
  - CULAR 201A Hotel, Restaurant: Institutional Cooking | 8 |
  - **TOTAL UNITS:** 8

- **Hotel, Restaurant: Institutional Cooking 2 Certificate**
  - REQUIRED COURSE | UNITS |
  - CULAR 201B Hotel, Restaurant: Institutional Cooking | 8 |
  - **TOTAL UNITS:** 8

### CUSTOMER SERVICE REPRESENTATIVE

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

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. 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 | 1:1 |
  - CAOTC 39A Microsoft Word for Office - Beginning | 1 |
  - CAOTC 41E Excel for Windows - Beginning | 1 |
  - CAOTC 45 Internet for Office and Personal Use | 2 |
  - CAOTC 215A Microsoft Outlook | 2 |
  - CAOTC 250A, B Data Entry - Levels 1, 2 | 2:3 |
  - CAOTO 15 Business Communications | 3 |
  - CAOTO 260 Business Telephone Procedures | 1 |
  - CAOTO 261 Business English | 3 |
  - CAOTO 262 Professional Development | 1 |
  - CAOTO 263 Customer Service | 1 |
  - CAOTO 264 Call Centers | 1 |
  - CAOTO 265 Customer Conflict Management | 1 |

**TOTAL UNITS:** 3
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>†DANCE 32AD</td>
<td>Group Choreography (2nd semester)</td>
<td>1</td>
</tr>
<tr>
<td>†DANCE 41AD</td>
<td>Dance Performance</td>
<td>2</td>
</tr>
<tr>
<td><strong>Select ONE of the following courses:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>†DANCE 6AB</td>
<td>Intermediate Tap</td>
<td>1</td>
</tr>
<tr>
<td>†DANCE 13AD</td>
<td>Turns</td>
<td>1</td>
</tr>
<tr>
<td>†DANCE 18AD</td>
<td>Folk and Ethnic Dance</td>
<td>1</td>
</tr>
<tr>
<td>†DANCE 60AD</td>
<td>Special Projects in Dance</td>
<td>1</td>
</tr>
<tr>
<td><strong>Subtotal Units (for Semester 4)</strong></td>
<td></td>
<td>7</td>
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<tr>
<td><strong>TOTAL UNITS</strong></td>
<td></td>
<td>29</td>
</tr>
</tbody>
</table>

**DATA ENTRY**

Associate in Arts/Career Certificate

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**

- CAOTC 209AB Speed/Accuracy Bldg for Typists 1
- CAOTT 202 Advanced Typing/Keyboarding 2
- CAOTO 272AD Work Experience - CAOT 3
- CAOTO 216 Proofreading Skills 1
- CAOTT 227AD Work Experience - CAOT 3
- CAOTT 209AB Speed/Accuracy Bldg for Typists 1

**Required Total Units**

18

**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 80 percent accuracy on a 5-minute test within the previous 12 months. Completion of certificate courses with a minimum grade of “B” in each course.

**Microsoft Access Certificate**

**REQUIRED COURSES**

- CAOTC 47A Access for Office Applications, Begin 3
- CAOTC 47B Access for Office Applications, Intern 3

**TOTAL UNITS**

6

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

**DESKTOP/MEDIA PUBLISHING**

Associate in Arts/Career Certificate

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; Journalism classes call (562) 938-4675 or 938-4036.

**REQUIRED Core Courses for Both Concentrations**

- ART 31 Fundamentals of Art/Composition & Color 3
- ART 41 Introduction to Computer Graphics 3
- JOURN 1A Introduction to Desktop Publication 3
- **JOURN 25 Free-Lance Writing** 3

**Required Total Units**

12

**Choose One Area of Concentration**

**Art or Writing/Publishing:**

**Concentration in Art**

Select **TWELVE (12) units from the following:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>†ART 43AD</td>
<td>Computer Art for the Internet</td>
<td>3</td>
</tr>
<tr>
<td>†ART 44AD</td>
<td>Computer Art for Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td>†ART 45AD</td>
<td>Computer Art for Drawing and Painting</td>
<td>3</td>
</tr>
<tr>
<td>†ART 55AD</td>
<td>Introduction to Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 56AB</td>
<td>Introduction to Typography</td>
<td>3</td>
</tr>
</tbody>
</table>

**Required Total Units**

12

**Total Units**

24
Concentration in Writing/Publishing
Select TWELVE (12) units from the following:
* JOURN 1B Introduction to Desktop Publication 3
JOURN 6AD Working on the Magazine 3
† JOURN 20 Beginning Newswriting and Reporting 3
JOURN 71-73AD Work Experience – Journalism 2-4
JOURN 80AD Working on the Newspaper 3
JOURN 85AD Editor Training 3
Subtotal Units 12
TOTAL UNITS 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 lifelong learning. For any additional departmental information, call (562) 938-4169.

Prerequisite Courses
The following courses must be completed within five years prior to the first Spring Semester of the program:

REQUIRED COURSES UNITS
* ANAT 41 Anatomy & Physiology 5
AH 60 Medical Terminology 3
AH 61 Integration of Patient Care 2
TOTAL UNITS 10

FIRST YEAR
Spring Semester
† DMI 10 Introduction to Radiological Technology 3
Subtotal Units 3

Summer Session
† DMI 20 Introduction to Radiological 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 Fluoroscope/Radiographic Proc 3
† DMI 21 Applied Radiological Physics 2
† DMI 30 Positioning for General Radiography 3
† DMI 40A Clinical Radiography & Film Critique 2.5
Subtotal Units 18.5

Spring Semester
† 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 60 Radiologic Pathology 3
† DMI 24 Radiation: Biology & Protection 3
† DMI 61 Fluoroscopy 2
† DMI 31 Positioning for Cranial Radiography 3
† DMI 40C Clinical Radiography & Film Critique 6
Subtotal Units 19

TOTAL UNITS (in program) 81.5
TOTAL UNITS (including prerequisite courses) 91.5

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

CERTIFICATES OF COMPLETION:
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
Associate in Science/Career Certificate
Students prepare for entry-level jobs in the diesel mechanics/heavy equipment industry. For more departmental information call (562) 938-3071 or 938-3054.

REQUIRED CORE COURSES FOR BOTH OPTIONS
REQUIRED COURSES UNITS
• CAOTC31A MS Windows Operating System, Beg 1
• CAOTT 200A Beginning Typing/Keyboarding 1
• CAOTC 391B Heavy Equipment Electrical Systems 5
Subtotal Units 7

COMPLETE OPTION #1 OR OPTION #2

Consult guides available in Counseling Centers for specific general education and required grades.
OPTION #1:

REQUIRED COURSES
- AMECH 424 Automotive Air Conditioning 3
- DIESL 281 Diesel Two Cycle Engine 10
- DIESL 282 Diesel Four Cycle Engine 10
- †DIESL 283 Powered Systems 10
- †DIESL 284 Highway Transport 10
Subtotal Units 43
TOTAL UNITS 50

RECOMMENDED but not required courses:
- WELD 400AD Welding (General) 2

OPTION #2:

REQUIRED COURSES
- AMECH 424 Automotive Air Conditioning 3
- DIESL 289 Caterpillar 3406 & 3116 Engine 10
- DIESL 290 Caterpillar Transmissions & Final Drive 10
- DIESL 291 C.A.T. Hydraulics 10
Subtotal Units 43
TOTAL UNITS 50

RECOMMENDED but not required courses:
- WELD 460AD Welding (Acetylene Gas) 2

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, 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
- F_N 20 Nutrition & Life 3
- F_N 21 Food Selection & Meal Preparation 4
- F_N 224 Sanitation, Safety & Equipment 3
- F_N 225 Intro. Food Service & Work Organization 3
- F_N 227 Supervision & Training Tech. 3
- F_N 228 Food Production Management 3
- F_N 230AC Clinical Field Exper. I (2 semesters req) 2:2
- F_N 231 Menu Planning & Food Purchasing 3
- F_N 232 Medical Nutrition Therapy 3
Subtotal 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:
- †F_N 234 Advanced Nutrition Care 3
- F_N 235 Advanced Medical Nutrition Therapy 3
- †F_N 236 Dietetic Seminar 1
- F_N 240AC Clinical Field Exper II (2 semesters req) 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 26 Nutrition for the Active Person 1
- F_N 233A-D Special Topics in Health Care Dietetics 1
- F_N 250 Nutrition for Culinary Arts 2
- F_N 253 Certified Food Handler Certification 1
- F_N 255A-D Special Topics in Nutrition 1
- F_N 256 Weight Control & Energy Balance 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.
## DRAFTING - ARCHITECTURAL

*(Occupational Program)*

### Associate in Science/Career Certificate

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. 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.

### ASSOCIATE DEGREE

#### REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>★ARCHT 51A</td>
<td>Industrial Drafting I</td>
<td>3</td>
</tr>
<tr>
<td>★ARCHT 51B</td>
<td>Industrial Drafting II</td>
<td>3</td>
</tr>
<tr>
<td>★ARCHT 52A</td>
<td>Advanced Industrial Drafting</td>
<td>3</td>
</tr>
<tr>
<td>★ARCHT 52B</td>
<td>Descriptive Geometry</td>
<td>3</td>
</tr>
<tr>
<td>★DRAFT 60</td>
<td>Geometric Dimension &amp; Tolerancing</td>
<td>3</td>
</tr>
<tr>
<td>★DRAFT 61</td>
<td>Architectural Design</td>
<td>4</td>
</tr>
<tr>
<td>★DRAFT 62</td>
<td>Architectural Design</td>
<td>4</td>
</tr>
<tr>
<td>★DRAFT 64</td>
<td>Architectural Design OR</td>
<td>8</td>
</tr>
<tr>
<td>★DRAFT 65</td>
<td>Architectural Design</td>
<td>4</td>
</tr>
<tr>
<td>★DRAFT 66</td>
<td>Architectural Design</td>
<td>4</td>
</tr>
<tr>
<td>★DRAFT 70A</td>
<td>Architectural Design OR</td>
<td>8</td>
</tr>
<tr>
<td>★DRAFT 71A</td>
<td>Architectural Design</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total Units: 40**

#### RECOMMENDED but not required courses:

- ★DRAFT202AD AutoCAD I, Fundamentals 3
- ★DRAFT203AD AutoCAD II, Advanced Concepts 3
- ★DRAFT204 AutoCAD II, Advanced Concepts 4

### DRAFTING - Mechanical Design

*(Occupational Program)*

### Associate in Science/Career or Completion Certificate

Students learn entry-level job skills in mechanical drafting and design. The Associate Degree will prepare students for a mechanical-design-related career, and appropriate course selection will facilitate transfer to a professional degree program. The Core Skills Career Certificate will prepare students for an entry-level position as a mechanical drafter trainee in a variety of design professional settings and will serve as a foundation for specialization. The Advanced Skills Career Certificate will prepare student for an advanced position as a mechanical drafter or intermediate level drafting position in a variety of design professional settings and will serve as a foundation for specialization. For more departmental information call (562) 938-4718.

The Associate Degree requires a minimum of 20 units from the following courses identified with "★".

The Core Skills Career Certificate requires a minimum of 18 units from the following courses identified with "★".

The Advanced Skills Career Certificate requires a minimum of 34 units as specified below.

### Core Skills Career Certificate

- ★ARCHT 60 Architectural Design OR 8
- ★ARCHT 61 Architectural Design 4
- ★ARCHT 62 Architectural Design 4
- ★ARCHT 64 Architectural Design OR 8
- ★ARCHT 65 Architectural Design 4
- ★ARCHT 66 Architectural Design 4
- ★ARCHT 70A Architectural Design OR 8
- ★ARCHT 71A Architectural Design 4
- ★DRAFT 201 Introduction to Drafting OR 4
- ★DRAFT 202AD AutoCAD I, Fundamentals 3
- ★DRAFT 203AD AutoCAD II, Advanced Concepts OR 3
- ★DRAFT 204 AutoCAD II, Advanced Concepts 4

**Total Units: 19-20**

### Recommended but not required courses:

- ★DRAFT203AD AutoCAD II, Advanced Concepts OR 3
- ★DRAFT 204 AutoCAD II, Advanced Concepts 4

### Advanced Skills Career Certificate

- ★ARCHT 60 Architectural Design OR 8
- ★ARCHT 61 Architectural Design 4
- ★ARCHT 62 Architectural Design 4
- ★ARCHT 64 Architectural Design OR 8
- ★ARCHT 65 Architectural Design 4
- ★ARCHT 66 Architectural Design 4
- ★ARCHT 70A Architectural Design OR 8
- ★ARCHT 71A Architectural Design 4
- ★DRAFT 201 Introduction to Drafting OR 4

**Total Units: 36-38**

- ★ELECT225 Algebra & Trigonometry for Technicians 4
- ★MACHT 50A Machine Tool Operation and Practices 3
- ★MACHT 50B Machine Tool Operation and Practices 3
- ★DRAFT 51A Industrial Drafting I 3
- ★DRAFT 51B Industrial Drafting II 3
- ★DRAFT 52A Advanced Industrial Drafting 3
- ★DRAFT 52B Descriptive Geometry 3
- ★DRAFT60 Geometric Dimension & Tolerancing 3
- ★DRAFT 201 Introduction to Drafting 3
- ★DRAFT 202AD AutoCAD I, Fundamentals 3
- ★DRAFT 203AD AutoCAD II, Advanced Concepts 3
- ★DRAFT 204 3D Visualization/Animations 4
- MACT 50A Machine Tool Operation and Practices 3
- MACT 50B Machine Tool Operation and Practices 3

**Subtotal Units: 29**

Consult guides available in Counseling Centers for specific general education and required grades.
Select **THREE (3)** - **FIVE (5)** units from the following:

†**ELECT225 Algebra & Trigonometry for Technicians** 4

OR

†**A more advanced level of Mathematics** 3-5

Subtotal Units 3-5

TOTAL UNITS 32-34

**CERTIFICATES OF COMPLETION:**

- **AutoCAD I, Fundamentals Certificate**
  
  **REQUIRED COURSES**
  - #DRAFT 202AD AutoCAD I, Fundamentals 3
  - TOTAL UNITS 3

- **AutoCAD II, Advanced Certificate**
  
  **REQUIRED COURSES**
  - 3D Visualization/Animation 4
  - TOTAL UNITS 4

- **3D Studio MAX-Modeling Technician Certificate**
  
  **REQUIRED COURSES**
  - DRAFT251AD 3D Modeling for Technical Animation 3
  - TOTAL UNITS 3

- **3D Studio MAX-Texture & Lighting Technician Certificate**
  
  **REQUIRED COURSES**
  - DRAFT252AD Texture/Lighting - Tech Animation 3
  - TOTAL UNITS 3

- **Technical Design Animator Certificate**
  
  **REQUIRED COURSES**
  - DRAFT251AD 3D Modeling for Technical Animation 3
  - DRAFT252AD Texture/Lighting - Technical Animation 3
  - DRAFT253AD 3D Technical Animation & Production 3
  - TOTAL UNITS 9

- **ELECTRICAL TECHNOLOGY**
  
  **Associate in Science/Career or Completion Certificate**

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. This program also meets the standards set by the California Department of Apprenticeship Standards towards the current California Electrician Certification testing. Once a student has completed the program, that student will be allowed to register to take the Electrician’s Certification Exam. For more departmental information call (562) 938-4505.

**STUDENTS MAY FOLLOW EITHER:**

**COURSES - DAY PROGRAM**

**UNITS**

**REQUIRED** 40

**ELECTIVES** 5

**COURSES - NIGHT PROGRAM**

**UNITS**

**REQUIRED** 37.5

**ELECTIVES** 7.5

**TOTAL** 45

**DAY PROGRAM**

**FIRST SEMESTER**

- ELECT 200A First Semester Industrial Electricity 8
- ELECT 253 OSHA Standards for Construction Safety 2

**SECOND SEMESTER**

- †ELECT 200B Second Semester Industrial Electricity 8
- †*ELECT225 Algebra & Trigonometry for Technicians** 4

**THIRD SEMESTER**

- †ELECT 200C Third Semester Industrial Electricity 8
- †ELECT 435A Electrical Motor Control 2

**FOURTH SEMESTER**

- †ELECT 200D Fourth Semester Industrial Electricity 8
  - and
  - Complete the remaining 5.0 units from the Electrical Program Electives list below. **These electives can be taken at any time during the program as long as the prerequisites for the desired class have been met.** 5

**TOTAL UNITS** 45

**NIGHT PROGRAM**

**FIRST SEMESTER**

- ELECT 202 Electrical Mathematics 3
- +ELECT 204 Fundamentals of D.C. Electricity 3
- +ELECT 210A Laboratory Practices 1
- ELECT 253 OSHA Standards for Construction Safety 2
- +Must enroll in ELECT 204 and 210A concurrently

**SECOND SEMESTER**

- +ELECT 209 Fundamentals of Motors and Generators 3
- +ELECT 210B Laboratory Practices 1
- †ELECT225 Algebra & Trigonometry for Technicians** 4
- †ELECT 240 Electrical Code – Residential 3
- +Must enroll in ELECT 209 and 210B concurrently

**THIRD SEMESTER**

- +ELECT 212 Fundamentals of A.C. Electricity 3
- +ELECT 210C Laboratory Practices 1
- †ELECT 435A Electrical Motor Control 2
- †ELECT 245 Electrical Code – Commercial 3
- +Must enroll in ELECT 212 and 210C concurrently

**FOURTH SEMESTER**

- +ELECT 214 A.C. Principles and Practices 3
- +ELECT 210D Laboratory Practices 1
- †ELECT 250 Electrical Code – Advanced 3
- †ELECT 242 Electrical Code – Grounding 1.5
- +Must enroll in ELECT 214 AND 210D concurrently.
Complete the remaining 7.5 units from the Electrical Program Electives list on the previous page for selection of the appropriate electives. These electives can be taken at any time during the program as long as the prerequisites for the desired class have been met. 7.5

**TOTAL UNITS** 45

**Electrical Program ELECTIVES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>CISCO 250 Network Cabling Installation</td>
<td>1</td>
</tr>
<tr>
<td>CISCO 251 Cisco Networking I, Introduction</td>
<td>3</td>
</tr>
<tr>
<td>*ELECT 41 Technical Applications of Minicomputers</td>
<td>2</td>
</tr>
<tr>
<td>*ELECT 224 Electrical Motors and Transformers</td>
<td>3</td>
</tr>
<tr>
<td>*ELECT 226 Solid State Fundamentals for Electricians</td>
<td>3</td>
</tr>
<tr>
<td>*ELECT 227 D.C. Variable Speed Drives</td>
<td>3</td>
</tr>
<tr>
<td>*ELECT 228 A.C. Variable Speed Drives</td>
<td>1.5</td>
</tr>
<tr>
<td>*ELECT 229 Industrial Drive Systems</td>
<td>3</td>
</tr>
<tr>
<td>ELECT 230A, B, C Robotics Technology (3 units each)</td>
<td>3</td>
</tr>
<tr>
<td>ELECT 271 Electrical Cost Estimating</td>
<td>3</td>
</tr>
<tr>
<td>*ELECT 275 Electrical Pipe Bending (A)</td>
<td>0.5</td>
</tr>
<tr>
<td>*ELECT 276 Electrical Pipe Bending (B)</td>
<td>0.5</td>
</tr>
<tr>
<td>*ELECT 277 Blueprint Reading for Electricians</td>
<td>3</td>
</tr>
<tr>
<td>ELECT 280 Traffic Signals Systems 1</td>
<td>3</td>
</tr>
<tr>
<td>ELECT 283 Traffic Systems Communications</td>
<td>3</td>
</tr>
<tr>
<td>*ELECT 284 Traffic Signal Controllers &amp; Digital Sys</td>
<td>3</td>
</tr>
<tr>
<td>ELECT 435B Electrical Motor Control (B)</td>
<td>2</td>
</tr>
</tbody>
</table>

**CERTIFICATES OF COMPLETION:**

**Network Cabling Specialist Certificate**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISCO 250 Network Cabling Installation</td>
<td>1</td>
</tr>
</tbody>
</table>

**TOTAL UNITS** 1

**Network Installation Certificate**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISCO 250 Network Cabling Installation</td>
<td>1</td>
</tr>
<tr>
<td>CISCO 251 Cisco Networking I, Introduction</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS** 4

**Network Installation and Design Certificate**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISCO 250 Network Cabling Installation</td>
<td>1</td>
</tr>
<tr>
<td>CISCO 251 Cisco Networking I, Introduction</td>
<td>3</td>
</tr>
<tr>
<td>CISCO 252 Cisco Networking II, Routers</td>
<td>3</td>
</tr>
<tr>
<td>CISCO 253 Cisco Networking III, LAN</td>
<td>3</td>
</tr>
<tr>
<td>CISCO 254 Cisco Networking IV, WAN</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS** 13

**Traffic Signal Systems 1 Certificate**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELECT 280 Traffic Signals Systems 1</td>
<td>3</td>
</tr>
<tr>
<td>ELECT 283 Traffic Systems Communications</td>
<td>3</td>
</tr>
<tr>
<td>ELECT 284 Traffic Signal Controllers &amp; Digital Sys</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS** 9

**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.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</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</td>
<td>3</td>
</tr>
<tr>
<td>*ENGR 17L Electrical Engineering Circuits Lab</td>
<td>1</td>
</tr>
<tr>
<td>*ENGR 35 Statics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 50 Intro. to Engineering</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>
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</table>

**Subtotal Units** 33

Select **ONE of the following:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>*CS 11 Computer Programming/C++I</td>
<td>3</td>
</tr>
<tr>
<td>*ENGR 54 Computer Methods /C++</td>
<td>3</td>
</tr>
</tbody>
</table>

**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 & 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>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>*ENGL 1 OR 1H Reading and Composition</td>
<td>3</td>
</tr>
<tr>
<td>*ENGL 2 Introduction to Literature/Composition</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal Units** 6

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):

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>*ENGL 41 American Literature I</td>
<td>3</td>
</tr>
<tr>
<td>*ENGL 42 American Literature II</td>
<td>3</td>
</tr>
<tr>
<td>*ENGL 44 OR 44H Literature of Western World I</td>
<td>3</td>
</tr>
<tr>
<td>*ENGL 45 OR 45H Literature of Western World II</td>
<td>3</td>
</tr>
<tr>
<td>*ENGL 46 OR 46H Survey of British Literature I</td>
<td>3</td>
</tr>
<tr>
<td>*ENGL 47 OR 47H Survey of British Literature II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Subtotal Units** 9

Select **SIX (6) units from any of the following courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>*ENGL 3 OR 3H Argumentative and Critical Writing</td>
<td>4</td>
</tr>
<tr>
<td>*ENGL 18 Detective and Crime Fiction</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 24 College Grammar</td>
<td>3</td>
</tr>
<tr>
<td>*ENGL 30 Horror and Terror Fiction</td>
<td>3</td>
</tr>
<tr>
<td>*ENGL 32 Masterpieces of Asian Literature</td>
<td>3</td>
</tr>
<tr>
<td>*ENGL 33 Mythology</td>
<td>3</td>
</tr>
<tr>
<td>*ENGL 35 Interpreting the Short Story</td>
<td>3</td>
</tr>
</tbody>
</table>

Consult guides available in Counseling Centers for specific general education and required grades.
For the Career Certificate or Associate Degree, complete any 18 units from the list below:

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDECE 47</td>
<td>Human Development</td>
<td>3</td>
</tr>
<tr>
<td>FACS 50</td>
<td>Consumer Awareness</td>
<td>3</td>
</tr>
<tr>
<td>FACS 64</td>
<td>Life Management</td>
<td>3</td>
</tr>
<tr>
<td>FACS 211A-B</td>
<td>College &amp; Career Opportunities for Women</td>
<td>3</td>
</tr>
<tr>
<td>FD 9</td>
<td>Clothing Selection</td>
<td>3</td>
</tr>
<tr>
<td>FD 10</td>
<td>Textile Fibers &amp; Fabrics</td>
<td>3</td>
</tr>
<tr>
<td>FD 20</td>
<td>Introduction to Fashion Merchandising</td>
<td>3</td>
</tr>
<tr>
<td>F N 20</td>
<td>Nutrition &amp; Life</td>
<td>3</td>
</tr>
<tr>
<td>F N 21</td>
<td>Food Selection &amp; Meal Preparation</td>
<td>4</td>
</tr>
<tr>
<td>F N 252AD</td>
<td>Cake Decorating &amp; Sugar Cookery</td>
<td>1.5</td>
</tr>
<tr>
<td>ID 1</td>
<td>Fundamentals of Interior Design</td>
<td>3</td>
</tr>
<tr>
<td>ID 5</td>
<td>Interior Design Studio</td>
<td>2</td>
</tr>
<tr>
<td>ID 10</td>
<td>Beginning Drafting: Interior Design</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL UNITS** 18

---

**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 18 units from the list below:

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course ID</th>
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<tr>
<td>FACS 64</td>
<td>Life Management</td>
<td>3</td>
</tr>
<tr>
<td>FACS 211A-B</td>
<td>College &amp; Career Opportunities for Women</td>
<td>3</td>
</tr>
<tr>
<td>FD 9</td>
<td>Clothing Selection</td>
<td>3</td>
</tr>
<tr>
<td>FD 10</td>
<td>Textile Fibers &amp; Fabrics</td>
<td>3</td>
</tr>
<tr>
<td>FD 20</td>
<td>Introduction to Fashion Merchandising</td>
<td>3</td>
</tr>
<tr>
<td>F N 20</td>
<td>Nutrition &amp; Life</td>
<td>3</td>
</tr>
<tr>
<td>F N 21</td>
<td>Food Selection &amp; Meal Preparation</td>
<td>4</td>
</tr>
<tr>
<td>F N 252AD</td>
<td>Cake Decorating &amp; Sugar Cookery</td>
<td>1.5</td>
</tr>
<tr>
<td>ID 1</td>
<td>Fundamentals of Interior Design</td>
<td>3</td>
</tr>
<tr>
<td>ID 5</td>
<td>Interior Design Studio</td>
<td>2</td>
</tr>
<tr>
<td>ID 10</td>
<td>Beginning Drafting: Interior Design</td>
<td>2</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 & 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. For more departmental information call (562) 938-4454. 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.

**ENTRY LEVEL CLASSES**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FD 3</td>
<td>Intro to Careers in Design &amp; Merchandising</td>
<td>2</td>
</tr>
<tr>
<td>FD 5</td>
<td>Intro/Manufacturing for Design/Merchan</td>
<td>2</td>
</tr>
<tr>
<td>FD 9</td>
<td>Clothing Selection</td>
<td>3</td>
</tr>
<tr>
<td>FD 36A</td>
<td>Pattern Drafting I: Basic Block</td>
<td>1.5</td>
</tr>
<tr>
<td>FD 36B</td>
<td>Pattern Drafting I: Pattern Manipulation</td>
<td>1.5</td>
</tr>
<tr>
<td>FD 37A</td>
<td>Pattern Draping: Basic Sloper</td>
<td>1.5</td>
</tr>
<tr>
<td>FD 37B</td>
<td>Pattern Draping: Sloper Manipulations</td>
<td>1.5</td>
</tr>
<tr>
<td>FD 200</td>
<td>Fashion Prediction/Promotion: Crit View</td>
<td>1</td>
</tr>
<tr>
<td>FD 214AB</td>
<td>Quick Sketch Croquis Drawing OR</td>
<td>2</td>
</tr>
<tr>
<td>FD 215AB</td>
<td>Fashion Sketching I</td>
<td>2</td>
</tr>
</tbody>
</table>

Select **TWO** of the following courses:

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FD 24AB</td>
<td>Beginning Sewing (One semester)</td>
<td>1.5</td>
</tr>
<tr>
<td>FD 25AB</td>
<td>Intermediate Sewing (One semester)</td>
<td>1.5</td>
</tr>
<tr>
<td>FD 26AB</td>
<td>Advanced Sewing (One semester)</td>
<td>2</td>
</tr>
<tr>
<td>FD 29AB</td>
<td>Tailoring</td>
<td>2</td>
</tr>
</tbody>
</table>

**TOTAL UNITS** 19-20

---

**INTERMEDIATE LEVEL CLASSES**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FD 10</td>
<td>Textile Fibers and Fabrics</td>
<td>3</td>
</tr>
<tr>
<td>FD 27AB</td>
<td>Sewing Production (One semester)</td>
<td>1.5</td>
</tr>
<tr>
<td>FD 32</td>
<td>History of Fashion</td>
<td>3</td>
</tr>
<tr>
<td>FD 38A</td>
<td>Fashion Design I</td>
<td>3</td>
</tr>
<tr>
<td>FD 38B</td>
<td>Fashion Design II</td>
<td>3</td>
</tr>
<tr>
<td>FD 41AD</td>
<td>Fashion Show Production (One semester)</td>
<td>2.5</td>
</tr>
<tr>
<td>FD 245AD</td>
<td>Computer Applications in Fashion</td>
<td>1</td>
</tr>
<tr>
<td>FD 244AD</td>
<td>Computer Patternmaking (2 semesters)</td>
<td>1:1</td>
</tr>
</tbody>
</table>

Select **ONE** of the following courses:

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FD 20</td>
<td>Intro to Fashion Merchandising</td>
<td>3</td>
</tr>
<tr>
<td>IBUS 1</td>
<td>Intro to International Business</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS** 22
ADVANCED LEVEL CLASSES

FD 38C Fashion Design III 3
FD 38D Fashion Design IV 3
FD 39A Pattern Grading 1
FD 40 Advanced & Production Pattern Drafting 1
FD216AB Fash Sketch Board/Portfolio Presentation 2

Select Four (4) units from this section:
*FD 70AD Work Experience Issues (One Semester) 1
*FD 72AD OR FD 73AD Work Experience 2-3
FACS 364 Life Management 1
Subtotal Units 14
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 Const0.5
FD 234AB Specialized Sewing Tech: Winter Sports 0.5
FD 235AB Specialized Sewing Tech: Quick Sew 0.5
FD 236AB Specialized Sewing Tech: Couture Finish0.5
FD 258AD Swimwear 1
IBUS 20 Export-Import Business Practices 3
MKTG 40 Salesmanship 3
MKTG 80 Small Business Entrepreneurship 3
TART 43AD Costume Crafts 2

CERTIFICATE OF COMPLETION:
Fashion Design Update Certificate

REQUIRED COURSES
*FD 70AD Work Experience Issues 1
*FD71AD, 72AD, 73AD Work Experience–FD 1-3
Select any 12 units from the courses listed below:
*FD 38C Fashion Design III 3
*FD 38D Fashion Design IV 3
FD 41AD Fashion Show Production 2.5
FD 200 Fashion Prediction/Promotion: Crit View 1
FD 214AB Quick Sketch Croquis Drawing 2
FD 216AB Fash Sketch Board/Portfolio Presentation 2
FD 245AD Computer Applications in Fashion 1
FD 244AD Computer Patternmaking 1
TOTAL UNITS 14-16
*FD 70AD must be taken concurrently with FD 71AD, 72AD or 73AD.

ENTRY LEVEL CLASSES

REQUIRED COURSES
FD 3 Intro to Careers in Design/Merchandising 2
FD 5 Intro/Manufacturing for Design/merchant 2
FD 9 Clothing Selection 3
FD 36A Pattern Drafting I: Basic Block 1.5
†FD 36B Pattern Drafting II: Pattern Manipulation 1.5
FD 37A Pattern Draping I: Basic Sloper 1.5
†FD 37B Pattern Draping II: Sloper Manipulations 1.5
FD 200 Fashion Prediction/Promotion: Crit View 1
†FD 214AB Quick Sketch Croquis Drawing 2:2
†FD 245AD Computer Applications in Fashion 1 1:1

Select TWO of the following courses:
FD 24AB Beginning Sewing (One semester) 1.5
FD 25AB Intermediate Sewing (One semester) 1.5
†FD 26AB Advanced Sewing (One semester) 2
FD 27AB Production Sewing (One semester) 2
Subtotal Units 23-24

INTERMEDIATE LEVEL CLASSES

FD 10 Textile Fibers and Fabrics 3
†FD 38A Fashion Design I 3
FD 244AD Computer Patternmaking 1
Subtotal Units 7

ADVANCED LEVEL CLASSES

REQUIRED COURSES
†FD 38B Fashion Design II 3
†FD 38C Fashion Design III 3
Select Four (4) units from this section:
*FD 70AD Work Experience Issues (One Semester) 1
*FD 72AD OR FD 73AD Work Experience 2-3
FD 216AB Fash Sketch Board/Portfolio Presentation 2
FACS 364 Life Management 1
Subtotal Units 10
TOTAL UNITS 40-41

RECOMMENDED but not required courses:
ART 1 OR 2 Art & Civilization 3
ART 15AD Beginning Drawing 3
ART 31 Fundamentals of Art: Composition and Color 3
FD 20 Intro to Fashion Merchandising 3
FD 211AB Textile Design: Beading 1
FD 213AB Textile Design: Hand Painting 1
FD 233AB Specialized Sewing Tech: Lingerie Const0.5
FD 234AB Specialized Sewing Tech: Winter Sports 0.5
FD 235AB Specialized Sewing Tech: Quick Sew 0.5
FD 236AB Specialized Sewing Tech: Couture Finish0.5
FD 258AD Swimwear 1

Consult guides available in Counseling Centers for specific general education and required grades.
FASHION DESIGN
PATTERNMAKER
Career Certificate
Students prepare for entry-level jobs in fashion design, production & 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. For more departmental information call (562) 938-4192 or 938-4454.

ENTRY LEVEL CLASSES
REQUIRED COURSES UNITS
FD 3 Intro to Careers in Design/Merchandising 2
FD 5 Intro/Manufacturing for Design/Merchan 2
FD 36A Pattern Drafting I: Basic Block 1.5
FD 36B Pattern Drafting II: Pattern Manipulation 1.5
FD 214AB Quick Sketch Croquis Drawing 2
Select ONE of the following courses:
FD 24AB Beginning Sewing (One semester) 1.5
FD 25AB Intermediate Sewing (One semester) 1.5
FD 26AB Advanced Sewing (One semester) 2
Subtotal Units 10.5-11

INTERMEDIATE LEVEL CLASSES
FD 10 Textile Fibers and Fabrics 3
FD 37A Pattern Draping I: Basic Sloper 1.5
FD 37B Pattern Draping II: Sloper Manipulations 1.5
FD 27AB Production Sewing (one semester) 2
•FD 245AD Computer Applications in Fashion 1
FD 244AD Computer Patternmaking(Two Semesters)1:1
Subtotal Units 11

ADVANCED LEVEL CLASSES
FD 39A Pattern Grading 1
†FD 40AD Advanced & Production Pattern Drafting 1
†•FD 70AD Work Experience Issues (One semester) 1
†•FD 73AD Work Experience (One semester) 3
Subtotal Units 6
TOTAL UNITS 27.5–28

RECOMMENDED but not required courses: UNITS
ART 1 OR 2 Art & Civilization 3
ART 15AD Beginning Drawing 3
FD 10 Textile Fibers and Fabrics 3
FD 20 Intro to Fashion Merchandising 3
FD 211AB Textile Design: Beading 1
FD 213AB Textile Design: Hand Painting 1
FD 233AB Specialized Sewing Tech: Lingerie Const0.5
FD 234AB Specialized Sewing Tech: Winter Sports 0.5
FD 235AB Specialized Sewing Tech: Quick Sew 0.5
FD 236AB Specialized Sewing Tech: Couture Finish0.5
•FD 245AD Computer Applications in Fashion 1
FD 244AD Computer Patternmaking 1

TOTAL UNITS 22-23.5

FASHION DESIGN SAMPLEMAKER
Career Certificate
Students prepare for entry-level jobs in fashion design, production & 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. For more departmental information call (562) 938-4192 or 938-4454.

ENTRY LEVEL CLASSES
REQUIRED COURSES UNITS
COMIS 1 Computer Information Competency 1
OR
CPAS 1 Using the MAC as a Tool for Learning 1
FD 3 Intro to Careers in Design/Merchandising 2
FD 5 Intro/Manufacturing for Design/Merchan 2
Select TWO of the following courses:
FD 24AB Beginning Sewing (One semester) 1.5
FD 25AB Intermediate Sewing (One semester) 1.5
FD 26AB Advanced Sewing (One semester) 2
Subtotal Units 8-8.5

INTERMEDIATE LEVEL CLASSES
FD 27AB Production Sewing (two semesters) 2:2
FD 36A Pattern Drafting I: Basic Block 1.5
†FD 36B Pattern Drafting II: Pattern Manipulation 1.5
†•FD 70AD Work Experience Issues (One Semester) 1
†•FD 72AD OR 73AD Work Experience 2-3
Select FOUR (4) units from this section:
FD 29AB Tailoring 2
FD 233AB Specialized Sewing Tech: Lingerie Const0.5
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

RECOMMENDED but not required courses: UNITS
ART 1 OR 2 Art & Civilization 3
ART 15AD Beginning Drawing 3
FD 10 Textile Fibers and Fabrics 3
FD 20 Intro to Fashion Merchandising 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 Finish0.5
•FD 245AD Computer Applications in Fashion 1
FD 244AD Computer Patternmaking 1

FASHION MERCHANDISING
Associate in Arts/Career Certificate
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 prepare students for career advancement once a certificate has been earned. Field of concentration selection will also facilitate transfer in a related major. For more departmental information call (562) 938-4336 or 938-4454.

The Associate Degree requires only 19 units from the following courses identified with a “•”.
The Career Certificate requires 41.5 – 44.5 units as specified below.
ENTRY LEVEL CLASSES

REQUIRED COURSES

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACS 64 OR 364 Life Management</td>
<td>1-3</td>
</tr>
<tr>
<td>□ FD 3 Intro to Careers in Design/Merchandising</td>
<td>2</td>
</tr>
<tr>
<td>□ FD 5 Intro/Manufacturing for Design/Merchan</td>
<td>2</td>
</tr>
<tr>
<td>□ FD 9 Clothing Selection</td>
<td>3</td>
</tr>
<tr>
<td>□ FD 20 Intro to Fashion Merchandising</td>
<td>3</td>
</tr>
<tr>
<td>FD 200 Fashion Prediction/Promotion: Crit View</td>
<td>1</td>
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</table>

Subtotal Units: 12-14

INTERMEDIATE LEVEL CLASSES

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>□ FD 10 Textiles Fibers &amp; Fabrics</td>
<td>3</td>
</tr>
<tr>
<td>□ FD 22A Merchandising for a Profit I</td>
<td>1.5</td>
</tr>
<tr>
<td>□ FD 22B Merchandising for a Profit II</td>
<td>1.5</td>
</tr>
<tr>
<td>FD 32 History of Fashion</td>
<td>3</td>
</tr>
<tr>
<td>FD 41AD Fashion Show Production</td>
<td>2.5</td>
</tr>
<tr>
<td>▪ FD 245AD Computer Applications in Fashion</td>
<td>1</td>
</tr>
<tr>
<td>MKTG 40 Salesmanship</td>
<td>3</td>
</tr>
</tbody>
</table>

Select ONE of the following:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FD 214AB Quick Sketch Croquis Drawing</td>
<td>2</td>
</tr>
<tr>
<td>FD 215AB Fashion Sketching I</td>
<td>2</td>
</tr>
</tbody>
</table>

Subtotal Units: 17.5

ADVANCED LEVEL CLASSES

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ FD 23 Fashion/Merchandise Buying</td>
<td>3</td>
</tr>
<tr>
<td>▪ FD 70AD Work Experience Issues</td>
<td>1</td>
</tr>
<tr>
<td>▪ FD 72AD OR 73AD Work Experience</td>
<td>2-3</td>
</tr>
<tr>
<td>MKTG 41 Advertising</td>
<td>3</td>
</tr>
</tbody>
</table>

Select ONE of the following:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBUS 1 Introduction to International Business</td>
<td>3</td>
</tr>
<tr>
<td>IBUS 20 Export-Import Business Practices</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 42 Retailing Principles &amp; Practices</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal Units: 12-13

TOTAL UNITS: 41.5 - 44.5

RECOMMENDED but not required courses:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ FD 24AB Beginning Sewing</td>
<td>1.5</td>
</tr>
<tr>
<td>FD 244AD Computer Patternmaking</td>
<td>1</td>
</tr>
<tr>
<td>FACS 50 Consumer Awareness</td>
<td>3</td>
</tr>
<tr>
<td>IBUS 52 International Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>

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.

FILM 1 Introduction to Film | 3 |
FILM 10AD Explorations in Film (1st & 2nd semester) | 3 |
FILM 11AD Film Art and Artists (3rd & 4th semester) | 3 |
♦FILM 20AB Fundamentals of Film Production | 3 |
FILM 60AD Special Projects in Film | 1 |
♦TART 1 Acting I - Introduction to Acting OR | 3 |
TART 32AD Stage and Screen Writing | 3 |

Select ONE of the following:

♦FILM 21AB Intermediate Film Production | 3:3 |

TOTAL UNITS: 19

FIRE SCIENCE

Associate in Science/Career Certificate

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.

CORE

REQUIRED COURSES

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE 1 Fire Protection Organization</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 2 Fire Prevention Technology</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 3 Fire Protection Equipment &amp; Systems</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 4 Building Construction for Fire Prevention</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 5 Fire Behavior &amp; Combustion</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal Units: 15

Select NINE (9) units from the following courses:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE 6A,B Fire Command 1A -1B</td>
<td>2:2</td>
</tr>
<tr>
<td>FIRE 7A,B, C Fire Prevention Officer 1A-1B-1C</td>
<td>2:2:2</td>
</tr>
<tr>
<td>FIRE 10A,B Fire Instructor 1A -1B</td>
<td>2:2</td>
</tr>
<tr>
<td>FIRE 16A,B Fire Investigator 1A -1B</td>
<td>2:2</td>
</tr>
<tr>
<td>FIRE 26A Fire Command 2A</td>
<td>2</td>
</tr>
<tr>
<td>FIRE 26B Fire Command 2B</td>
<td>2</td>
</tr>
<tr>
<td>FIRE 26C Fire Command 2C</td>
<td>2</td>
</tr>
<tr>
<td>FIRE 40 Fire Management 1</td>
<td>2</td>
</tr>
<tr>
<td>FIRE 42A Fire Management 2A</td>
<td>2</td>
</tr>
<tr>
<td>FIRE 42B Fire Management 2B</td>
<td>2</td>
</tr>
<tr>
<td>FIRE 42E Fire Management 2E</td>
<td>2</td>
</tr>
<tr>
<td>FIRE 53 Fire Hydraulics</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 54 Hazardous Materials 1</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 58 Intro to Fire Company Administration</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 60 Fire Investigation 1</td>
<td>3</td>
</tr>
</tbody>
</table>

Consult guides available in Counseling Centers for specific general education and required grades.
FIRE 61 Rescue Practices 3
FIRE 62 Fire Apparatus & Equipment 3
FIRE 64 Hazardous Materials 2 3
FIRE 65 Fundamental of Fire Safety 3
FIRE 66 Intro to Related Codes & Ordinances 3
FIRE 242C Fire Management 2C 2
FIRE 250 Basic Fire Service Training 9
FIRE 271AD OR 272AD OR 273AD Work Experience-Fire Science 2 OR 3 OR 4
FIRE 400 Special Topics in Fire Science 1
EMT 251 & 251L Emergency Medical Tech. 4.5
Subtotal Units 9
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 OR 3
MTKG 40 Salesmanship 3
Select FIVE (5) additional units from the following courses:
ART 31 Fundamentals of Art/Composition & Color OR 3
ID 30 Applied Color and Theory and Design 4
*ID 70AD Work Experience Issues 1
*ID 71AD, 72AD or 73AD Vocational Work Experience (One semester) 1, 2 or 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
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 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, maitre d’, menu makers, guest services, purchasing, sales and marketing, stewards, human resources, table servers, and wine stewards. With additional courses students can prepare for a Bachelor’s Degree in this field, see counseling staff for admission requirements at a university. 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.

FOOD & BEVERAGE MANAGEMENT OPTION
REQUIRED COURSES UNITS
CULAR 20 Food Service Sanitation in Management 3
THRFB 17 Intro to Food and Beverage Operations 3
THRFB 18 Intro to Culinary Preparation 3
THRFB 19 Food/Beverage Purchasing/Plan/Control 3
THRFB 27 Bar and Beverage Management 3
THR 24 Hospitality Accounting 3
THR 26 Hospitality Law 3
THR 30 Hospitality Sales & Marketing 3
THR 39 Hospitality Industry Computer Systems 3
F_N 250 Nutrition for Culinary Arts 2
Complete a minimum of FOUR (4) units from the following:
†THR 271AD Work Experience 2
†THR 272AD Work Experience 3
†THR 273AD Work Experience 4
TOTAL UNITS 36

RECOMMENDED but not required:
THRFB 32 Introduction to Catering Management 3

CATERING MANAGEMENT OPTION
Complete the Food and Beverage Option (above 36 units) and the following course:
THRFB 32 Introduction to Catering Management 3
TOTAL UNITS 39

RECOMMENDED but not required courses for both options:
• CBIS 6A Intro to IT Concepts & Applications 4
THR 28 Convention Management & Meeting Plan 3
THR 29 Facilities Management 3
THR 33 Housekeeping and Security Management 3
MGMT 80 Small Business Entrepreneurship 3
SP 10 Elements of Public Speaking 3
SP 25 Elements of Intercultural Communications 3
THRT 210 Intro to Travel Industry 3

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 Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 32</td>
<td>Masterpieces/Asian Literature (In Engl)</td>
<td>3</td>
</tr>
<tr>
<td>IBUS 1</td>
<td>Introduction to International Business</td>
<td>3</td>
</tr>
<tr>
<td>IBUS 52</td>
<td>International Marketing</td>
<td>3</td>
</tr>
<tr>
<td>THRH 16</td>
<td>Introduction to Hotel Management</td>
<td>3</td>
</tr>
<tr>
<td>THRT 210</td>
<td>Introduction to Travel &amp; Tourism</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal Units 29

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.

SPANISH AMERICAN CULTURE

Select 20 units from Spanish courses listed below:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRSTU11A-B</td>
<td>Language &amp; Cultures of West Europe</td>
<td>3</td>
</tr>
<tr>
<td>HIST 8A-B</td>
<td>History of the Americas</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal Units 6

TOTAL UNITS 29

In addition, students must pass a competency examination in 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 advanced level according to the guidelines established by the American Council of Teachers of Foreign Languages.

EUROPEAN AREA CULTURE

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 Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRSTU11A-B</td>
<td>Language &amp; Cultures of West Europe</td>
<td>3</td>
</tr>
<tr>
<td>HIST 8A-B</td>
<td>History of the Americas</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal Units 6

TOTAL UNITS 29

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 advanced level according to the guidelines established by the American Council of Teachers of Foreign Languages.

PACIFIC RIM CULTURE

Select 10 units in one language from Japanese or Chinese courses listed below:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBUS 1</td>
<td>Introduction to International Business</td>
<td>3</td>
</tr>
<tr>
<td>IBUS 52</td>
<td>International Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal Units 10

Select SIX (6) units from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBUS 1</td>
<td>Introduction to International Business</td>
<td>3</td>
</tr>
<tr>
<td>IBUS 52</td>
<td>International Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal Units 6

Select THREE (3) units from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 32</td>
<td>Masterpieces/Asian Literature (In Engl)</td>
<td>3</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT 11A-D Plant Identification</td>
<td>3:3:3:3</td>
</tr>
<tr>
<td>‡HORT 15A OR 15B Basic Horticulture</td>
<td>2</td>
</tr>
<tr>
<td><strong>Subtotal Units</strong></td>
<td><strong>14</strong></td>
</tr>
<tr>
<td>Select SIX (6) units from the following courses:</td>
<td></td>
</tr>
<tr>
<td>† HORT 271AD Work Experience – Horticulture</td>
<td>2</td>
</tr>
<tr>
<td>† HORT 272AD Work Experience - Horticulture*</td>
<td>3</td>
</tr>
<tr>
<td>† HORT 273AD Work Experience - Horticulture</td>
<td>4</td>
</tr>
<tr>
<td><strong>Subtotal Units</strong></td>
<td><strong>6</strong></td>
</tr>
<tr>
<td>Select TWENTY (20) units from the following courses:</td>
<td></td>
</tr>
<tr>
<td>BIO 5 Plant Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 18 Edible, Poisonous &amp; Useful Plants</td>
<td>2</td>
</tr>
<tr>
<td>COMIS 1A Using the IBM Microcomputer</td>
<td>1</td>
</tr>
<tr>
<td>HORT 10A-B Greenhouse Operation/Mgmt</td>
<td>4</td>
</tr>
<tr>
<td>‡HORT 15A OR 15B Basic Horticulture*</td>
<td>2</td>
</tr>
<tr>
<td>HORT 21 Principles of Landscape Design</td>
<td>3</td>
</tr>
<tr>
<td>HORT 26A-B Plant Propagation</td>
<td>3</td>
</tr>
<tr>
<td>HORT 28A-B Horticulture Equipment Operation</td>
<td>3</td>
</tr>
<tr>
<td>HORT 30 Integrated Pest Management</td>
<td>3</td>
</tr>
<tr>
<td>HORT 202AB Principles of Pruning</td>
<td>4</td>
</tr>
<tr>
<td>HORT 223AD Landscape Construction</td>
<td>4</td>
</tr>
<tr>
<td>HORT 227 Interior Plant Design/Installation</td>
<td>2</td>
</tr>
<tr>
<td>ID 286A-B Introduction to Floral Design</td>
<td>2</td>
</tr>
<tr>
<td>MGMT 80 Small Business Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 1A Elementary Spanish</td>
<td>3</td>
</tr>
<tr>
<td><strong>Subtotal Units</strong></td>
<td><strong>20</strong></td>
</tr>
<tr>
<td><strong>TOTAL UNITS</strong></td>
<td><strong>40</strong></td>
</tr>
</tbody>
</table>

**HOTEL MANAGEMENT**

**Associate in Arts/Career Certificate**

Students learn entry and mid-level skills in the day-to-day management of all types of hotels, convention centers, cruise lines, theme parks, and resorts. Students enhance their skills in hotel management, in areas such as controller, housekeeping, auditor, banquet sales, bell hops, concierge, sales and marketing, purchasing, conference sales, front office, guest services, mail and telephone, PBX, reservations, human resources, and operations. With additional courses students can prepare for a Bachelor’s Degree in this field, see counseling staff for admission requirements at a university. This certificate will prepare students for an entry-level position in a wide range of hospitality career opportunities. For information regarding restaurant/catering programs please refer to separate Food and Beverage Management curriculum guide. For departmental information call (562) 938-4325 or 938-4328.

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>THRH 16 Intro to Hospitality Management</td>
<td>3</td>
</tr>
<tr>
<td>THRFB 18 Intro to Culinary Preparation</td>
<td>3</td>
</tr>
<tr>
<td>THRFB 19 Food/Beverage Purchasing/Plan/Control</td>
<td>3</td>
</tr>
<tr>
<td>THRH 22 Front Office Operations</td>
<td>3</td>
</tr>
<tr>
<td>THRH 24 Hospitality Accounting</td>
<td>3</td>
</tr>
<tr>
<td>THRH 25 Hospitality Law</td>
<td>3</td>
</tr>
<tr>
<td>THRH 26 Hospitality Supervision</td>
<td>3</td>
</tr>
<tr>
<td>THRH28 Convention Management &amp; Meeting Plan</td>
<td>3</td>
</tr>
<tr>
<td>THRH 30 Hospitality Sales &amp; Marketing</td>
<td>3</td>
</tr>
<tr>
<td>THRH 33 Housekeeping &amp; Security Management</td>
<td>3</td>
</tr>
<tr>
<td>THRH 39 Hospitality Industry Computer Systems</td>
<td>3</td>
</tr>
<tr>
<td><strong>Subtotal Units</strong></td>
<td><strong>33</strong></td>
</tr>
<tr>
<td>Complete a minimum of FOUR (4) units from the following:</td>
<td></td>
</tr>
<tr>
<td>†THRH 271AD Work Experience</td>
<td>2</td>
</tr>
<tr>
<td>†THRH 272AD Work Experience</td>
<td>3</td>
</tr>
<tr>
<td>†THRH 273AD Work Experience</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL UNITS</strong></td>
<td><strong>37</strong></td>
</tr>
</tbody>
</table>

**RECOMMENDED but not required courses:**

| THRFB 17 Intro to Food & Beverage Management | 3 |
| †THRFB 27 Bar & Beverage Management | 3 |
| THRFB 32 Intro to Catering Management | 3 |
| THRCA 20 Food Service Sanitation in Management | 3 |
| THRH 29 Facilities Management | 3 |
| THRH 31 Resort Operations | 3 |
| •CBIS 6A Intro to IT Concepts & Applications | 4 |
| MGMT 80 Small Business Entrepreneurship | 3 |
| SP 10 Elements of Public Speaking | 3 |
| SP 25 Elements of Intercultural Communications | 3 |
| THR 210 Intro to the Travel Industry | 3 |

**HUMAN SERVICES**

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

Student 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 career 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) 938-3961.

Complete TEN-FOURTEEN (10-14) units from any of the CORE courses below:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS 1 Intro to Social Work</td>
<td>3</td>
</tr>
<tr>
<td>†HS 71AD Work Experience - Human Services</td>
<td>2</td>
</tr>
<tr>
<td>†HS 72AD Work Experience - Human Services</td>
<td>3</td>
</tr>
<tr>
<td>†HS 73AD Work Experience - Human Services</td>
<td>4</td>
</tr>
<tr>
<td>HS 207 Development of Helping &amp; Listening Skills</td>
<td>3</td>
</tr>
<tr>
<td><strong>Subtotal Units</strong></td>
<td><strong>10-14</strong></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>F_N 20 Nutrition &amp; Life</td>
<td>3</td>
</tr>
<tr>
<td>HS 26 Intro To Gerontology</td>
<td>3</td>
</tr>
<tr>
<td>HS 45 Stress Mgmt for the Helping Professional</td>
<td>3</td>
</tr>
<tr>
<td>HS 228 Elderly Care Issues</td>
<td>3</td>
</tr>
<tr>
<td>HS 253 Activity/Recreation Leadership Training</td>
<td>3</td>
</tr>
<tr>
<td><strong>Subtotal Units</strong></td>
<td><strong>10-14</strong></td>
</tr>
</tbody>
</table>

### CRIMINAL JUSTICE GROUP

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJUS 14 Juvenile Law and Procedures</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 20 Intro To Corrections</td>
<td>3</td>
</tr>
<tr>
<td>HS 7 Introduction to Victimology</td>
<td>3</td>
</tr>
<tr>
<td>HS 40A-B Introduction to Addictive Behaviors</td>
<td>3</td>
</tr>
<tr>
<td>HS 41 Introduction to Chemical Dependency</td>
<td>3</td>
</tr>
<tr>
<td>HS 43 Case Management: Treatment &amp; Aftercare</td>
<td>3</td>
</tr>
<tr>
<td>HS 46 Physiology and Pharmacology of Drugs</td>
<td>3</td>
</tr>
<tr>
<td>SOCIIO 11 Race and Ethnic Relations in the U.S.</td>
<td>3</td>
</tr>
<tr>
<td>SOCIIO 12 OR ADJUS 12 Crime &amp; Delinquency</td>
<td>3</td>
</tr>
<tr>
<td><strong>Subtotal Units</strong></td>
<td><strong>10-14</strong></td>
</tr>
</tbody>
</table>

### GENERAL HUMAN SERVICES GROUP

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1A MACRO Economics Analysis</td>
<td>3</td>
</tr>
<tr>
<td>HS 15 Social Welfare: People with Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>HS 40A-B Intro To Addictive Behaviors</td>
<td>3</td>
</tr>
<tr>
<td>HS 43 Case Management: Treatment and Aftercare</td>
<td>3</td>
</tr>
<tr>
<td>HS 45 Stress Management for the Helping Professional</td>
<td>3</td>
</tr>
<tr>
<td>HS 47 Process &amp; Individual Techniques</td>
<td>3</td>
</tr>
<tr>
<td>†HS 48 Group and Family Process</td>
<td>3</td>
</tr>
<tr>
<td>HS 50 Law and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>†HS 251 HIV: Cultural Competence in Treatment</td>
<td>4</td>
</tr>
<tr>
<td>†HS 252 Dual Diagnosis: Assessment &amp; Treatment</td>
<td>3</td>
</tr>
<tr>
<td>PUBAD 1 Intro To Public Administration</td>
<td>3</td>
</tr>
<tr>
<td>SOCIIO 2 Modern Social Problems</td>
<td>3</td>
</tr>
<tr>
<td>SP 20 Elements of Communication</td>
<td>3</td>
</tr>
<tr>
<td><strong>Subtotal Units</strong></td>
<td><strong>10-14</strong></td>
</tr>
</tbody>
</table>

### FAMILY SERVICES GROUP

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJUS 253 Understanding Domestic Violence</td>
<td>3</td>
</tr>
<tr>
<td>CDECE 47 Human Development</td>
<td>3</td>
</tr>
<tr>
<td>FACS 50 Consumer Awareness</td>
<td>3</td>
</tr>
<tr>
<td>FACS 64 Life Management</td>
<td>3</td>
</tr>
<tr>
<td>HS 15 Social Welfare: People with Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>HS 40A-B Intro To Addictive Behaviors</td>
<td>3</td>
</tr>
<tr>
<td>HS 47 Process &amp; Individual Techniques</td>
<td>3</td>
</tr>
<tr>
<td>†HS 48 Group and Family Process</td>
<td>3</td>
</tr>
<tr>
<td>SOCIIO 11 Race and Ethnic Relations in the U.S.</td>
<td>3</td>
</tr>
<tr>
<td>SOCIIO 40 Marriage &amp; the Family</td>
<td>3</td>
</tr>
<tr>
<td><strong>Subtotal Units</strong></td>
<td><strong>10-14</strong></td>
</tr>
</tbody>
</table>

### ALCOHOL AND DRUG STUDIES

#### 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</td>
<td>3</td>
</tr>
<tr>
<td>HS 47 Process &amp; Individual Techniques</td>
<td>3</td>
</tr>
<tr>
<td>†HS 48 Group &amp; family Process</td>
<td>3</td>
</tr>
<tr>
<td><strong>Subtotal Units</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

Complete SIX (6) units from any of the following courses to bring the total to 18 units:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS 43 Case Management: Treatment &amp; Aftercare</td>
<td>3</td>
</tr>
<tr>
<td>HS 45 Stress Management for the Helping Professional</td>
<td>3</td>
</tr>
<tr>
<td>HS 50 Law and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>†HS 251 HIV &amp; Cultural Competency in Treatment</td>
<td>3</td>
</tr>
<tr>
<td>†HS 252 Dual Diagnosis: Assessment &amp; Treatment</td>
<td>3</td>
</tr>
<tr>
<td><strong>Subtotal Units</strong></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>

### HUMAN SERVICES:

#### ALCOHOL AND DRUG STUDIES

**Associate in Arts/Career Certificate**

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 serving alcohol and drug clients. This career certificate will prepare students for an entry-level position in the alcohol/drug treatment field. This certificate fulfills the California Association of Alcohol & Drug Studies (CAADE) academic and work experience requirements. Additional work experience plus passing their test will lead students to becoming Certified Addiction Treatment Specialists (CATS). This Associate Degree will prepare students for an entry-level position in the human services/alcohol and drug treatment field and for career advancement for those already employed in these occupations. For more departmental information call (562) 938-3961.

#### CERTIFICATE OF COMPLETION:

**Activity/Recreation Leadership Training Certificate**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS 253 Activity/Recreation Leadership Training</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL UNITS</strong></td>
<td><strong>3</strong></td>
</tr>
</tbody>
</table>

**Chemical Dependency Certificate**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS 41 Introduction to Chemical Dependency</td>
<td>3</td>
</tr>
<tr>
<td>HS 43 Case Management</td>
<td>3</td>
</tr>
<tr>
<td>HS 46 Physiology &amp; Pharmacology of Drugs</td>
<td>3</td>
</tr>
<tr>
<td>†HS 48 Group &amp; Family Process</td>
<td>3</td>
</tr>
<tr>
<td>HS 50 Law &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL UNITS</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

Consult guides available in Counseling Centers for specific general education and required grades.
CAREER CERTIFICATE 
(fulfills CAADE/CAADAC Requirements)
Complete SIX (6) units from any of the following courses:

- ANTHR 2 Cultural Anthropology 3
- HS 1 Introduction to Social Work 3
- PSYCH 1 Introduction to Psychology 3
- CDECE 47 Human Development 3
- SOCIOL 1 Introduction to Sociology 3
- PSYCH 14 Abnormal Psychology 3

Subtotal Units 6

Complete the following courses listed below:
- HS 43 Case Management: Treatment & Aftercare 3
- HS 46 Physiology & Pharmacology of Drugs 3
- HS 47 Process & Individual Techniques 3
- †HS 48 Group and Family Process 3
- HS 252 Dual Diagnosis: Assessment & Treatment 3

Subtotal Units 15

Complete SIX (6) units from any of the following courses:
- HS 41 Introduction to Chemical Dependency 3
- HS 50 Law & Ethics 3
- HS 45 Stress Management for the Helping Professional 3
- †HS 251 HIV & Cultural Competency in Treatment 3

Subtotal Units 6

Complete SIX (6) units from any of the following courses:
- HS 71AD Work Experience – Human Services 2
- HS 72AD Work Experience – Human Services 3
- HS 73AD Work Experience – Human Services 4

Subtotal Units 6

TOTAL UNITS 34

INTERIOR DESIGN
Associate in Arts/Career Certificate

Students prepare for employment in Interior Design in the areas of drafting and computer aided design. For more departmental information call (562) 938-4180.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID 1 Fundamentals of Interior Design</td>
<td>3</td>
</tr>
<tr>
<td>ID 5 Interior Design Studio 1</td>
<td>2</td>
</tr>
<tr>
<td>ID 10 Beginning Drafting</td>
<td>3</td>
</tr>
<tr>
<td>ID 20 Interior Design Careers</td>
<td>2</td>
</tr>
<tr>
<td>ID 70 Space Planning</td>
<td>3</td>
</tr>
<tr>
<td>ID 210 Fundamentals of Lighting</td>
<td>3</td>
</tr>
<tr>
<td>†ID 215 Interior Design Studio I</td>
<td>2</td>
</tr>
<tr>
<td>ARCHT 360M1 Basic AutoCAD for Architecture</td>
<td>1.5</td>
</tr>
<tr>
<td>ARCHT 360M2 Architectural Design – AutoCAD</td>
<td>1.5</td>
</tr>
<tr>
<td>†DRAFT 204 3D Visualization/Animation</td>
<td>4</td>
</tr>
</tbody>
</table>

TOTAL UNITS 25

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 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 relation offices. For more departmental information call (562) 938-4282.

DEGREE PROGRAM
NEWSPAPER/MAGAZINE EMPHASIS

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOURN 10 Intro to Mass Communication</td>
<td>3</td>
</tr>
<tr>
<td>†JOURN 2 Beginning Newswriting &amp; Reporting</td>
<td>3</td>
</tr>
<tr>
<td>JOURN 25 Free Lance/Feature Writing</td>
<td>3</td>
</tr>
<tr>
<td>JOURN 35AD Photojournalism (1st semester)</td>
<td>3</td>
</tr>
</tbody>
</table>
LEGAL SECRETARY

Associate in Arts/Career or Completion Certificate

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

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• CAOTC 31A Microsoft Windows Operating System</td>
<td>1</td>
</tr>
<tr>
<td>• CAOTC 45 Internet for Office and Personal Use</td>
<td>2</td>
</tr>
<tr>
<td>• CAOTC 265 Computer Transcription</td>
<td>2</td>
</tr>
<tr>
<td>CAOTO 214A, B Filing, Levels 1, 2</td>
<td>1:1</td>
</tr>
<tr>
<td>CAOTO 216 Proofreading Skills</td>
<td>1</td>
</tr>
<tr>
<td>CAOTO 223 Legal Procedures - Litigation</td>
<td>3</td>
</tr>
<tr>
<td>CAOTO 224 Legal Procedures</td>
<td>3</td>
</tr>
<tr>
<td>CAOTO 260 Business Telephone Procedures</td>
<td>1</td>
</tr>
<tr>
<td>CAOTO 261 Business English</td>
<td>3</td>
</tr>
<tr>
<td>CAOTT 201 Intermediate Typing/Keyboarding</td>
<td>2</td>
</tr>
</tbody>
</table>

Subtotal Units: 20

Select FOUR (4) units from one of the following groups:

• CAOTC 39A, B, C, D Microsoft Word for Office1:1:1:1
• CAOTC 236A, B, C, D Word Processing-WordPerfect 1:1:1:1

Subtotal Units: 4

Select ONE (1) unit from the following:

• CAOTC 34 Introduction to Computers & Applications
• CAOTC 35 Microsoft Office

Subtotal Units: 3

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 (ELECTIVE):

• CAOTC 31B MS Windows Operating System, Adv
• #CAOTC 39A, B, C, D Microsoft Word for Office
• CAOTC 41E, F, J Excel for Windows, Levels 1, 2, 3
• CAOTC 42A, B Desktop Publishing - Small Business
• CAOTC 44A, B Access for Office Applications
• CAOTC 215A Microsoft Outlook
• #CAOTC 236A, B, C, D Word Processing-WordPerfect
• CAOTO 15 Business Communications
• CAOTO 222 Job Search Skills
• CAOTO 262 Professional Development
• CAOTO 272AD Work Experience - CAOT
• CAOTT 209AB Speed/Accuracy Bldg for Typists

Subtotal Units: 1-3

TOTAL UNITS: 28-30

CERTIFICATES OF COMPLETION:

Basic Legal Office Procedures Certificate

REQUIRED COURSES

<table>
<thead>
<tr>
<th>COURSE</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
• CAOTC 236A Word Processing-WordPerfect, Beg 1
• CAOTC 236B Word Processing-WordPerfect, Inter. 1
• CAOTC 265 Computer Transcription 2
• CAOTO 223 Legal Procedures-Litigation 3
• CAOTO 224 Legal Procedures 3
TOTAL UNITS 10

REQUIRED COMPETENCY: Typing certificate of at least 50 words per minute for 5 minutes with 5 or fewer errors completed within the previous 12 months.

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 OR 1
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 UNITS
• CAOTC 236A Word Processing-WordPerfect, Begin 1
• CAOTC 236B Word Processing-WordPerfect, Inter 1
• CAOTO 236C Word Processing-WordPerfect, Adv 1
• CAOTO 236D Word Processing, WordPerfect, 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.

Microsoft Word Certificate
REQUIRED COURSES UNITS
• CAOTC 39A Microsoft Word for the Office, Begin 1
• CAOTC 39B Microsoft Word for the Office, Inter 1
• CAOTO 39C Microsoft Word for the Office, Adv 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.

LIBERAL ARTS
Associate in 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.

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 SCIENCE 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.

LIBRARY TECHNICIAN
Associate in Arts/Career Certificate
This field of concentration is designed to prepare students for an entry-level Library Technician position. This certificate will prepare students for a variety of entry-level in a library setting. This Associate Degree will prepare students for career advancement once a certificate has been earned. For more departmental information call (562) 938-4708.

REQUIRED COURSES UNITS
• LIB 3 Information Competency 3
• LIB 201 Introduction to Cataloging 3
• LIB 202 Introduction to Access Services 3
• LIB 203 Introduction to Acquisitions 3
• LIB 204 Introduction to Reference Services 3
Subtotal Units 15
Select ONE course from the following:
• CAOTC 34 Introduction to Computers & Applications 3
• CAOTC 35 Microsoft Office 3
Subtotal Units 3
TOTAL UNITS 18

RECOMMENDED but not required courses:
• CDECE 34 Children’s Literature 3
• LIB 210 Web Health Resources 1
• LIB 211 Web Business Resources 1
• LIB 212 Web Law Resources 1
• LIB 213 Web Government Resources 1
• SP 20 Elements of Interpersonal Communication 3
• SP 25 Elements of Intercultural Communication 3
Consult guides available in Counseling Centers for specific general education and required grades.
Select TWO of the following:
†BIO 1A Biology for Science Majors 5
†BIO 1B Biology for Science Majors 5
†CHEM 1A General Chemistry 5
†CHEM 1B General Chemistry 5
ECON 1A Macro Economic Analysis 3
ECON 1B Micro Economic Analysis 3
GEOL 2 General Geology, Physical 3
GEOL 3 Historical Geology 3
GEOL 5 Environmental Geology 3
†PHYS 3B Physics for Sci. & Engr. – E & M 4
†PHYS 3C Physics for Sci. & Engr. – Modern Physics 4
Subtotal Units 6-10

Select ONE of the following:
†CS 12 Computer Programming/C++ 3
†ENGR 54 Computer Methods /C++ 3
Subtotal Units 3
TOTAL UNITS 36-40

MECHANICAL MAINTENANCE TECHNOLOGY
Associate in Science/Career Certificate
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 UNITS
DIESL 293AD General Engine 4
DIESL 391A Hydraulics 3
DIESL 492 Air & Hydraulic Brakes 3
ELECT 202 Electrical Mathematics 3
*ELECT 204° Fundamentals of DC Electricity 3
*ELECT 310A° Laboratory Practices (DC) 1
*ELECT 209° Fundamentals of Motors/Generators 3
*ELECT 310B° Laboratory Practices (AC) 1
AC_R 450A Transport Refrigeration 5
†AC_R 450B Advanced Transport Refrigeration 5
FORK 801 Forklift Safety & Operation 1
WELD 400AD General Welding 2
WELD 410AD Welding (Arc) 2
WELD 480AD Welding (Inert Gas - MIG & TIG) 2
Subtotal Units 38

Select a minimum of THREE (3) Units from the following:
†ELECT212 Fundamentals of AC Electricity(3rd sem) 3
ELECT 310C° Laboratory Practices (AC) 1
AC_R 400A Uniform Mechanical Code I 3
AC_R 400B Uniform Mechanical Code II 3
SHMET 220AD Sheet Metal Fabrication 5
Subtotal Units 3
TOTAL UNITS 41

MEDICAL ASSISTING PROGRAM
Administrative/Clinical
Associate in Arts or Science/Career or Completion Certificate
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. The program offers an Associate Arts/Science Degree in the Combined Certificate Program Option or a Career Certificate in the Administrative or Clinical Certificate option. The program also offers Certificates of Completion in Emergency Medical Technician, Health Unit Coordinator, Medical Insurance Billing, or Phlebotomy. 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.

COMBINED ADMINISTRATIVE/CLINICAL PROGRAM
FIRST SEMESTER
REQUIRED COURSES UNITS
± *BIO 60 Human Biology I 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

CHOOSE ONE OF THE FOLLOWING OPTIONS
OPTION ONE:
±ACCTG 200A Introduction to Accounting 3
‡ CAOTC 39A, B Microsoft Word for Office 1:1
†Computer Class Any class which satisfies computer proficiency for graduation. 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

CAREER CERTIFICATE
ADMINISTRATIVE CERTIFICATE OPTION
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.
FIRST SEMESTER

REQUIRED COURSES
±*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 282 Advanced Health Care Clinical Procedures 3
†MA 286 Medical Insurance Billing 3
±Administrative Option - See Options 3

TOTAL UNITS 23

CHOOSE ONE OF THE FOLLOWING OPTIONS

OPTION ONE:
±ACCTG 200A Introduction to Accounting 3
•±CAOTC 39A, B Microsoft Word for Office 1:1
•±Computer Class Any class which satisfies computer proficiency for graduation. 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 OPTION
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; laboratory procedures; giving injections; diagnostic tests; pharmacology; taking a health history; venipuncture; and handling emergency situations.

FIRST SEMESTER

REQUIRED COURSES
•±Computer Class Any class which satisfies computer proficiency for graduation. 1
±*BIO 60 Human Biology 1 4
±AH 60 Medical Terminology 3
†MA 270 Introduction to Medical Assisting 3
†MA 280 Medical Insurance Billing 3
±Administrative Option - See Options 3

SECOND SEMESTER
±AH 276 Health Care Law 1
†MA 284AB Medical Assisting Specialized Practicum2
†MA 288 Practicum Seminar 1
±MA 290 Medical Insurance Billing 3
±Administrative Option - See Options 3

TOTAL UNITS 24

COMBINED ADMINISTRATIVE/CLINICAL CERTIFICATE

FIRST SEMESTER

REQUIRED COURSES
±*BIO 60 Human Biology 1 4
±AH 60 Medical Terminology 3
†MA 270 Introduction to Medical Assisting 3
†MA 280 Medical Insurance Billing 3
±Administrative Option - See Options 3

SECOND SEMESTER
±AH 276 Health Care Law 1
†MA 282 Adv. Health Care Clinical Procedures 3
†MA 284AB Medical Assisting Specialized Practicum2
†MA 288 Practicum Seminar 1
±MA 290 Medical Insurance Billing 3
±Administrative Option - See Options 3

TOTAL UNITS 31

CHOOSE ONE OF THE FOLLOWING OPTIONS

OPTION ONE:
±ACCTG 200A Introduction to Accounting 3
•±CAOTC 39A, B Microsoft Word for Office 1:1
•±Computer Class Any class which satisfies computer proficiency for graduation. 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

RECOMMENDED COURSES FOR CLINICAL/COMBINED CERTIFICATE:
AH 210 Math for Meds 1
AH 220 Phlebotomy 1
LEARN 11 Learning and Academic Strategies 2

CERTIFICATES OF COMPLETION:
Emergency Medical Technician Certificate

REQUIRED COURSES
†EMT 251 Emergency Medical Technician 3
†EMT 251L Emergency Medical Technician Lab 1.5

TOTAL UNITS 4.5

Health Unit Coordinator Certificate

REQUIRED COURSES
AH 60 Medical Terminology 3
†AH 280 Health Unit Secretary 2
†AH 280L Health Unit Secretary Laboratory 1

TOTAL UNITS 6

Medical Insurance Billing Certificate

REQUIRED COURSES
AH 60 Medical Terminology 3
MA 290 Medical Insurance Billing 3

TOTAL UNITS 6

Phlebotomy Certificate

REQUIRED COURSE
AH 220 Phlebotomy 1.5

TOTAL UNITS 1.5

MEDICAL TRANSCRIPTION

Associate in Arts/Career or Completion Certificate

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

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

**REQUIRED COURSES**  
**UNITS**
- AH 60 Medical Terminology 3
- AH 206A Beginning Medical Transcription 3
- AH 206B Advanced Medical Transcription 3
- *BIO* 60 Human Biology 1 4
- CAOTC 265 Computer Transcription 2
- CAOTO 216 Proofreading Skills 1
- CAOTO 261 Business English 3

**Subtotal Units** 19

Select **FOUR (4) units from one of the following groups:**
- CAOTC 39A-D Microsoft Word for Office 1:1:1:1
- CAOTC 236A-D Word Processing-WordPerfect 1:1:1:1

**Subtotal Units** 4

Select **ONE** of the following courses:
- CAOTT 201 Intermediate Typing/Keyboarding 2
- CAOTT 202 Advanced Typing/Keyboarding 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 MS Windows Operating System 1:1
- CAOTC 34 Introduction to Computers & Applications 3
- CAOTC 35 Microsoft Office 3
- #CAOTC 39A, B, C, D Microsoft Word for Office 1
- #CAOTC 236A, B, C, D Word Processing-WordPerfect 1
- CAOTO 222 Job Search Skills 3
- CAOTO 262 Professional Development 1

**Subtotal Units** 3

**TOTAL UNITS** 26-28

**CERTIFICATES OF COMPLETION:**

- **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, Intern 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.

- **Microsoft Word 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, Intern 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** 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.

**MUSIC**

**Associate in Arts/Completion Certificate**

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. For more departmental information call (562) 938-4309.

**First Semester**

**REQUIRED COURSES**  
**UNITS**
- 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
- MUSIC 92AD 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
MUSIC 92AD Applied Music (2nd semester) 1
▲Performance Organization 1

**Semester Total** 9

**Third Semester**

MUSIC 40A Music Appreciation 3
†MUSIC 92AD Applied Music (3rd semester) 1
▲Performance Organization 1

**Semester Total** 5

**Fourth Semester**

†MUSIC 4 Music Theory 3 3
†MUSIC 10AD Musicianship 3 2
MUSIC 30A Music History/Antiquity to 1750 2

**OR**

MUSIC 30B Music History/Lit -1750 to Present 3
†MUSIC 92AD Applied Music (4th semester) 1
▲Performance Organization 1

**Semester Total** 10

**TOTAL UNITS** 35
CERTIFICATES OF COMPLETION:

Applied Music Instructor Certificate

REQUIRED COURSES UNITS
MUSIC 1 Music Theory 1 3
MUSIC 5AD Musicianship 1 2
MUSIC 91AD Special Studies 2
MUSIC 92AD Applied Vocal and Instrumental Music 1

Select ONE of the following classes:
MUSIC 40 Appreciation of Music 3
MUSIC 30A Music History/Antiquity to 1800 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 UNITS
• MUSIC 71AD Introduction to Music Technology 2
MUSIC 75A – B 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 50AD Performance Showcase/Ensemble 1:1:1:1
MUSIC 72AD Commercial Improv/Arranging/Score 2:2
MUSIC 80AD “City” Jazz Big Band 1:1:1:1
MUSIC 81AD Commercial Keyboard 2:2
MUSIC 84AD Commercial Songwriting 2:2
MUSIC 85AD Commercial Small Jazz Ensemble 1:1:1:1

Subtotal Units 24

ELECTIVES (Select TWO (2) units from the following):
MUSIC 59AD Digital Recording & Sampling Tech. 2
MUSIC 62AD Guitar/Bass (Beginning) 1
MUSIC 63AD Guitar/Bass (Intermediate) 1
MUSIC 83AD Film/Video Music Scoring 1
MUSIC 97AD Tools of the Trade 2

Subtotal Units 2

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 UNITS
• MUSIC 71AD Introduction to Music Technology 2
MUSIC 75A – B 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 50AD Performance Showcase/Ensemble 1:1:1:1
MUSIC 72AD Commercial Improv/Arranging/Score 2:2
MUSIC 80AD “City” Jazz Big Band 1:1:1:1
MUSIC 81AD Commercial Keyboard 2:2
MUSIC 84AD Commercial Songwriting 2:2
MUSIC 85AD Commercial Small Jazz Ensemble 1:1:1:1

Subtotal Units 24

ELECTIVES (Select SIX (6) units from the following):
MUSIC 59AD Digital Recording & Sampling Tech. 2
MUSIC 62AD Guitar/Bass (Beginning) 1
MUSIC 63AD Guitar/Bass (Intermediate) 1
MUSIC 83AD Film/Video Music Scoring 1
MUSIC 97AD Tools of the Trade 2
†MUSIC 96AD Advanced Recording Techniques 2

Subtotal Units 6

TOTAL UNITS 38

COMMERCIAL MUSIC

Professional Technology

Associate in Arts/Career Certificate

Students prepare to compete in the world of commercial music and/or the entertainment industry. This certificate will prepare students for an entry-level position in a variety of music performance, film/video post-production, computer synthesis technician and corporate tech support. 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.

ELECTIVES (Select TWO (2) units from the following):
MUSIC 59AD Digital Recording & Sampling Tech. 2
MUSIC 62AD Guitar/Bass (Beginning) 1
MUSIC 63AD Guitar/Bass (Intermediate) 1
MUSIC 83AD Film/Video Music Scoring 1
MUSIC 97AD Tools of the Trade 2
†MUSIC 96AD Advanced Recording Techniques 2

Subtotal Units 6

TOTAL UNITS 38

Consult guides available in Counseling Centers for specific general education and required grades.
### COMMERCIAL MUSIC

#### Record Producer

**Associate in Arts/Career or Completion 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.

<table>
<thead>
<tr>
<th>REQUIRED CORE COURSES</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**

<table>
<thead>
<tr>
<th>ELECTIVES</th>
<th>Select SIX (6) units from the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 7AB Elementary Voice</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 92AD Professional Vocal/Solo Group</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 93AD Record Production &amp; Sampling Tech</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 71AD Introduction to Music Technology</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 78AD Studio Singers</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 44AD The Evening Jazz Choir</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 81AD Commercial Keyboard</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 84AD Commercial Songwriting</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 86AD Record Production (Fundamentals)</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 87AD Vocal Jazz Trios, Quintets, Octettes</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 88AD Small Studio Lab</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 90AD Commercial Theory</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 93AD Record Production (Using MIDI)</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 95 Intermediate Recording Techniques</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 96AD Advanced 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** | **6**

**TOTAL UNITS** | **38**

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### 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.

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<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>
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</tr>
</tbody>
</table>

**Subtotal Units** | **12**

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<td>2</td>
</tr>
<tr>
<td>MUSIC 98AD Synth/Drum Mach/Sequencer Program</td>
<td>2</td>
</tr>
</tbody>
</table>

**Subtotal Units** | **12**

<table>
<thead>
<tr>
<th>ELECTIVES</th>
<th>Select FIVE (5) units from the following:</th>
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</thead>
<tbody>
<tr>
<td>MUSIC 60AD Pro Tools (Digital Audio Record/Edit)</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 61AD Music Mastering</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 65AD Advanced-Pro Recording Techniques</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 66AD Studio Mixdown Techniques</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 68 Basic Audio Theory</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 69AD Analysis of Music Video</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 71AD Introduction to Music Technology</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 78AD Studio Singers</td>
<td>1</td>
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<td>2</td>
</tr>
<tr>
<td>MUSIC 84AD Commercial Songwriting</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 90AD Commercial Theory</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 91AD Special Studies</td>
<td>2</td>
</tr>
</tbody>
</table>

**Subtotal Units** | **20**

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**TOTAL UNITS** | **38**

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**Curriculum Guides**
**Curriculum Guides**

**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./Sequence Program 2
MUSIC 272AD Work Experience 3
MUSIC 273AD Work Experience 4

**Subtotal Units** 5
**TOTAL UNITS** 40

**CERTIFICATES OF COMPLETION:**

**ProTools Assistant Certificate**

**REQUIRED COURSES**
MUSIC 94 Beginning Recording Techniques 2
†MUSIC 95 Intermediate Recording Techniques 2
MUSIC 60AD ProTools (4 semesters) 2:2:2:2

**TOTAL UNITS** 12

**Studio Assistant Certificate**

**REQUIRED COURSES**
MUSIC 60AD Pro Tools (Digital Audio Record/Edit) 2
†MUSIC 65AD Advanced-Pro Recording Techniques 2
MUSIC 68 Basic Audio Theory 2
MUSIC 70AD Studio Maintenance 2
MUSIC 94 Beginning Recording Techniques 2
†MUSIC 95 Intermediate Recording Techniques 2
†MUSIC 96AD Advanced Recording Techniques 2

**TOTAL UNITS** 14

**COMMERCIAL MUSIC Recording Engineer**

**Associate in Arts/Career or Completion 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 studio, live sound, mastering, music video, foley, television, film, theater and multimedia. 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 75A–B 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/Sequence Program 2

**Subtotal Units** 12

**REQUIRED COURSES FOR SPECIALITY**
MUSIC 60AD ProTools (Digital Audio Recording/Edit) 2
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 70AD Studio Maintenance 2
†MUSIC 82AD Sound Reinforcement 2
†MUSIC 86AD Record Production (Fundamentals) 2
†MUSIC 95 Intermediate Recording Techniques 2
†MUSIC 96AD Advanced Recording Techniques 2
¶MUSIC 97AD Tools of the Trade 2
MUSIC 98AD Synth/Drum Mach/Sequence Program 2

**Subtotal Units** 27

**TOTAL UNITS** 40

**ELECTIVES - Select ONE (1) unit from the following:**
MUSIC 59AD Digital Recording & Sampling Tech 2
MUSIC 61AD Music Mastering 1
†MUSIC 65AD Advanced–Pro Recording Techniques 2
†MUSIC 66AD Studio Mixdown Techniques 2
MUSIC 70AD Studio Maintenance 2
MUSIC 71AD Introduction to Music Technology 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/Sequence Program 2

**Subtotal Units** 1
**TOTAL UNITS** 40

**CERTIFICATES OF COMPLETION:**

**ProTools Assistant Certificate**

**REQUIRED COURSES**
MUSIC 94 Beginning Recording Techniques 2
†MUSIC 95 Intermediate Recording Techniques 2
MUSIC 60AD ProTools (4 semesters) 2:2:2:2

**TOTAL UNITS** 12

**Studio Assistant Certificate**

**REQUIRED COURSES**
MUSIC 60AD Pro Tools (Digital Audio Record/Edit) 2
†MUSIC 65AD Advanced-Pro Recording Techniques 2
MUSIC 68 Basic Audio Theory 2
MUSIC 70AD Studio Maintenance 2
MUSIC 94 Beginning Recording Techniques 2
†MUSIC 95 Intermediate Recording Techniques 2
†MUSIC 96AD Advanced Recording Techniques 2

**TOTAL UNITS** 14

**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**
MUSIC 60AD Pro Tools (Digital Audio Record/Edit) 2
†MUSIC 65AD Advanced-Pro Recording Techniques 2
MUSIC 68 Basic Audio Theory 2
MUSIC 70AD Studio Maintenance 2
MUSIC 94 Beginning Recording Techniques 2
†MUSIC 95 Intermediate Recording Techniques 2
†MUSIC 96AD Advanced Recording Techniques 2

**TOTAL UNITS** 14

Consult guides available in Counseling Centers for specific general education and required grades.
REQUIRED CORE COURSES  
•MUSIC 71AD Introduction to Music Technology 2
MUSIC 75A – B The Music Business 1:1
•MUSIC 93AD Record Production (Using MIDI) 2
MUSIC 94 Beginning Recording Techniques 2
MUSIC 98AD Synthe./Drum Mach/Sequencer Program2  
Subtotal Units 12

REQUIRED COURSES FOR SPECIALITY  
MUSIC 59AD Digital Recording & Sampling Tech 2
MUSIC 60AD ProTools (Digital Audio Record/Edit) 2
MUSIC 72AD Commercial Improv/Arranging/Scoring2
MUSIC 84AD Commercial Songwriting 2:2:2
MUSIC 90AD Commercial Music Theory 2:2  
Subtotal Units 20

ELECTIVES - Select SIX (6) units from the following:  
MUSIC 50AD Perform Showcase/Ensemble Workshop1
MUSIC 60AD ProTools (Digital Audio Record/Edit) 2
MUSIC 63AD Guitar/Bass (Intermediate) 1
MUSIC 74AD Commercial Solo Voice 2
MUSIC 80AD “City” Jazz Big Band 1
MUSIC 81AD Commercial Keyboard 2
MUSIC 83AD Film/Video Music Scoring 1
MUSIC 88AD Small Studio Lab 1
•MUSIC 93AD Record Production (Using MIDI) 2
•MUSIC 95 Intermediate Recording Techniques 2
•MUSIC 96AD Advanced Recording Techniques 2
MUSIC 98AD Synth/Drum Machine/Sequencer Prog 2  
Subtotal Units 6  
TOTAL UNITS 38

NUMERICAL CONTROL  
MANUFACTURING TECHNOLOGY  
Associate in Science/Career Certificate  
Students prepare for entry-level positions as Numerical Control Technician in the aerospace or comparable manufacturing industry. Numerical Control Technicians locate, troubleshoot, examine, inspect, diagnose, repair, and test all aspects of electronic and electronic/mechanical components of numerical control systems, servo and stepping motors, hydraulic and pneumatic servo and solenoid valves found on typical NC machine tools and other NC manufacturing equipment. 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) 938-3078.

LEVEL 1 - REQUIRED COURSES  
•COMIS 1 Computer Information Competency OR 1
•CPAS 1 Using the MAC as a Tool for Learning 1
†DRAFT 203AD AutoCAD II OR 3
†DRAFT 51A Industrial Drafting I 3
MACH 50A Machine Tool Operation and Practices 3
†MACH 50B Machine Tool Operation and Practices 3
†ELECT 225 Algebra & Trigonometry for Technicians OR 3-4
*A more advanced or transferable math course. (Trigonometry is recommended.)  
Complete ONE (1) unit from the following:  
WELD 461AD Welding (Acetylene Gas) 1  
Subtotal Units 14-15

LEVEL 2 - REQUIRED COURSES  
†DRAFT 51B Industrial Drafting II OR 3
ARCH 60 Architectural Design 8
•TEC 60AD Computer Aided Design and Drafting 3  
Subtotal Units 6-11

Complete the following NINE (9) units:  
ELECT 230A-C Robotics Technology 3:3:3  
Subtotal Units 9  
TOTAL UNITS 29-35

NURSING: ASSOCIATE DEGREE  
(RN) PROGRAM  
Associate in Art or Science/Career Certificate  
Contact department at (562) 938-4166 for current information.

NURSING: LVN to RN  
Career Ladder Program  
Associate in Art or Science/Career Certificate  
Contact department at (562) 938-4166 for current information.

NURSING: VOCATIONAL  
Associate in Arts or Science/Career or Completion Certificate  
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. For more information, telephone the School of Health and Science at (562) 938-4166 Monday through Thursday, 8:00 a.m. – 4:30 p.m. or Friday 8:00 a.m. – 12:00 p.m.

Complete the following PREREQUISITE courses with a minimum grade of “C” or better:  
*BIO 60 Human Biology 1 4
VN 220 Transition to Vocational Nursing 3
VN 220L Transition to Vocational Nursing Lab 1
VN 225 Nursing Applications of Pharmacology 3
NA 215 + 215L Nursing Assistant Program OR 7
Certified Nursing Assistant (CNA) certificate issued by the State of California  
Subtotal Units 11-18

Complete the following required courses with a minimum grade of “C” or better:  
†VN 240 Common Mental Health Deviations 1 3
†VN 230 Common Health Deviations 1 3.5
†VN 230L Common Health Deviations 1 Lab 3
†VN 235 Common Health Deviations 2 3.5
†VN 235L Common Health Deviations 2 Lab 3
†VN 245 Maternal/Infant Nursing 1.5
†VN 245L Maternal/Infant Nursing Lab 2
†VN 250 Nursing Care of Children 1.5
Curriculum Guides

Consult guides available in Counseling Centers for specific general education and required grades.
**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, Intermed 1
    - CAOTC 236C Word Processing-WordPerfect, Adv 1
    - CAOTC 236D Word Processing-WordPerfect, Expert 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**
  - ALL FOUR
    - CAOTC 236A Word Processing-WordPerfect, Beg 1
    - CAOTC 236B Word Processing-WordPerfect, Intermed 1
    - CAOTC 236C Word Processing-WordPerfect, Adv 1
    - CAOTC 236D Word Processing-WordPerfect, Expert 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.

### 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

### Microsoft Word Certificate

**REQUIRED COURSES**
- **UNITS**
  - CAOTC 39A Microsoft Word for the Office, Beg 1
  - CAOTC 39B Microsoft Word for the Office, Intermed 1
  - CAOTC 39C Microsoft Word for the Office, Adv 1
  - CAOTC 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.

### PHOTOGRAPHY

#### COMMERCIAL

**Associate in Science/Career Certificate**

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) 938-3036.

**REQUIRED COURSES**
- **UNITS**
  - ART 31 Fundamentals of Art/Composition & Color 3
  - PHOT 31AB Basic Photography - Black & White 3
  - PHOT 32AD Basic Photography – Color 3
  - PHOT 33AD Photography Studio Lighting 4
  - PHOT 34AD Advanced Photography 4
  - PHOT 35AD Photojournalism 3
  - PHOT 37AD Portrait Photography 4
  - PHOT 42AD Experimental Photography Lab 4
  - PHOT 43AD Digital Photography 3

**Subtotal Units:** 31

**Select THREE (3) units from the following courses:**
- PHOT 71AD Work Experience-Photography 2
- PHOT 72AD Work Experience-Photography 3
- PHOT 73AD Work Experience-Photography 4

**Subtotal Units:** 3

**Select NINE (9) units from the following courses:**
- †ART 81 Intro to Fine Art Photography 3
- †PHOT 31AB Basic Photography - Black & White 3
- †PHOT 32AD Basic Photography – Color 3
- †PHOT 33AD Photography Studio Lighting 4
- †PHOT 34AD Advanced Photography 4
- †PHOT 35AD Photojournalism 3
- †PHOT 37AD Portrait Photography 3
- †PHOT 38 Marketing Professional Photography Skills 2
- †PHOT 39AD Documentary Photography 3
- †PHOT 40AD View Camera/ “Zone System Photo” 4
- †PHOT 41AD Professional Photographic Portfolio 4
- †PHOT 42AD Experimental Photography Lab 4
- †PHOT 43AD Digital Photography 3
- †PHOT 281AD Photography Laboratory Max of 3

**Subtotal Units:** 9

**TOTAL UNITS:** 43

### 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. For more information regarding Photography courses call (562) 938-4319; for Journalism classes call (562) 938-4675 or 938-4036.

**REQUIRED COURSES**
- **UNITS**
  - †ENGL 1 or ENGL 1H Reading & Composition OR 3
  - †ENGL 105 Fundamentals of Writing 4
  - †JOURN 80AD Working on the Newspaper 3:3
  - PHOT 31AB Basic Photo-Black & White 3
  - PHOT 32AD Basic Photography – Color 3
  - PHOT 33AD Photography Studio Lighting 4
  - PHOT 34AD Advanced Photography 4
  - PHOT 35AD Photojournalism 3
  - PHOT 37AD Portrait Photography 3
  - PHOT 38 Marketing Professional Photography Skills 2
  - PHOT 39AD Documentary Photography 3
  - PHOT 40AD View Camera/ “Zone System Photo” 4
  - PHOT 41AD Professional Photographic Portfolio 4
  - PHOT 42AD Experimental Photography Lab 4
  - PHOT 43AD Digital Photography 3
  - PHOT 281AD Photography Laboratory Max of 3

**Subtotal Units:** 18-19

**Select NINE (9) units from the following:**
- JOURN 6AD Making and Editing the Magazine 3
- JOURN 71AD, 72AD, 73AD Work Experience 2,3,4
- †PHOT 71AD, 72AD, 73AD Work Experience 2,3,4
Curriculum Guides

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

Required Courses

PEPF 1 Introduction to Physical Education 2
PEPF 7 Introduction to Community Recreation 2
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

PEPF 8AD Aerobic Circuit Training 2.5
PEPF 83AD, 84AD Fitness & Wellness I & II 2
PEPF 5 Sports Appreciation 3
PEPF 10 Prevention & Care of Athletic Injuries 3
*PEPF 15 Sports Officiating 3
*PEPF 17 Sports Officiating 3
PEPF 19AD Theory of Football 2
PEPF 23 First Aid & Safety Education 3
PEPF 71AD,72AD; OR 73AD Work Experience 2-4

Aquatics Category†

*PEPE66AD Life Guard/Water Safety Training 4
*PEPF 75AD OR PEG76AD Swimming 0.5,1
*PEPF 3AD OR 4ADWater Aerobics and Training0.5,1
PEPF 41AD OR 42AD Swimming Fitness 0.5,1
*PEPF 47AD OR 48AD Swimming Fitness/Polo 0.5,1
*PEPF 41 Aquatics (Coed) 2

Individual & Dual Activities Category†

*PEPF 2AD Monitoring & Developing Sports Skills 1
*PEPF 13 OR PEPF 5AD OR PEPF 6AD Dance Aerobics 1, 0.5,1
*PEPF 29 OR PEG 87AD OR PEG 88AD Cross Country OR Track & Field (Men) OR 1, 0.5,1
*PEIA 19AD OR PEIA 19M1 Cross Country, Track & Field (Men) 3
*PEPF19AD OR PEPG20AD Bowling (Coed) 0.5,1
*PEPF 9AD OR PEG 10AD Badminton (Coed) 0.5,1
*PEPF 51 OR PEG 31AD OR PEG 32AD Golf (Coed/Women) OR 1, 0.5,1
*PEIA9AD OR PEG9M1 Golf (Coed/Men) OR 3
*PEIA31AD OR PEIA31M1 Golf (Coed/Women) 3

Subtotal Units 15-16

Total Units 27-28

Fitness and Combatives Category†

*PEPF 65AD OR 66AD Self Defense 0.5,1
*PEPF 2AD Monitoring and Developing Sport Skills 1
*PEPF3AD 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
*PEPF21AD OR 22AD Physical Fitness 0.5,1
*PEPF 41AD OR 42AD Swim Fitness 0.5,1
*PEPF47AD OR 48AD Swim Fitness/Polo 0.5,1
*PEPF53AD OR 54AD Weight Training 0.5,1
*PEPF 81AD Fitness & Wellness Center 1
PEPF 83AD OR 84AD Fitness & Wellness I, II 2,2

Team Sports†

*PEPF 2AD Monitoring and Developing Sport Skills 1
*PEPF 25 Baseball (Men) OR 1
PEG11AD OR PEG12AD Baseball (Men) 0.5,1
OR PEIA 1AD OR PEIA 1M1 Baseball (Men) 3
*PEPF 27 Basketball (Men) OR 1
PEG 13AD OR PEG 14AD OR PEIA 3AD OR PEIA 31M1 Basket Ball (Men) 0.5,1,3
*PEPF 31 Football (Men) OR 1
PEG85AD OR PEG 86AD Football (Men)OR0.5,1
OR PEIA 7AD OR PEIA 7M1 Football (Men) 3
*PEPF 35 Soccer (Men) OR 1
PEG 69AD OR PEG 70AD Soccer (Men) OR0.5,1
OR PEIA 13AD OR PEIA 13M1 Soccer (Men) 3
*PEPF 37 OR PEIA 21AD Volleyball (Men) OR 1
PEG 89AD OR PEG 90AD Volleyball (Men) 0.5,1
*PEPF 55 Basketball (Women) OR 1
PEG 13AD Basketball (Women) OR 0.5
PEG 14AD OR PEIA 27AD OR PEIA 27M1 Basketball (Women) 1,3
*PEPF 58AD Intramural Activities 1
*PEPF 61 OR PEIA 35AD OR PEIA 35M1 Soccer (Women) OR 1,3
PEG 69AD OR PEG 70AD Soccer (Women) 0.5,1
*PEPF63 OR PEIA37AD Softball (Women) OR 1,3
PEG73AD OR PEG74AD Softball(Women) 0.5,1
*PEPF 67 Volleyball (Women) OR 1
PEG 89AD OR PEG 90AD Volleyball OR 0.5,1
PEIA 45AD OR PEIA45M1Volleyball (Women) 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 1
*PEOS 55AD OR PEOS 56AD Nordic Skiing 0.5,1
Subtotal Units 15-16

Consult guides available in Counseling Centers for specific general education and required grades.
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 1 OR CPAS 1 Using the IBM/Macintosh Microcomputer OR a more advanced course in computer competency
Subtotal Units 1
Complete FIVE-SIX (5-6) units from any Mathematics course which has a prerequisite of Intermediate Algebra or higher
Subtotal Units 5-6
TOTAL UNITS 18-20

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 UNITS
R_TV 1 Introduction to Broadcasting 3
• R_TV 3 Using MAC Computer Entertainment Indus 2
R_TV 8 Intro to Media Production 3
R_TV 13AD Television Production 2
Subtotal Units 10
REQUIRED COURSES FOR SPECIALITY
R_TV 13AD Television Production 2
R_TV 14AD Electronic Field Production 2:2
R_TV 25AD/35AD Radio/Television Activity 2:2
R_TV 30AD Broadcast News Writing 1.5:1.5
R_TV 36AD Broadcast News Production 3:3:3
R_TV 40AD Performance Before a Camera 2
R_TV 71/73 AD Work Experience 1
Subtotal Units 26
Select SIX (6) units from the following:
R_TV 2 Intro to Careers in Radio & Television 2
R_TV 4 Writing and Production Planning 3
R_TV 6 Critical Television Viewing 3
R_TV 12 Television Lighting 2
R_TV 15AC Advanced Television Production 2
R_TV17AD Special Projects in Radio/Television 1
R_TV 21 Radio Production 3
R_TV 34AD Music Video Production 2:2
R_TV 36AD Broadcast News Production 3
R_TV 37 Radio/Television Management and Sales 3
*R_TV 71/73 AD Work Experience 2:3
Other courses for area of specialization may be approved
Subtotal Units 6
TOTAL UNITS 42

Curriculum Guides
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**

**Associate in Arts/Career Certificate**

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 broadcast, film or performance program. For more departmental information call (562) 938-4309 or 938-4564.

**REQUIRED CORE COURSES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>R_TV 1</td>
<td>Introduction to Broadcasting</td>
<td>3</td>
</tr>
<tr>
<td>R_TV 3</td>
<td>Using MAC Computer Entertainment Industries</td>
<td>2</td>
</tr>
<tr>
<td>R_TV 8</td>
<td>Introduction to Media Production</td>
<td>3</td>
</tr>
<tr>
<td>R_TV 13</td>
<td>Television Production</td>
<td>2</td>
</tr>
</tbody>
</table>

Subtotal Units 10

**REQUIRED COURSES FOR SPECIALITY**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>R_TV 25AD/35AD</td>
<td>Radio/Television Activity</td>
<td>2:2</td>
</tr>
<tr>
<td>R_TV 34AD</td>
<td>Music Video Production</td>
<td>2</td>
</tr>
<tr>
<td>R_TV 36AD</td>
<td>Broadcast News Production</td>
<td>3:3</td>
</tr>
<tr>
<td>R_TV 40AD</td>
<td>Performance Before a Camera</td>
<td>2:2</td>
</tr>
<tr>
<td>R_TV 71/73AD Work Experience</td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

Subtotal Units 15

Select FIVE (5) units from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>R_TV 2</td>
<td>Intro to Careers in Radio &amp; Television</td>
<td>2</td>
</tr>
<tr>
<td>R_TV 6</td>
<td>Critical Television Viewing</td>
<td>3</td>
</tr>
<tr>
<td>R_TV 12</td>
<td>Television Lighting</td>
<td>2</td>
</tr>
<tr>
<td>R_TV 13AD</td>
<td>Television Production</td>
<td>2</td>
</tr>
<tr>
<td>R_TV 15AC</td>
<td>Advanced Television Production</td>
<td>2</td>
</tr>
<tr>
<td>R_TV 17AD</td>
<td>Special Projects in Television</td>
<td>1</td>
</tr>
<tr>
<td>R_TV 21</td>
<td>Radio Production</td>
<td>3</td>
</tr>
<tr>
<td>R_TV 30AD</td>
<td>Broadcast News Writing</td>
<td>1.5</td>
</tr>
<tr>
<td>R_TV 34AD</td>
<td>Music Video Production</td>
<td>2</td>
</tr>
<tr>
<td>R_TV 37AD</td>
<td>Broadcast Management and Sales</td>
<td>3</td>
</tr>
<tr>
<td>R_TV 71/73AD Work Experience</td>
<td></td>
<td>2:4</td>
</tr>
</tbody>
</table>

Other courses for area of specialization may be approved.

Subtotal Units 5
TOTAL UNITS 30

**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**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>REAL 78</td>
<td>Real Estate Economics</td>
<td>3</td>
</tr>
<tr>
<td>REAL 81A</td>
<td>Real Estate Practices</td>
<td>3</td>
</tr>
<tr>
<td>REAL 83A</td>
<td>Legal Aspects of Real Estate</td>
<td>3</td>
</tr>
<tr>
<td>REAL 85</td>
<td>Real Estate Appraisal</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal Units 12

Consult guides available in Counseling Centers for specific general education and required grades.
Select **FIFTEEN (15)** units from the following:

- MKTG 40 Salesmanship 3
- REAL 84 California Mortgage Brokering and Banking 3
- †REAL 86 Advanced Real Estate Appraisal 3
- REAL 92A Escrows and Land Titles 3
- †REAL 92B Escrows and Land Titles 3
- REAL 93 Real Estate Investments 3
- REAL 253 Property Management 3
- REAL 254 Industrial/Commercial Real Estate 3

**Subtotal Units** 15

**TOTAL UNITS** 27

**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. 

**REQUIRED COURSES**

- ACCTG 1A Principles of Accounting 4
- CAOTC 35 Microsoft Office 3
- †ENGL 1 Reading and Composition 3
- GBUS 251 Business Mathematics 3
- MGMT 49A Intro to Management 3
- MGMT 49B Human Resources Management 3
- MGMT 58 Leadership and Supervision 3
- MKTG 42 Retailing Principles and Practices 3
- MKTG 47 Essentials of Marketing 3
- SP 20 Elements of Interpersonal Communication 3

**Subtotal Units** 9

**TOTAL UNITS** 31

**SHEET METAL**

Associate in Science/Career Certificate

Students prepare for entry-level positions in sheet metal layout, template development, fabrication and installation. For more departmental information call (562) 938-3051.

**REQUIRED COURSES**

- SHMET 201 Sheet Metal 1 10
- SHMET 202 Sheet Metal 2 10
- SHMET 203 Sheet Metal 3 10
- SHMET 204 Sheet Metal 4 10
- WELD 400AD Welding - General 2

**TOTAL UNITS** 42

**RECOMMENDED courses but not required:**

- SHMET 220A D Surface Development & Fabrication 5
- WELD 400 band Welding 2

**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**

- Complete **NINE (9)** units in **HISTORY and POLITICAL SCIENCE courses** numbered 1-99.

**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** 9

**TOTAL UNITS** 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**

- SP 10 Elements of Public Speaking 3
- SP 20 Elements of Interpersonal Communication 3
- SP 25 Elements of Intercultural Communication 3
- SP 30 Elements of Group Communication 3
- SP 60 Elements of Argumentation & Debate 3
- SP 99AD Special Projects in Speech 1

**Subtotal Units** 16

Select a minimum of **THREE (3)** units from the following:

- SP 31 Elements of Leadership Communication 3
- SP 50 Elements of Oral Interpretation 3

**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/Completion Certificate

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 UNITS
TART 1 Acting-1 Introduction to Acting 3
TART 25 Introduction to Theatre 3
TART 51AD Theatre Forum 0.5:0.5:0.5:0.5
†TART 39AD Theatre Practicum 1
Subtotal Units 9

Select a minimum of TWO (2) units from the following:
TART 49AD Rehearsal and Performance 1
TART 50AD Major Production Performance 2
†TART 60AD Special Projects in Theatre Arts 1
†TART75AD Summer Repertory Theatre: Performance 1
†TART76AD Summer Repertory Theatre: Production 1
Subtotal Units 2

Select a minimum of FOUR (4) units from the following:
TART 40AD Stage Scenery 2
TART 42AD Stage Lighting 2
TART 43AD Costume Crafts 2
TART 55 Stage Make-up 2
Subtotal Units 2

Select a minimum of FOUR (4) units from the following:
TART 30 Introduction to Dramatic Literature 3
†TART 32 Stage and Screen Writing 3
TART 47 Theatre Management 3
FILM 1 Introduction to Film 3
DANCE 3AD Musical Theatre Dance 1
Subtotal Units 4
TOTAL UNITS 19

THEATRE EMPHASIS - A.A. DEGREE/TRANSFER

REQUIRED COURSES UNITS
TART 1 Acting-1 Introduction to Acting 3
†TART 1B Acting 1-Movement OR
†TART 1C Acting 1-Voice OR
†TART 1D Acting-Improvisation 2
†TART 2 Acting 2-Technique & Characterization 2
†TART 3A-B Acting 3-Scene Study 3
TART 25 Introduction to Theatre OR
TART 30 Introduction to Dramatic Literature 3
TART 51AD Theatre Forum 0.5:0.5:0.5:0.5
†TART 39AD Theatre Practicum 1:1
TART 40AD Stage Scenery OR
TART 43AD Costume Crafts 2
TART 42AD Stage Lighting OR
TART 55 Stage Make-up 2
Subtotal Units 22

Select a minimum of FOUR (4) units from the following:
TART 47 Theatre Management 3
TART 49AD Rehearsal and Performance 1
TART 50AD Major Production Performance 2
TART 75AD Summer Repertory Theatre: Performance 1
Subtotal Units 4
TOTAL UNITS 26

TECHNICAL EMPHASIS - A.A. DEGREE/TRANSFER

REQUIRED COURSES UNITS
TART 1 Acting-1 Introduction to Acting 3
TART 25 Introduction to Theatre 3
†TART 39AD Theatre Practicum 1:1:1
TART 40AD Stage Scenery 2
TART 42AD Stage Lighting 2
TART 43AD Costume Crafts 2
TART 47 Theatre Management 3
TART 51AD Theatre Forum 0.5:0.5:0.5:0.5
TART 55 Stage Make-up 2
Subtotal Units 22

Select a minimum of FOUR (4) units from the following:
TART 30 Introduction to Dramatic Literature 3
TART 44AB Costume Design 2
TART 49AD Rehearsal and Performance 1
TART 56AD Advanced Stage Make-Up 2
†TART 60AD Special Projects in Theatre Arts 1
TART 76AD Summer Repertory Theatre: Production 1
Subtotal Units 4
TOTAL UNITS 26

CERTIFICATES OF COMPLETION:

Vocational Media - Film Acting Certificate

REQUIRED COURSES UNITS
TART 1 or ANY COMPARABLE LEVEL Acting 1 course Intro to Acting 3
TART 201 Show Business Careers – How to Start 1.5
TART 204 Marketing Yourself for Show Business 1.5
TART 206A Audition and Interview Skills - Begin 1.5
TART 206B Audition and Interview Skills - Adv 1.5
TART 212A Acting in Film - Beginning 1.5
TART 212B Acting in Film - Advanced 1.5
TOTAL UNITS 12

Vocational Media - Commercials Certificate

REQUIRED COURSES UNITS
TART 1 or ANY COMPARABLE LEVEL Acting 1 course Intro to Acting 3
TART 201 Show Business Careers – How to Start 1.5
TART 204 Marketing Yourself for Show Business 1.5
TART 206A Audition and Interview Skills - Begin 1.5
TART 206B Audition and Interview Skills - Adv 1.5
TART 212A Acting in Film - Beginning 1.5
TART 212B Acting in Film - Advanced 1.5
TOTAL UNITS 12

Consult guides available in Counseling Centers for specific general education and required grades.
TART 208B Breaking into Commercials - Adv 1.5
TOTAL UNITS 12

Vocational Media – Voice-Over Certificate

REQUIRED COURSES
TART 1 or ANY COMPARABLE LEVEL Acting 1 course Intro to Acting 3
TART 201 Show Business Careers – How to Start 1.5
TART 204 Marketing Yourself for Show Business 1.5
TART 206A Audition and Interview Skills - Begin 1.5
TART 206B Audition and Interview Skills - Adv 1.5
TART 210A Voice-Over Techniques - Beginning 1.5
TART 210B Voice-Over Techniques - Advanced 1.5
TOTAL UNITS 12

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) 938-4718.

LEVEL 1 - REQUIRED COURSES
MACH 50A Machine Tool Operation and Practices 3
†MACH 50B Machine Tool Operation and Practices 3
DRAFT 201 Introduction to Drafting OR 4
†DRAFT 51A Industrial Drafting I 3
**ELECT 225 Algebra & Trigonometry for Technicians OR
*A more advanced or transferable math course. 3-4
(Trigonometry is recommended.)

Complete One (1) unit from the following:
WELD 461AD Welding (Acetylene Gas) 1
Subtotal Units 13-15

LEVEL 2 - REQUIRED COURSES
†DRAFT 51B Industrial Drafting II OR 3
†ARCH 60 Architectural Design 8
†DRAFT 60 Geometric Dimensioning & Tolerancing 3
†TEC 60AD Computer Aided Design & Drafting
Subtotal Units 9-14
TOTAL UNITS 22-29

TRAVEL INDUSTRY

Associate in Arts/Career or 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 938-4328.

REQUIRED COURSES
THRT 210 Introduction to Travel Industry 3
THRT 212 Travel Career Employment 3
THRT 214 Travel Marketing & Sales Techniques 3
THRT 215 Travel Operations & Risk Mgmt 3
THRT 216B-D Travel Destinations 3:3
THRT 218 Transportation and Tours 3
THRT 219 Cruise Specialization 3
THRT 222A-C Travel Agency Computer Operations 3
THRT 224 Meeting & Special Event Planning 3
THRT 230 Travel Industry Fares & Ticketing 3
THRT 234 Tour Management & Escorting 3
THRT 240 Travel Industry Proficiency Preparation 3

Complete a minimum of FOUR (4) units from the following:
†THRT 271AD Travel/Tourism Work Experience 2
†THRT 272AD Travel/Tourism Work Experience 3
†THRT 273AD Travel/Tourism Work Experience 4
Subtotal Units 43

Select ONE of the following:
•CAOTT 200 Beginning Typing/Keyboarding 3
•CAOTT 201 Intermediate Typing/Keyboarding 2
•CAOTT 200A, B, C Typing/Keyboarding OR 1
A typing proficiency test of 35 words per minute
Subtotal Units 0-3
TOTAL UNITS 43-46

RECOMMENDED but not required courses:
•CAOTC 39A, B Microsoft Word for Office 1:1
•CAOTC 41E, F Excel for Windows Levels 1, 2 1:1
CBIS 6A Intro to IT Concepts & Applications 4
Foreign Language 1-2 (First year level equivalency) 5:5
†GBUS 251 Business Mathematics 3
GEOG 40 World Regional Geography 3
THRH28 Convention Management & Meeting Plan 3
LAW 18A Business Law 3
MGMT 80 Small Business Entrepreneurship 3
†SP 10 Elements of Public Speaking 3
SP 25 Elements of Intercultural Communication 3
THRT 226 Travel Industry Bookkeeping & Reporting 3
THRT 228 Corporate Travel Management 3

CERTIFICATES OF COMPLETION:
Air Reservation Specialist Certificate

REQUIRED COURSES
THRT 214 Travel Marketing & Sales Techniques 3
THRT 222A-C Travel Industry Computer System 3
THRT 230 Travel Industry OAG, Fares & Ticketing 3
TOTAL UNITS 9

Cruise Specialist Certificate

REQUIRED COURSES
THRT 214 Travel Marketing & Sales Techniques 3
THRT 216B-D Travel Destinations (TWO COURSES REQUIRED) 3:3
THRT 219 Cruise Ship Specialization & Techniques 3
TOTAL UNITS 12

Travel Destinations Certificate

REQUIRED COURSES
THRT 214 Travel Marketing & Sales Techniques 3
THRT216B Travel Destinations-North/Cent/South Am3
THRT 216C Travel Destinations-Europe & Africa 3
Curriculum Guides

THRT 216D Travel Dest-Pacific, Asia, & Middle East 3
TOTAL UNITS 12

Travel Industry Management Specialist Certificate

REQUIRED COURSES UNITS
THRT 214 Travel Marketing & Sales Techniques 3
THRT 215 Travel Operations & Risk Mgmt. 3
THRT 216B-D Travel Destinations (One semester) 3
THRT 218 Transportation and Tours 3
THRT 234 Tour Management & Escorting 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
WELD211 Fundamentals of Welding & Tools of Trade 9
†WELD 212 Arc Welding and Fabrication 9
†WELD 213 Advanced Arc Welding 9
†WELD 214 Inert Gas Welding 9
†WELD 220 Structural Arc Welding 6
†WELD 221 Arc Welding Structural Welding 4
†WELD230 Fundamentals of Inert Gas Weld (Heliarc)4
†WELD 231 Prep for Inert Gas Welding Certification 6
†SHMET220AD Surface Development and Fabrication5
MACHT 50A Machine Tool Operation and Practices 3
Subtotal Units 40

Option #2
SHMET 220 (5 units) AND 35 units of Welding -18 units must be from 200 series listed above, balance of courses from any 200/400 welding series courses (no credit allowed for repetition of course).
TOTAL UNITS 40

WORD PROCESSING

Associate in Arts/Career or Completion Certificate

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 1:1
• CAOTC 34 Introduction to Computers & Applications 3
• CAOTC 41E Excel for Windows - Beginning 1
• CAOTC 44D PowerPoint for Windows, Beginning 1
• CAOTC 45 Internet for Office and Personal Use 2
• CAOTO 15 Business Communications 3
• CAOTO 216 Proofreading Skills 1
• CAOTO 261 Business English 3
• CAOTT 201 Intermediate Typing/Keyboarding 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 1:1:1:1
• CAOTC 236A, B, C, D Word Processing-WordPerfect, Levels 1, 2, 3, 4 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.

ELECTIVES Select FIVE (5) units from the following:
• #CAOTC 39A, B, C, D Microsoft Word for Office 1
• CAOTC 41F, J Excel for Windows, Levels 2, 3 1:1
• CAOTC 44E PowerPoint for Windows, Advanced 1
• CAOTC 47A, B Access for Office Applications 3:3
• #CAOTC236A, B, C, D Word Processing-WordPerfect 1
• CAOT 222 Job Search Skills 3
• CAOTO 262 Professional Development 1
• CAOTT 209A-B Speed/Accuracy Bldg for Typists 1:1
Subtotal Units 5
TOTAL UNITS 27

CERTIFICATES OF COMPLETION:

Basic Business Communications Certificate

REQUIRED COURSES UNITS
• CAOTC 39A Microsoft Word for Office, Beginning 1
• CAOTC 44D PowerPoint for Windows, Beginning 1
CAOTO 15 Business Communications 3
CAOTO 261 Business English 3
CAOTO 262 Professional Development 1
TOTAL UNITS 9

Basic Office Computer Skills Certificate

REQUIRED COURSES UNITS
• CAOTC 31A MS Windows Operating System, Begin 1
• CAOTC34 Introduction to Computers & Applications3
• 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: Typewriting Certificate of 25 wpm for five minutes with no more than five errors within the previous twelve months.

Consult guides available in Counseling Centers for specific general education and required grades.
### Basic Word Processing Certificate

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>COURSES</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, Interm</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>

**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>COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• CAOTC 236A Word Processing-WordPerfect, Beg</td>
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**REQUIRED COMPETENCY:** Typing certificate of 35 wpm for five minutes with five or fewer errors completed within the previous twelve months.

### Microsoft Excel Certificate

**REQUIRED COURSES**

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**REQUIRED COMPETENCY:** Typing certificate of 35 wpm for five minutes with five or fewer errors completed within the previous twelve months.

### Microsoft Word Certificate

**REQUIRED COURSES**

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<td>• CAOTO 39C Microsoft Word for the Office, Adv</td>
<td>1</td>
</tr>
<tr>
<td>• CAOTO 39D Microsoft Word for the Office, Expert</td>
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</tr>
</tbody>
</table>

**REQUIRED COMPETENCY:** Typing certificate of 35 wpm for five minutes with five or fewer errors completed within the previous twelve months.
Courses of Instruction

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.

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, *Transferrable 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.

**Experimental Courses**

The descriptor “Experimental” applies college-wide and is issued as a curricular placeholder identified by a standard number (98, 298 or 898) and by the general heading Experimental (X). These courses provide an opportunity for curriculum experimentation and innovation.

While the Experimental course option offers a department curricular opportunities, it also has some limitations, particularly for students. Credits are degree applicable (X 98, 298) as elective credits only.

Credits are transferable (X 98) as elective credits only.

Experimental courses cannot be placed on a program’s curriculum guide.

Experimental courses cannot be used as a pre- or corequisite for another course.

Experimental 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.

**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.

**LBCC Course** | **CAN Course**
--- | ---
ACCTG 1A & 1B | CAN BUS SEQ A
ADJUS 2 | CAN AJ 2
ADJUS 4 | CAN AJ 4
ADJUS 8 | CAN AJ 8
ANAT 1 & PHYSI 1 | CAN BIOL SEQ B
ANAT 1 | CAN BIOL 10
ANTHR 1 | CAN ANTH 2
ANTHR 2 | CAN ANTH 4
ART 1 & 2 | CAN ART SEQ A
ART 1 | CAN ART 2
ART 2 | CAN ART 4
ART 15 | CAN ART 8
ART 19AD | CAN ART 24
ART 23 | CAN ART 10
ART 30 | CAN ART 16
ART 31 | CAN ART 14
ART 35AD | CAN ART 26
ART 50 | CAN ART 6
ART 60 | CAN ART 12
BIO 1A & 1B | CAN BIOL SEQ A
BIO 2 | CAN BIOL 14
CBIS 6A | CAN BUS 6
CHEM 1A & 1B | CAN CHEM SEQ A
CHEM 1A | CAN CHEM 2
CHEM 1B | CAN CHEM 4
CHEM 3A & 3B | CAN CHEM SEQ B
CHEM 3A | CAN CHEM 6
CHEM 3B | CAN CHEM 8
CHIN 1 & 2 | CAN CHIN SEQ A
CHIN 1 | CAN CHIN 2
CHIN 2 | CAN CHIN 4
ECON 1A | CAN ECON 2
ECON 1B | CAN ECON 4
ENGL 1 & 2 | CAN ENGL SEQ A
ENGL 1 | CAN ENGL 2
ENGL 2 | CAN ENGL 4
ENGL 26 | CAN ENGL 6
ENGL 41 & 42 | CAN ENGL SEQ C
ENGL 41 | CAN ENGL 14
ENGL 42 | CAN ENGL 16
ENGL 46 & 47 | CAN ENGL SEQ B
ENGL 46 | CAN ENGL 8
ENGL 47 | CAN ENGL 10
ENGR 17 | CAN ENGR 12
ENGR 17 & 17L | CAN ENGR 6
ENGR 35 | CAN ENGR 8
FD 10 | CAN FCS 6
FD 20 | CAN FCS 22
FREN 1 & 2 | CAN FREN SEQ A
FREN 1 | CAN FREN 2
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CURRICULUM OFFERINGS

The courses offered 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 description 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 study of methods and techniques used in analyzing, recording and summarizing those procedures used in preparing a balance sheet along with the statements of income, retained earnings and cash flow for a corporation. The course describes and illustrates financial accounting principles including classification of accounting activities, recording of financial transactions, along with the presentation of the four basic financial statements for internal and external users with an emphasis on the corporate form business entity.

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

Topics in this course include the accounting theory and practice for manufacturing, departmental, and cost accounting techniques; performance evaluation; profit reporting and analysis; interpretation of financial statements and budgets; product pricing and performance evaluation; capital investment analysis; and business ethics. This course provides the students with information and techniques that management uses in evaluating the daily operations and related costs of a business, in planning future operations, making decisions, and developing overall business strategies.

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

This course provides students with experience using a commercial general ledger accounting program.

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
Prerequisite: ACCTG 200A or 1A or 201A-B and CBIS 2 or CAOTC 35 or 41E
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 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.
Courses of Instruction

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
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
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 (CAN AJ 8)
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
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
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
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
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
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
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
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
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
<th>Description</th>
<th>Transfer Status</th>
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<tbody>
<tr>
<td>ADJUS 20</td>
<td>Introduction to Corrections</td>
<td>3.0</td>
<td>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.</td>
<td>Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>ADJUS 22</td>
<td>Institutional Correction</td>
<td>3.0</td>
<td>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.</td>
<td>Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>ADJUS 24</td>
<td>Introduction to Private Security</td>
<td>3.0</td>
<td>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.</td>
<td>Transferable to CSU, see counselor for limitations.</td>
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<tr>
<td>ADJUS 25</td>
<td>Intro to Private Security Investigation</td>
<td>3.0</td>
<td>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.</td>
<td>Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>ADJUS 30</td>
<td>Risk Management/Assets Protection 1</td>
<td>3.0</td>
<td>A review of new technology, techniques and statutes in the management of losses for the protection of private and public agencies. Recaps loss control techniques using insurance as a secondary form of protection and insurance controls such as bonding, workers compensation and OSHA regulations.</td>
<td>Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>ADJUS 32</td>
<td>Risk Management/Assets Protection 2</td>
<td>3.0</td>
<td>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.</td>
<td>Transferable to CSU, see counselor for limitations.</td>
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<tr>
<td>ADJUS 40</td>
<td>Street Gangs and Law Enforcement</td>
<td>3.0</td>
<td>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.</td>
<td>Transferable to CSU, see counselor for limitations.</td>
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<tr>
<td>ADJUS 45</td>
<td>Drug Abuse and Law Enforcement</td>
<td>3.0</td>
<td>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.</td>
<td>Transferable to CSU, see counselor for limitations.</td>
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<tr>
<td>ADJUS 61AD</td>
<td>Defensive Tactics</td>
<td>1.0</td>
<td>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.</td>
<td>Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>ADJUS 62AB</td>
<td>Firearms</td>
<td>1.0</td>
<td>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.</td>
<td>Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>ADJUS 200</td>
<td>Constitutional Law for Criminal Justice</td>
<td>3.0</td>
<td>Provides a legal and ethical overview of the criminal justice system, emphasizing the protection of human rights and civil liberties under the constitutional law.</td>
<td>Transferable to CSU, see counselor for limitations.</td>
</tr>
</tbody>
</table>
Courses of Instruction

This course is designed to give an “in-depth” review and analysis of those important amendments in The Bill of Rights as they relate to and impact professionals in the Criminal Justice system. This course will provide a strong foundation for the student who is commencing a career in Criminal Justice. Topics will include, but will not be limited to, the structure of Federal and State court systems, search and seizure, arrests and detention, warrantless searches, Grand Jury proceedings, double jeopardy, self-incrimination, review of landmark cases, trial rights and guarantees.

**ADJUS 201** 0.5 unit
Civilian Employee Orientation
0.9 hour lecture
Grading: letter grade or credit/no credit
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 for the basic certificate.

**ADJUS 250M1** 8.0 units
Reserve Officer Training Module D
21.0 hour lecture, 3.5 hours laboratory
Grading: credit/no credit
Fundamental training for reserve police officers. An intro to the profession, community relations, criminal law, rules of evidence, communications, vehicle operations, force and weaponry, patrol procedures, traffic, criminal investigation, custody, drill and formation. Meets the requirements of the Commission on Peace Officers Standards and Training Level I certification and assignment.

**ADJUS 250M2** 3.0 units
Reserve Officer Training-Level II
6.4 hours lecture
Grading: credit/no credit
Police training for intermediate certification by POST. Level III. A basic overview and update of professionalism, ethics and the criminal justice system including law enforcement and courts. Discretionary decision making, review of legal statutes, laws of evidence, investigations, firearms, safety, community relations, communications, arrest and control are discussed.

**ADJUS 250M3** 2.0 units
Reserve Officer Training Level III
3.0 hours lecture, 0.5 hour laboratory
Grading: credit/no credit
The fundamentals of police training for the intermediate certification by POST, Level III. A basic overview and update of the professionalism, ethics and the criminal justice system including law enforcement and the courts. Discretionary decision making, review of legal statutes, laws of evidence, investigations, firearms, safety, community relations, communications, arrest and control are discussed.

**ADJUS 250M4** 4.0 units
Reserve Officer Training Level II & III
8.0 hours lecture, 2.0 hours laboratory
Grading: credit/no credit
An in-depth review of the history and ethical principles of law enforcement and professionalism, legal elements of crimes, report writing, vehicle operating, discretionary decision making and an overview of operations. Meets certification requirements for Reserve Level II and III. Qualifies a student for a Basic Post academy certificate.

**ADJUS 250M5** 14.0 units
Reserve Officer Training Level I, II, III
39.0 hours lecture, 5.0 hours laboratory
Grading: credit/no credit
The fundamentals of police training for reserve officers. An overview of professional orientation, community relations, law, laws of evidence, communications, vehicle operation, force and weaponry, patrol procedures, traffic, criminal investigation, custody, drill and formation. Review of legal elements of crime, report writing, advanced weaponry, first aid and CPR, discretionary decision-making and an overview of operations. Meets the requirements of the California Commission on Peace Officers Standards and Training for Reserve level I, II, III certification and assignment.

**ADJUS 253** 3.0 units
Understanding Domestic Violence
3.0 hours lecture
Courses of Instruction

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, 4.1 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 304M1** 1.0 unit
**Criminal Law-Assets**
1.3 hours lecture
Grading: credit/no credit
Designed to acquaint students with issues pertaining to the legal aspects of assets seizure and forfeiture.

**ADJUS 305M1** 0.5 unit
**Community/Human Relations-Verbal Judo**
1.0 hour lecture
Grading: credit/no credit
An intro to the use of verbal skills in community and human relations. Learn to use words to facilitate communications with clients of the criminal justice system.

**ADJUS 305M2** 2.0 units
**Community/Human Relations-Conduct Update**
2.2 hours lecture
Grading: credit/no credit
Enhance a police officer’s understanding and awareness relative to community culture and needs, focusing on contemporary issues affecting law enforcement and emphasizing customer service and interpersonal skills.

**ADJUS 316** 0.5 unit
**Vice/Narcotics & Organized Crime-Drug Re**
0.5 hour lecture
Grading: letter grade or credit/no credit
Covers symptoms of narcotics, organized crime and drug problems and management of crime control units.

**ADJUS 318** 1.0 unit
2.6 hours lecture
Grading: credit/no credit
Teaches K-9 patrol tactics, field activities, handling requests for K-9 services, mechanics of searches, pursuit tracking and felony vehicle stops. Designed for in-service K-9 personnel.

**ADJUS 318M1** 0.5 unit
**Police Field Ops-Metro**
1.6 hours lecture
Grading: credit/no credit
This course is designed to acquaint students with tactics related to activities of the Metro Division of a police agency.

**ADJUS 318M2** 2.0 units
**Police Field Operations-FTO**
1.7 hours lecture, 0.6 hour laboratory
Grading: credit/no credit
For in-service personnel to develop skills necessary for field training officers. Includes communication, writing, administration and evaluation training. Meets requirements for Peace Officer Standards and Training requirements.

**ADJUS 318M3** 1.0 unit
**Police Field Operations: FTO Update**
1.1 hours lecture
Grading: credit/no credit
Designed to update in-service personnel on issues relating to the field training program. Meets California Commission on Peace Officer Standards and Training requirements.

**ADJUS 318M4** 1.0 unit
**Police Field Operations — Metro II**
1.6 hours lecture, 1.6 hours laboratory
Grading: credit/no credit
Courses of Instruction

Acquaints students with tactics related to specific activities of the prostitution abatement squad of the metro division of a police agency.

ADJUS 318M5 2.0 units
Police Field Operations: Motorcycle Trng
1.1 hours lecture , 3.3 hours laboratory
Grading: credit/no credit
Teaches motor officer candidates the skill points of safety of traffic law enforcement on a police motorcycle.

ADJUS 319 0.5 unit
Fingerprint Classif & Ident/Latent Print
0.5 hour lecture
Grading: credit/no credit
Teaches basics of fingerprinting, pattern interpretation, methods of recording and lifting fingerprints, preparation of court displays and expert testimony.

ADJUS 331 1.0 unit
Jail Operations-Level I Update
1.3 hours lecture
Grading: credit/no credit
Provides theory and practice in basic jail operations for in-service and pre-service students preparing for entry-level employment in city and county jails. Introduction to all phases of jail operation from legal aspects to stress management. Typically offered for one week.

ADJUS 342 0.5 unit
Arrest and Firearms: Tactical Training
0.5 hour lecture
Grading: credit/no credit
A basic course in the laws, policies and procedures used by peace officers in making arrests and handling of firearms; meets the requirements of Section 832 of the penal code. Certified by the California Commission on Peace Officer Standards and Training.

ADJUS 350 4.0 units
Basic Police Trng-Probation Procedure
8.8 hours lecture , 2.2 hours laboratory
Grading: credit/no credit
Basic in-service training for probation officers, including fundamentals of probation procedures, criminal law, report writing, court presentations, and case management. Meets the requirements of the California Commission on Peace Officers Standards and Training.

ADJUS 350M1 3.5 units
Basic L.E. Training-SWAT
3.3 hours lecture , 1.6 hours laboratory
Grading: credit/no credit
Designed to acquaint students with operations encountered by members of special weapons and tactics (SWAT) teams.

ADJUS 350M2 3.5 units
Basic Law Enforcement Training — SWAT II
3.3 hours lecture , 1.6 hours laboratory
Grading: credit/no credit
Acquaints students with advanced operations of special weapons and tactics (SWAT) teams.

ADJUS 351 1.0 unit
Reserve Officer Training: AOTC
1.3 hours lecture
Grading: credit/no credit
Advanced training for Reserve Police Officers. An in-depth review of the history and ethical principles of law enforcement, a review of the legal elements of major crimes, communications including report writing, vehicle operations and liability, advanced training in force and weaponry, patrol.

ADJUS 354 3.0 units
Res Officer Train Level II & III-Defense
4.4 hours lecture
Grading: credit/no credit
Fundamentals of police training for Reserve Officers Level II and III. An in-depth review of the history and ethical principles of law enforcement and professionalism, legal elements of crimes, report writing, vehicle operation and liability, force and weaponry, patrol procedures, first aid and CPR, discretionary decision making and an overview of operations. Meets certification requirements for Reserve Level II and III, and qualifies a student for a Basic Post academy certificate.

ADJUS 362AB 0.5 unit
Firearms Instructor's Training
2.2 hours laboratory
Grading: credit/no credit
Learn legal provisions, firing methods, safety precautions and restrictions covering firearms and special weapons used in law enforcement. Intended for in-service personnel whose objective is duty as range personnel.

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.

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 to become technicians in industrial 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
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
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.
**Courses of Instruction**

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, 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 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.
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.
Courses of Instruction

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
This course is designed to facilitate the development of a fundamental knowledge of the health care field. Careers in health care both now and in the future will be discussed. Some of the health care procedures common to all health care fields will be demonstrated.

Transfer Status: Transferable to CSU, see counselor for limitations.

AH 60  3.0 units
Medical Terminology
3.0 hours lecture
Grading: letter grade
This course is designed to develop a comprehensive medical vocabulary. Emphasis will be placed on spelling, definitions, and pronunciation of terms related to the body systems and medical specialties.

Transfer Status: Transferable to CSU, see counselor for limitations.

AH 61  2.0 units
Integration of Patient Care
1.0 hour lecture, 3.0 hours laboratory
Grading: letter grade
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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
<th>Hours</th>
<th>Recommended Preparation</th>
<th>Prerequisite(s)</th>
<th>Grading:</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>AH 70</td>
<td>0.5</td>
<td>Infection Control in Health Care</td>
<td>0.5 lecture</td>
<td></td>
<td></td>
<td>letter grade</td>
<td>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.</td>
</tr>
<tr>
<td>AH 206A</td>
<td>3.0</td>
<td>Beginning Medical Transcription</td>
<td>2.0 lecture, 3.0 hours laboratory</td>
<td>AH 60 (may be taken concurrently) and type 35 WPM.</td>
<td>letter grade or credit/no credit</td>
<td>letter grade</td>
<td>Recommended Preparation: AH 60 (may be taken concurrently) and type 35 WPM. 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.</td>
</tr>
<tr>
<td>AH 206B</td>
<td>3.0</td>
<td>Advanced Medical Transcription</td>
<td>2.0 lecture, 3.0 hours laboratory</td>
<td>AH 206A</td>
<td>letter grade or credit/no credit 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.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AH 276</td>
<td>1.0</td>
<td>Health Care Law</td>
<td>1.0 lecture</td>
<td></td>
<td></td>
<td>letter grade</td>
<td>This course is an introduction to medical vocabulary, including spelling, definition and pronunciation of terms related to the major body systems. This course is designed to prepare a student for AH 60. This course is not accepted as a prerequisite or corequisite for any Allied Health Program or Nursing Program at Long Beach Community College.</td>
</tr>
<tr>
<td>AH 206</td>
<td>1.5</td>
<td>Math for Medications</td>
<td>1.0 lecture</td>
<td></td>
<td></td>
<td>letter grade</td>
<td>This course is designed to enable the student to acquire the knowledge to understand and solve various math manipulations basic to computing drug problems.</td>
</tr>
<tr>
<td>AH 207</td>
<td>1.0</td>
<td>Basic Arrhythmia Recognition</td>
<td>0.5 lecture</td>
<td></td>
<td></td>
<td>letter grade</td>
<td>Prerequisite: ADN 11B and ADN 11BL or VOCN 278B and VOCN 278BL or EMT 251 and EMT 251L or AH 61. Grading: credit/no credit 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.</td>
</tr>
<tr>
<td>AH 208</td>
<td>1.5</td>
<td>Intravenous Therapy</td>
<td></td>
<td></td>
<td></td>
<td>letter grade</td>
<td>Prerequisite: DMI 12 &amp; AH 61 or VOCN 286 &amp; VOCN 290A or ADN 11B &amp; ADN 11BL or CRT Certificate licensed as a VN or RN. Current CPR card for health care providers and malpractice insurance. Grading: credit/no credit 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 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.</td>
</tr>
<tr>
<td>AH 220</td>
<td>1.5</td>
<td>Phlebotomy</td>
<td>1.0 lecture, 1.5 hours laboratory</td>
<td></td>
<td></td>
<td>credit/no credit</td>
<td>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.</td>
</tr>
<tr>
<td>AH 220AD</td>
<td>1.0</td>
<td>Phlebotomy Practicum</td>
<td>3.0 hours laboratory</td>
<td>AH 220</td>
<td>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.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AH 222</td>
<td>1.0</td>
<td>Preparation for Medical Terminology</td>
<td>3.0 hours lecture</td>
<td></td>
<td></td>
<td>letter grade</td>
<td>This course is an introduction to medical vocabulary, including spelling, definition and pronunciation of terms related to the major body systems. This course is designed to prepare a student for AH 60. This course is not accepted as a prerequisite or corequisite for any Allied Health Program or Nursing Program at Long Beach Community College.</td>
</tr>
<tr>
<td>AH 225</td>
<td>0.5</td>
<td>Basic Arrhythmia Recognition</td>
<td>0.5 lecture</td>
<td></td>
<td></td>
<td>letter grade</td>
<td>Prerequisite: ADN 11B and ADN 11BL or VOCN 278B and VOCN 278BL or EMT 251 and EMT 251L or AH 61. Grading: credit/no credit 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.</td>
</tr>
<tr>
<td>AH 226</td>
<td>0.5</td>
<td>Health Care Law</td>
<td>1.0 lecture</td>
<td></td>
<td></td>
<td>letter grade</td>
<td>This course is an introduction to medical vocabulary, including spelling, definition and pronunciation of terms related to the major body systems. This course is designed to prepare a student for AH 60. This course is not accepted as a prerequisite or corequisite for any Allied Health Program or Nursing Program at Long Beach Community College.</td>
</tr>
<tr>
<td>AH 227</td>
<td>1.0</td>
<td>Health Care Law</td>
<td>1.0 lecture</td>
<td></td>
<td></td>
<td>letter grade</td>
<td>This course is an introduction to medical vocabulary, including spelling, definition and pronunciation of terms related to the major body systems. This course is designed to prepare a student for AH 60. This course is not accepted as a prerequisite or corequisite for any Allied Health Program or Nursing Program at Long Beach Community College.</td>
</tr>
<tr>
<td>AH 228</td>
<td>1.0</td>
<td>Health Care Law</td>
<td>1.0 lecture</td>
<td></td>
<td></td>
<td>letter grade</td>
<td>This course is an introduction to medical vocabulary, including spelling, definition and pronunciation of terms related to the major body systems. This course is designed to prepare a student for AH 60. This course is not accepted as a prerequisite or corequisite for any Allied Health Program or Nursing Program at Long Beach Community College.</td>
</tr>
<tr>
<td>AH 229</td>
<td>1.0</td>
<td>Health Care Law</td>
<td>1.0 lecture</td>
<td></td>
<td></td>
<td>letter grade</td>
<td>This course is an introduction to medical vocabulary, including spelling, definition and pronunciation of terms related to the major body systems. This course is designed to prepare a student for AH 60. This course is not accepted as a prerequisite or corequisite for any Allied Health Program or Nursing Program at Long Beach Community College.</td>
</tr>
</tbody>
</table>
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 (CAN BIOL 10) 4.0 units**

Human Anatomy
3.0 hours lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
Anatomy 1 is the study of the structure of the human body. This course provides the basic knowledge and lab skills to meet the needs of pre-nursing, physical education, physical therapy, and allied health majors. Dissection of a cat is required.

**ANAT 41**

Anatomy & Physiology
4.0 hours lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
Anatomy 41 is an introduction to the study of the structures and functions of the human body. Knowledge learned in lecture is reinforced by laboratory experiments and dissections. This course is designed for students in certain health related majors as well as for students not majoring in the life sciences. Dissection of the fetal pig is required.

**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.

**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.

**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.

**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.

**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.
Courses of Instruction

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 DRAFT 201
Grading: letter grade
This is a beginning computer aided drafting (CAD) course that uses the most recent version of AutoCAD and focuses on developing basic architectural skills. The student will develop basic two-dimensional (2D) AutoCAD 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 simple building. Students learn to solve basic design problems of site design, space relationships, roof shapes and building aesthetics. Alternative solutions to design problems will be explored using freehand sketching and computer generated techniques.
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
This is a beginning computer aided drafting (CAD) course that uses the most recent version of AutoCAD and focuses on developing basic architectural skills. The student will develop two-dimensional (2D) AutoCAD production drawing skills. Arch 61 is one half of Arch 60, is transferable and leads to a certificate in architectural drafting.
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 ARCHT60, 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 ARCHT62, with an intro to 3D drafting 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
Prerequisite: ARCHT 65
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 ARCHT65, with an intro to 3D drawing systems. Develop structural drawings for design problems developed in ARCHT65 using the computer and freehand sketching techniques. The concepts of lateral forces, vertical forces and various structural systems will be introduced. 3D plan oblique drawings
and details of the project will be developed. The concepts of tonal values, shade, and shadows will be introduced and applied to the drawings. (Units and content are one-half of ARCHT64.)

Transfer Status: Transferable to CSU, see counselor for limitations.

**ARCHT 70AB** 8.0 units
Architectural Design
6.0 hours lecture, 6.0 hours laboratory
Prerequisite: ARCHT 64 or ARCHT 65 and 66
Grading: letter grade

An advanced computer aided drafting course (2 semesters, A and B) that uses AutoCAD 2000i for 2D drawings and an intro to 3D Studio Viz for the development of 3D drawing. Focuses on developing further the 2D CAD production and 3D drawing skills learned in ARCHT64. Develop advanced 2D CAD production drawings for building one's own design. Resolve advanced design and structural problems using the computer and freehand sketching techniques. 3D models and details of the project will be developed. The use of tonal values and shade and shadows will be applied to the drawings. An opportunity to design and build a portable structure may exist in the spring semester. A portfolio of work and a resume will be developed.

Transfer Status: Transferable to CSU, see counselor for limitations.

**ARCHT 71AD** 4.0 units
Architectural Design
3.0 hours lecture, 3.0 hours laboratory
Prerequisite: ARCHT 66
Grading: letter grade

A course of up to four semesters (A,B,C,D) to develop skills in advanced computer aided drafting that uses AutoCAD 2000i for 2D drawings and 3D Studio Viz for 3D drawings. Focuses on developing further the 2D CAD production and 3D drawing skills learned in ARCHT64. Develop advanced 2D CAD production drawings for a building of one's own design. Resolve advanced design and structural problems using the computer and freehand sketching techniques. 3D models and details of the project will be developed. The use of tonal values and shade and shadows will be applied to the drawings. A portfolio of work and a resume will be developed.

Transfer Status: Transferable to CSU, see counselor for limitations.

**ARCHT 273AD** 4.0 units
Work Experience — Architectural Drafting
1.0 hour lecture, 12.5 hours laboratory
Corequisite: Enrollment in at least seven units including this course.

Recommended Preparation: DRAFT 51A or DRAFT 201 or DRAFT 202
Grading: letter grade or credit/no credit

Vocational learning experiences through employment directly related to careers in Architectural Design Drafting. 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 and or internships directly related to occupational goals or careers of interest to the student.

Transfer Status: Transferable to CSU, see counselor for limitations.

**ART (ART)**

**ART 1 (CAN ART 2)** 3.0 units
Art and Civilization
3.0 hours lecture
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** 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 2 (CAN ART 4)** 3.0 units
Art and Civilization
3.0 hours lecture
Grading: letter grade or credit/no credit

An historical approach to painting, sculpture and architecture from Renaissance to modern times, emphasizing the relationship of art to concurrent philosophical, political and social ideas. Discussion includes key artists and their techniques. Art 1 is NOT a prerequisite.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.
Courses of Instruction

ART 2H  3.0 units
Honors Art and Civilization
3.0 hours lecture
Prerequisite: Qualification for the Honors Program
Grading: letter grade or credit/no credit
An historical approach to painting, sculpture and architecture from Renaissance to modern times emphasizing the relationship of art to concurrent philosophical, political and social ideas. Discussion includes key artists and their techniques. Art 1 is NOT a prerequisite.
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
Grading: letter grade or credit/no credit
This course is 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 also will 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
AA 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 also will 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
This course serves as a comprehensive introduction to the art traditions of India, Southeast Asia, China, Korea and Japan. The historical development of the arts is examined within their broader cultural context.
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
This course serves as a comprehensive introduction to the art traditions of India, Southeast Asia, China, Korea and Japan. The historical development of the arts is examined within their broader cultural context.
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
This course is an overview of the major historical periods in Western art. After learning the basics of how to look at art, students will be introduced to the major styles of western and non-western art using slides, lectures and videos. Each lecture is followed the next week by a bus trip to view an exhibit related to the lecture. Credit will be earned by completing a report/analysis of individual art works. Designed for art majors and non-majors.
Transfer Status: Transferable to 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
This course introduces the materials and techniques involved in making art through a broad survey of art styles, sources and individual artists. On alternate weeks a slide assisted lecture will show the steps involved in the artistic process and introduce selected art styles and artists. On a field trip the following week, students observe the process or its product. Credit will be earned by completing assigned worksheets or analyses of selected works of art. The course is for art majors and non-majors.
Transfer Status: Transferable to 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
This course is part of a program that introduces students to regional and cultural exhibits of world art not available on a continuing basis. It 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 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
Students will be introduced 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 lectures and visual aids, students become aware of artistic ideas, media and techniques. The course is 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
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 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.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**ART 14AD** 1.5 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 CSU, see counselor for limitations.

**ART 15 (CAN ART 8)** 3.0 units

**Beginning Drawing**
2.0 hours lecture, 4.0 hours laboratory
Grading: letter grade or credit/no credit
This is an introductory studio experience in freehand drawing emphasizing accurate observation, shading, perspective, proportion and composition. Students develop the use of these skills as a means of personal expression.
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
This is an advanced studio drawing experience with emphasis on the employment of personal expression 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
Recommended Preparation: 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 CSU, see counselor for limitations.

**ART 18AD** 3.0 units

**Illustration II**
2.0 hours lecture, 4.0 hours laboratory
Recommended Preparation: 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 CSU, see counselor for limitations.

**ART 19AD (CAN ART 24)** 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. UC course limitation, see counselor.
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
Courses of Instruction

interpretive figure drawing, drawing and painting and art majors interested in transferring to a university.

Transfer Status: Transferable to 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 CSU, see counselor for limitations.

ART 23 (CAN ART 10) 3.0 units
Beginning Painting
2.0 hours lecture, 4.0 hours laboratory
Recommended Preparation: ART 15
Grading: letter grade or credit/no credit
Introductory 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. UC course limitations, see counselor.

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
This course offers an opportunity to explore and develop creative attitudes, values and personal expression in the visual arts. It investigates, emphasizing unique techniques, methods and tools, using the elements and principles of two-dimensional pictorial composition in an imaginative, personal manner. CSU course limitation, see counselor.

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
This is an advanced course in watercolor painting with an emphasis on the employment of personal expression as applied to 20th century concepts and trends. For UC course limitations, see counselor.

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
The Art 27AD course is studio experience designed for students with basic painting skills. The course will introduce them to historical and contemporary visual art concepts and techniques. The students will develop paintings that reflect personal expression, experimental media and current trends in painting.

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
This course is an introductory 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
Courses of Instruction

Grading: letter grade or credit/no credit
This course is an introduction to media in the design and creation of decorative and/or functional objects. Emphasis is on skill acquisition and refinement in a context of art and functional design.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 35AD (CAN ART 26) 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 scope and limitations of contemporary metalsmithing through the design and construction of original projects. Knowledge of various specialized soldering, forming and surface techniques is demonstrated in the construction of projects. Emphasis is on skill acquisition and refinement in a context of art and design.
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
Prerequisite: One semester of ART 35AD
Grading: letter grade or credit/no credit
The exploration of wax-working, casting and mold making as methods for creating jewelry and objects, emphasizing use of inexpensive, available tools and methods.
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
Prerequisite: One semester of ART 35AD
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.

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 Computergraphics
2.0 hours lecture, 4.0 hours laboratory
Grading: letter grade or credit/no credit
This course will help demystify computer graphics for beginners and give a broad overview of the concepts involved in two dimensional computer graphic applications. The course covers terminology, basic operating systems and art related peripheral devices.
Transfer Status: Transferable to CSU, see counselor for limitations.

ART 42 3.0 units
Intro/3D & Multimedia Computergraphics
2.0 hours lecture, 4.0 hours laboratory
Prerequisite: ART 41
Recommended Preparation: ART 30 and 31
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
In this course students learn to apply computer graphics to a variety of communication needs. The unique issues associated with multidimensional/non-linear communication are addressed. Students apply these principles to the creation of actual websites through hands-on use of a variety of software applications. This course is intended 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
This course is an exploration of the basic use of computers for graphic design. Students learn the basics of graphic design in preparation of visual communications for both digital and print media. By completing assignments on the computer, students will create documents that effectively combine text and graphics. Projects will be created using a variety of input and output devices as well as software.
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
Digital image creation is explored using vector and raster based software applications such as Adobe Illustrator and Photoshop. Students learn the appropriate use of image creation software and hardware. Images are developed for both commercial and fine art applications.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ART 46AD 3.0 units
Computer Art & Design in 3D Modeling
2.0 hours lecture, 4.0 hours laboratory
Prerequisite: ART 41
Recommended Preparation: ART 31 and 42
Grading: letter grade or credit/no credit
Students digitally construct three-dimensional objects and learn to deal with abstract objects in virtual three-dimensional space. Specific relationships will be made between electronic modeling and the visual arts, in
particular, sculpture, animation, illustration, and other areas of computer graphics.  

*Transfer Status: Transferable to CSU, see counselor for limitations.*

**ART 47AD**  
**Computer Art and 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  
This course introduces the skills and software used to create digital multimedia and animation. Students will learn the theories of computer-based animation and interactive multimedia design. Students will also learn how to digitally create stand-alone, as well as interactive multimedia/animation, projects.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**ART 48AD**  
**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  
Students learn to develop digital content for video requirements on the computer. Students use non-linear editing and compositing of clips to create professional quality productions.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**ART 49AD**  
**Special Studies-Computer Art and Design**  
2.0 hours lecture, 4.0 hours laboratory  
Prerequisite: ART 41  
Recommended Preparation: Four courses from ART 43AD, 44AD, 45AD, 46AD, 47AD and 48AD  
Grading: letter grade or credit/no credit  
This course is for art majors in computer art and design who have completed a series of computer art classes and are prepared to do advanced work in a specific area. It will allow students to develop personal skills for their chosen specialty in the computer art field. Students work independently on projects formulated with faculty assistance.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**ART 50 (CAN ART 6)**  
**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**  
**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. 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 52AD**  
**Ceramics III**  
2.0 hours lecture, 4.0 hours laboratory  
Prerequisite: ART 51AD  
Grading: letter grade or credit/no credit  
Develop a more intensive knowledge and ability to produce well-designed ceramic objects. Emphasizes utilitarian forms, related clay, glaze and firing technology, aesthetic judgment, problem-solving capabilities, skills and knowledge of materials.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**ART 53AD**  
**Ceramics IV**  
2.0 hours lecture, 4.0 hours laboratory  
Prerequisite: ART 52AD  
Grading: letter grade or credit/no credit  
Develop a more intensive knowledge and ability to produce well-designed ceramic forms. Emphasizes nonutilitarian form, related clay, glaze and firing technology, aesthetic judgment, problem-solving capabilities, skills and knowledge of materials.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**ART 55AD**  
**Introduction to Graphic Design**  
1.0 hour lecture, 2.0 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**  
**Introduction to Typography**  
1.0 hour lecture, 2.0 hours laboratory  
Grading: letter grade or credit/no credit  
This course is for all students considering work in the field of graphic and communication design. The study of lettering and typographic form is explored from historic, theoretic and aesthetic views. Students learn the appropriate use of specific families of type.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**ART 60 (CAN ART 12)**  
**Beginning Sculpture**  
2.0 hours lecture, 4.0 hours laboratory  
Recommended Preparation: ART 30  
Grading: letter grade or credit/no credit
Courses of Instruction

This is an introductory studio course 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. This course is 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

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 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 photo-silkscreen.

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

Recommended Preparation: ART 31

Grading: letter grade or credit/no credit

Introduction 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.
Courses of Instruction

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 field of art.  
*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 studio projects within the field of art.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

ART 292 3.0 units
Professional Skills for Artists
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
This course emphasizes developing skills for portfolio presentation as a student, professional artist or art director. Lectures and demonstrations will include photographing artwork, documentation of artwork, matting, framing, resume and artist statement writing, portfolio development. Class lectures will also include information on exhibitions, criticism, ethical and contractual issues, and grants.

ART 600 0.0 unit
Two-Dimensional Art Exploration
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.

ART 601 0.0 unit
Three-Dimensional Art Exploration
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.

ART 602 0.0 unit
Specialty/Technical Art Exploration
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.

ART 603 0.0 unit
Exploration in Art History
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.

ASTRONOMY (ASTR)

ASTR 1 3.0 units
Elementary Astronomy
3.0 hours lecture
Grading: letter grade or credit/no credit
This course is an introduction to astronomy. Topics to be covered include the physical nature of the solar system, stars and stellar systems, and the universe as a whole, including not only their current state, but also theories of their origin and evolution.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

ASTR 1L 2.0 units
Astronomy Laboratory
1.0 hour lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
This course provides an introduction to observational astronomy. Various projects provide training in astronomical observation, and in the analysis of numeric and graphical data. Passing both ASTR 1 and ASTR 1L satisfies a physical science lab requirement.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

AUTO BODY REPAIR (ABODY)

ABODY 211 9.0 units
Intro to Basic Auto Body Repair
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.

ABODY 212 9.0 units
Minor Collision Repair
5.0 hours lecture, 13.3 hours laboratory
Recommended Preparation: ABODY211
Grading: letter grade or credit/no credit
Intro to basic auto body alignment and frame straightening principles involving: theory, safety practices, arc welding, frame construction, alignment, hydraulic body jacks, sectioning and frame dozer.

ABODY 213 9.0 units
Major Collision Repair
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.

ABODY 214 9.0 units
Painting Techniques
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.
Courses of Instruction

ABODY 419AD 4.0 units
Auto Body Repair
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.

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 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 236 9.0 units
Automotive Emission & Computer Control
5.0 hours lecture, 13.3 hours laboratory
Recommended Preparation: AMECH423
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 272AD 3.0 units
Work Experience — Automotive
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 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 280AD 2.0 units
Automotive Mechanics Adjunct
6.0 hours laboratory
Corequisite: Current enrollment in one or more of the following courses: AMECH 231, 232, 233 or 236.
Grading: letter grade or credit/no credit
This course provides additional practical experience for automotive majors wanting to supplement the instruction in the primary automotive class in which the student is enrolled. Topics can include engines, transmissions, brakes, steering, electrical, fuel systems, emissions, and/or computer controls.

AMECH 331M1 4.5 units
Engine Repair
2.5 hours lecture, 6.7 hours laboratory
Grading: letter grade or credit/no credit
“Hands on” instructions and demonstrations in automobile engines, including theory, safety, tools and fasteners, nomenclature.

AMECH 331M2 4.5 units
Transmissions
2.5 hours lecture, 6.7 hours laboratory
Grading: letter grade or credit/no credit
“Hands on” instructions and demonstrations in automobile transmissions, including theory, safety, tools and fasteners, nomenclature.

AMECH 332M1 4.5 units
Automotive Brake Systems
2.5 hours lecture, 6.7 hours laboratory
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 automobiles and small trucks. Includes testing, diagnosing and modern methods of servicing the brake system. Preparation for taking the Automotive Service Excellence (ASE) test is emphasized.

AMECH 332M2 4.5 units
Auto Wheel Alignment
2.5 hours lecture, 6.7 hours laboratory
Grading: letter grade or credit/no credit
## Courses of Instruction

Covers the theory, design and operation of chassis units affecting stability, power flow, suspension, steering in automobiles and small trucks. Includes testing, trouble diagnosis and modern methods of servicing. Preparation for taking the Automotive Service Excellence (ASE) test is emphasized.

**AMECH 333M1**

**Automotive Electrical System**

- 2.5 hours lecture, 6.7 hours laboratory
- Grading: letter grade or credit/no credit
- Covers the testing and repair of automotive charging and starting systems. Automotive ignition systems (conventional and transistorized) and operation of automotive oscilloscopes (conventional and computer assisted) are covered. Preparation for taking the ASE (Automotive Service Excellence) test is emphasized.

**AMECH 333M2**

**Automotive Fuel Systems**

- 2.5 hours lecture, 6.7 hours laboratory
- Grading: letter grade or credit/no credit
- Covers the testing and repair of automotive fuel systems (carburetion and fuel injection) and operation of automotive oscilloscopes for testing purposes. Preparation for taking the ASE (Automotive Service Excellence) test is emphasized.

**AMECH 336M1**

**Computerized Engine Management**

- 2.5 hours lecture, 6.7 hours laboratory
- Recommended Preparation: AMECH233 or 333M1 and M2
- Grading: letter grade or credit/no credit
- Covers operation and testing of computerized electronic engine management systems. Preparation for taking the Automotive Service Excellence (ASE) test, and the State B.A.R. Smog check license is emphasized.

**AMECH 336M2**

**Automotive Emission Systems**

- 2.5 hours lecture, 6.7 hours laboratory
- Recommended Preparation: AMECH233 or 333M1 and M2
- Grading: letter grade or credit/no credit
- Covers the California State approved “Clean Air Course”, as well as the operation and testing of the emission control systems. Preparation for taking the Automotive Service Excellence (ASE) test, and the State B.A.R. Smog Check license test is emphasized.

**AMECH 421**

**Auto Mechanics I**

- 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**

**Auto Air Conditioning**

- 2.0 hours lecture, 3.0 hours laboratory
- Grading: letter grade or credit/no credit
- Covers tools and equipment, refrigeration fundamentals, electrical systems, air distribution, automatic air conditioning, installation, maintenance and repair of auto air conditioning.

**AMECH 426**

**Clean Air Car**

- 2.9 hours lecture, 1.5 hours laboratory
- Grading: letter grade or credit/no credit
- Prepares the mechanic to take the California Smog Check exam and obtain a license to work as a Smog Check mechanic. A prerequisite for admission into the state-administered Smog Check Examination. Includes all state required Bureau of Automotive Repair Clean Air Car and latest update course materials.

**AMECH 430**

**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**

**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**

**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**

**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
- This course covers the construction, operation, maintenance, adjustment and overhaul of manual and automatic transmissions.

**AMECH 438**

**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
- Prepares the mechanic to take 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).
Courses of Instruction

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 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 extensively used in fleet service. This NATEF certified course 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 in compressed natural gas systems is 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. Lab intensive training in Natural Gas spark fired vehicles 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
H D Alt Fuel Engine Diagnosis & Repair
3.0 hours lecture, 1.5 hours laboratory
Grading: letter grade or credit/no credit
Covers OEM and aftermarket spark ignited, alternatively-fueled truck and bus engines with an emphasis on computer controlled fuel management. The theory of operation, conversion, trouble-shooting and maintenance of alternatively-fueled heavy duty engines, emphasizing natural gas and computer controlled fuel management systems. Includes both factory and after-market dedicated systems. 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 diagnosis and repair of light and medium duty alternative fuel vehicles including aftermarket and OEM systems. The theory of 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 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.

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.

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 brake safety inspections and vehicle inspections. Job seeking skills included. Also excellent for the do-it-yourselfer who wants to learn how professionals do brake service.

AVIATION MAINTENANCE TECHNICIAN (AVMNT)

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
This course partially fulfills the requirements stated in FAR 147, including safety, wood structures, aircraft covering, sheet metal structures, ice and rain control, welding, aircraft finishing, cleaning and corrosion control, wood structures and aircraft drawings. This course is typically offered for nine weeks.

AVMNT 242 8.0 units
Aircraft Systems and Components 1
6.2 hours lecture, 9.3 hours laboratory
Recommended Preparation: AVMNT241
Grading: letter grade
Partially fulfills the requirements stated in FAR 147. 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.

AVMNT 243 8.0 units
Aircraft Systems and Components 2
6.2 hours lecture, 9.3 hours laboratory
Recommended Preparation: AVMNT242
Grading: letter grade
Partially fulfills the requirements stated in FAR 147. Includes safety, assembly and rigging, airframe inspection, hydraulic and pneumatic power systems, aircraft electrical systems, position and warning systems, fluid line and fittings, cleaning and corrosion control. Typically offered for nine weeks.

AVMNT 251 8.0 units
Powerplant Theory and Maintenance
6.2 hours lecture, 9.3 hours laboratory
Recommended Preparation: AVMNT211
Grading: letter grade
Partially fulfills the requirements stated in FAR 147. Includes safety, reciprocating engine-A, turbine engine-A, lubrication systems and maintenance forms and records. Typically offered for nine weeks.

AVMNT 252 8.0 units
Powerplant Systems and Components 1
6.2 hours lecture, 9.3 hours laboratory
Recommended Preparation: AVMNT251
Grading: letter grade
Partially fulfills the requirements stated in FAR 147. Includes safety, reciprocating engine-A, turbine engine-B, engine instrument 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.

AVMNT 253 8.0 units
Powerplant Systems and Components 2
6.2 hours lecture, 9.3 hours laboratory
Recommended Preparation: AVMNT252
Grading: letter grade
Partially fulfills the requirements stated in FAR 147. 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.

AVMNT 427A 4.0 units
Aviation Electronics (Avionics)
3.0 hours lecture, 3.0 hours laboratory
Grading: letter grade
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.

AVMNT 427B 4.0 units
Aviation Electronics (Avionics)
3.0 hours lecture, 3.0 hours laboratory
Prerequisite: AVMNT 427A
Grading: letter grade
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.

AVMNT 440 4.0 units
Aircraft Mechanics License Preparation
3.0 hours lecture, 3.0 hours laboratory
Prerequisite: AVMNT 243 or AVMNT 253
Grading: letter grade or credit/no credit
Review of theoretical and technical information related to airframe and powerplant mechanics in preparation for the FAA written, oral and practical exams.

AVMNT 460 4.0 units
Airframe Structures 1
3.0 hours lecture, 3.0 hours laboratory
Grading: letter grade
Partially fulfills the requirements for airframe structures stated in FAR 147 including wood structures, aircraft covering and sheet metal structures.

AVMNT 461 4.0 units
Airframe Structures 2
3.0 hours lecture, 3.0 hours laboratory
Grading: letter grade
Partially fulfills the requirements for airframe structures stated in FAR 147, including ice and rain control, welding, aircraft finishing, cleaning and corrosion control and aircraft drawings.

AVMNT 462 4.0 units
Aircraft Systems and Components 1
3.0 hours lecture, 3.0 hours laboratory
Grading: letter grade
Partially fulfills the requirements for aircraft systems and components stated in FAR 147, including aircraft landing gear systems, hydraulic and pneumatic power systems, fluid line and fittings and cabin atmosphere.

AVMNT 463 4.0 units
Aircraft Systems and Components 2
3.0 hours lecture, 3.0 hours laboratory
Grading: letter grade
Partially fulfills the requirements for aircraft systems stated in FAR 147 including aircraft drawing, instrument systems and electrical systems.

AVMNT 464 4.0 units
Aircraft Systems and Components 3
3.0 hours lecture, 3.0 hours laboratory
Grading: letter grade
Partially fulfills the requirements for aircraft systems and components stated in FAR 147, including position and warning systems, cleaning and corrosion control, assembly and rigging and ground operation.

AVMNT 465 4.0 units
Aircraft Systems and Components 4
3.0 hours lecture, 3.0 hours laboratory
Grading: letter grade
Partially fulfills the requirements for aircraft systems and components stated in FAR 147, including airframe inspection, hydraulic and pneumatic power systems, communication and navigation.

AVMNT 466 4.0 units
Aircraft Systems and Components 5
3.0 hours lecture, 3.0 hours laboratory
Grading: letter grade
Partially fulfills the requirements for aircraft systems and components stated in FAR 147, including aircraft fuel systems, drawing, ice and rain control, fluid lines and fittings.

AVMNT 470 4.0 units
Powerplant Theory and Maintenance
3.0 hours lecture, 3.0 hours laboratory
Grading: letter grade
Partially fulfills the requirements for powerplants stated in FAR 147, including reciprocating engines, lubrication systems, maintenance forms and induction systems.

AVMNT 471 4.0 units
Powerplant Systems and Components 1
3.0 hours lecture, 3.0 hours laboratory
Grading: letter grade
Partially fulfills the requirements for powerplants stated in FAR 147, including turbine engine, ignition systems, engine cooling systems and mechanic privileges and limitations.

AVMNT 472 4.0 units
Powerplant Systems and Components 2
3.0 hours lecture, 3.0 hours laboratory
Grading: letter grade
Partially fulfills the requirements for powerplants stated in FAR 147, including fuel metering systems, propellers “A,” ground operation and aircraft drawings.

AVMNT 473 4.0 units
Powerplant Systems and Components 3
3.0 hours lecture, 3.0 hours laboratory
Grading: letter grade
Partially fulfills the requirements for powerplants as stated in FAR 147, including engine fuel systems, induction systems, aircraft instruments and propellers “B.”

AVMNT 474 4.0 units
Powerplant Systems and Components 4
3.0 hours lecture, 3.0 hours laboratory
Grading: letter grade
Partially fulfills the requirements for powerplants as stated in FAR 147, including reciprocating engines “B,” turbine engines “B,” engine inspection and exhaust systems.

AVMNT 475 4.0 units
Powerplant Systems and Components 5
3.0 hours lecture, 3.0 hours laboratory
Grading: letter grade
Partially fulfills the requirements for powerplants as stated in FAR 147, including engine instrument systems, propellers “B,” communication and navigation systems.

AVMNT 476 4.0 units
Powerplant Systems and Components 6
3.0 hours lecture, 3.0 hours laboratory
Grading: letter grade
Courses of Instruction

Partially fulfills the requirements for powerplants as stated in FAR 147, including engine electrical systems, engine fire protection, ice and rain control and additional practices and exams.

AVMNT 477 4.0 units
Advanced Gas Turbine Engine
6.0 hours lecture
Grading: letter grade
For aviation airframe and powerplant technicians and covers: gas turbine engine theory, types of gas turbine engines, internal turbine engine components, jet engine system descriptions, gas turbine maintenance, handling and operation.

AVMNT 601 0.0 unit
Aviation Refresher Training
15.0 hours laboratory
Grading: LBCC Non-Graded Course
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.

AVIATION PILOT (AVPLT)

AVPLT 49 1.0 unit
Professional Pilot Career Orientation
1.0 hour lecture
Grading: credit/no credit
Covers career orientation for prospective professional pilots. Surveys major airlines, commuter airlines, corporate, flight instruction, work operation, military aviation and other pilot careers. Covers historical hiring patterns, the hiring cycle, employment outlook, pay scales and career preparation, physical and medical considerations, work schedules and other working conditions, employee benefits and career progression.

Transfer Status: Transferable to CSU, see counselor for limitations.

AVPLT 50 5.0 units
Basic Aeronautical Ground School
5.0 hours lecture
Grading: letter grade or credit/no credit
Satisfies FAA requirements for private pilot ground instruction and provides substantial additional preparation for becoming a safe pilot. Weather navigation, aircraft and engines, radio, theory of flight, safety and FAR’s are discussed.

Transfer Status: Transferable to CSU, see counselor for limitations.

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
Metropolitan
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 system; 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: letter grade or 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
Using FAA approved Flight Training Devices
(“simulators”), the student will learn flight instrument
interpretation and aircraft control by reference to
instruments (attitude instrument flying), navigation
planning, and VOR radio navigation procedures.
Students receive FAA recognized (“loggable”) pilot
experience hours. Students also learn VFR aircraft radio
communications procedures.
Transfer Status: Transferable to CSU, see counselor for
limitations.

AVPLT 62AD 2.0 units

Instrument Rating Simulator Pilot Tng
1.0 hour lecture, 3.0 hours laboratory
Recommended Preparation: AVPLT 61 or FAA Private
Pilot certificate.
Grading: credit/no credit
This course provides partial preparation for the FAA
Instrument Rating-Airplane Practical Test. Using FAA
approved Flight Training Devices (“simulators”), the
student will learn IFR preflight, departure, enroute, arrival,
and emergency procedures. Aircraft control by
reference to instruments as well as IFR communication
and navigation skills will be developed. Students receive
FAA recognized (“loggable”) pilot experience hours.
Transfer Status: Transferable to CSU, see counselor for
limitations.

AVPLT 63AD 2.0 units

Advanced Instrument Simulator Pilot Tng
1.0 hour lecture, 3.0 hours laboratory
Recommended Preparation: AVPLT 62AD or Instrument
Rating
Grading: credit/no credit
This course assists instrument rated pilots to maintain
and improve instrument flying skills and knowledge,
using FAA approved single engine Flight Training
Devices (“simulators”). The proficiency goals for this
course are those specified in the FAA “Airline Transport
Pilot and Type Rating Practical Test Standards”
(airplane). Students receive FAA recognized
(“loggable”) pilot experience hours.
Transfer Status: Transferable to CSU, see counselor for
limitations.

AVPLT 65AD 2.0 units

Commercial-IFR Pilot Multi-Eng. Sim. Tng
1.0 hour lecture, 3.0 hours laboratory
Grading: credit/no credit
This course provides partial preparation for the FAA
Instrument Rating-Airplane Practical Test
Flight Training Devices (“simulators”), the student will
develop IFR preflight, departure, enroute, arrival,
and emergency procedures for multi-engine airplanes.
Aircraft control by reference to instruments as well as
IFR communication and navigation skills will be
developed. Students receive FAA recognized
(“loggable”) pilot experience hours.
Transfer Status: Transferable to CSU, see counselor for
limitations.

AVPLT 66AD 2.0 units

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
This course assists instrument rated pilots to maintain
and improve instrument flying skills and knowledge,
and provides partial preparation for the FAA Airline
Transport Pilot (Airplane Multi-engine) certificate
Practical Test using multi-engine FAA approved Flight
Training Devices (“simulators”). The proficiency goals
for this course are those specified in the FAA “Airline
Transport Pilot and Type Rating Practical Test
Standards” (airplane). Students receive FAA recognized
(“loggable”) pilot experience hours.
Transfer Status: Transferable to CSU, see counselor for
limitations.

AVPLT 71 3.0 units

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
This class 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 6.0 units

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.

BASED ADULT EDUCATION (BAE)

BAE 601 0.0 unit

Basic Adult Education-Fundamental Skills
15.0 hours laboratory
Grading: LBCC Non-Graded Course
Courses of Instruction

Designed to aid students who: (1) are enrolled, or plan to enroll, in regular courses and need to improve or refresh their basic educational skills; (2) wish to review or complete their elementary and/or secondary education; (3) plan to take the General Education Diploma (GED) tests; (4) are preparing to take exams for employment, special educational/vocational programs or college/university entrance or (5) wish to improve their mastery of English as a Second Language.

**BIOLOGY (BIO)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 1A</td>
<td>5.0</td>
<td>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.</td>
</tr>
<tr>
<td>BIO 1B</td>
<td>5.0</td>
<td>Second semester of a one-year survey of biology. Includes an overview of diversity, structures and life processes in plants and animals and ecology. Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>BIO 2</td>
<td>5.0</td>
<td>General Microbiology. Includes lectures in the classroom and in the field. 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 micro-organisms, replication of viruses, common diseases caused by micro-organisms and viruses, microbial ecology, aquatic microbiology and the microbiology of foods and beverages. Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>BIO 5</td>
<td>4.0</td>
<td>Plant Biology. Includes lectures in the classroom and in the field. Biology 5 is designed to develop an understanding of the fundamental concepts and principles of plant life, including a study of plant structure, function, and diversity. Designed for the non-science major. Not open to students registered in or with credit in BIO 1A. Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>BIO 11</td>
<td>3.0</td>
<td>Environmental Problems of Man. Includes lectures in the classroom and in the field. 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 deterioration will be considered, as well as conservation and management of natural resources. Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>BIO 18</td>
<td>2.0</td>
<td>Edible, Poisonous &amp; Useful Plants. Includes lectures in the classroom and in the field. Designed for non-science majors. Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>BIO 20</td>
<td>4.0</td>
<td>Marine Biology. Includes lectures in the classroom and in the field. 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.</td>
</tr>
<tr>
<td>BIO 20H</td>
<td>4.0</td>
<td>Honors Marine Biology. Includes lectures in the classroom and in the field. 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.</td>
</tr>
<tr>
<td>BIO 22</td>
<td>2.0</td>
<td>Oceanus: The Marine Environment. Includes lectures in the classroom and in the field. 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 UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>BIO 25</td>
<td>3.0</td>
<td>Biology and Society. Includes lectures in the classroom and in the field. Designed for non-science majors. Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
</tbody>
</table>
Courses of Instruction

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, HIV and AIDS, genetic engineering, reproductive technologies, extinctions, overpopulation and major ecological issues.

BIO 28
Field Natural History of the Mountains
1.5 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
This is a natural history course that provides a general survey of ecological principles which describe organisms, their habits and how they relate to the environment. The course 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
This is an introductory course for the identification and recognition of the various birds species common to Southern California. This course discusses birding identification terminology including bird anatomy, behavior, variations, migrations and speciation. Emphasis is on field identification and use of the field guide. Habitats, behaviors, songs, ecology and natural history of the species will be summarized. This course includes at least three required field trips to local sites.
Transfer Status: Transferable to UC/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 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
This is a study of the estuarine wetland habitats of Newport Bay. Students will become acquainted with the basic physical and biological features of Newport Bay. The common plants and animals of both the marine and terrestrial environments will be studied. How these organisms adapt to estuarine conditions will be emphasized. 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 units
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 lab in contemporary biology which provides a 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 chemistry. Learn the basic 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 1.0 unit
Human Biology 1 Laboratory
3.0 hours laboratory
Prerequisite: BIO 60 (may be taken concurrently)
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 3.0 units
Human Biology 2
3.0 hours lecture
Prerequisite: BIO 60
Grading: letter grade or credit/no credit
This course is an introduction to the study of disease, including cause, prevention and symptoms of the common human diseases. The course assumes a basic understanding of anatomy and physiology. Biology 61 is designed for the general student and those in the health technology fields.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

BIO 62 3.0 units
Human Biology 3
3.0 hours lecture
Prerequisite: Eligibility ENGL 1 and BIO 60.
Grading: letter grade or credit/no credit
An advanced anatomy and physiology course designed for nursing students. Includes the nervous, endocrine, cardiovascular, respiratory, excretory, and digestive systems and pH, fluid, and electrolyte homeostasis.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

BIO 261 3.0 units
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.

This course is designed to provide a basic understanding of the business environment and the prime operating functions of management/organization, human resources, marketing, information/technology and accounting/finance. These skills are useful for both entry and mid-level positions.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

GBUS 216A 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 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: MATH 815 or basic math skills.
Grading: letter grade
This course 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  
This course offers an introduction to the global business macro-environment and orients students toward a career in the field of international business. Topics covered include economic variables, cultural differences, political risk, regional trade agreements, foreign direct investment, and exchange rates.  
Transfer Status: Transferable to CSU, see counselor for limitations.

IBUS 20 3.0 units  
Export-Import Business Practices  
3.0 hours lecture  
Grading: letter grade  
This class consists of the basics of export-import business, how to handle money matters and how to buy and sell. It is designed for the person seeking an entry level position, contemplating the start of an export-import business or the manager who wishes to expand a company’s marketing opportunities.  
Transfer Status: Transferable to CSU, see counselor for limitations.

IBUS 30 3.0 units  
International Business Management  
3.0 hours lecture  
Grading: letter grade  
This class emphasizes the concept that management of an international operation differs in many ways from management of a purely domestic firm. The student will gain the 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  
This course orientates 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. It 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 (CAN BUS 8) 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  
This is a beginning course that covers the employment opportunities, safety practices, materials and techniques used to fabricate 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 201  
Grading: letter grade or credit/no credit  
This course focuses on how to manufacture wood products using contemporary materials and machining techniques. A historical look back from the 1980’s will
establish the scope for the products that will be considered as contemporary including commercial and residential cabinets in the 20th century. The appropriate use of hardware such as connectors, handles, hinges, edgebanders, manual and computerized boring machines, CNC Routers, hinge insertion machines, and material handling devices. Students will learn about engineering parts and recognize what efficient flow is for contemporary manufacturing. Student projects will reinforce the techniques and the types of materials presented in this course.

CABMK 290AD 2.0 units
Advanced Practices
6.0 hours laboratory
Prerequisite: CABMK 201 or CABMK 301
Grading: letter grade or credit/no credit
This is an advanced lab course for students enrolled in coursework in the cabinet making program. Opportunity is given to practice the techniques and machining practices that they have learned about, performed, or have an interest in developing further, and would like to incorporate in an independent project.

CABMK 301 4.0 units
Intro to Wood Products Manufacturing
2.0 hours lecture, 6.0 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 wood products.

CABMK 301M1 2.0 units
Intro to Wood Products Manufacturing
1.0 hour lecture, 3.0 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 wood products.

CABMK 301M2 2.0 units
Intro to Wood Products Manufacturing
1.0 hour lecture, 3.0 hours laboratory
Prerequisite: CABMK 301M1
Grading: letter grade or credit/no credit
The second half of a beginning course that covers the employment opportunities, safety practices, materials and techniques used to fabricate wood products.

CABMK 302 4.0 units
Millwork and Cabinet Making 2
2.0 hours lecture, 6.0 hours laboratory
Prerequisite: CABMK 301
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 special projects and field trips. Not open to students with credit in CABMK 202.

CABMK 303 4.0 units
Millwork and Cabinet Making 3
2.0 hours lecture, 6.0 hours laboratory
Prerequisite: CABML 302
Grading: letter grade or credit/no credit
This course focuses on how to manufacture wood products using contemporary materials and machining techniques. A historical look back from the 1980’s will establish the scope for the products that will be considered as contemporary including commercial and residential cabinets in the 20th century. The appropriate use of hardware such as connectors, handles, hinges, edgebanders, manual and computerized boring machines, CNC Routers, hinge insertion machines, and material handling devices. Students will learn about engineering parts and recognize what efficient flow is for contemporary manufacturing. Student projects will reinforce the techniques and the types of materials presented in this course. Not open to students with credit in CABMK 203.

CABMK 304 4.0 units
Millwork and Cabinet Making 4
2.0 hours lecture, 6.0 hours laboratory
Prerequisite: CABMK 303
Grading: letter grade or credit/no credit
Learn safety, external-internal house finish detailing, installation of cabinetry and paneling, estimating cabinetry and millwork cabinetmaking, fundamentals of materials and processes used in wood finishing. Participate in projects and field trips. Not open to students who have taken CABMK 204.

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
This course is an introduction to the fundamentals of the building trades. Topics of instructions include: safety, building codes, construction mathematics, rough framing, residential concrete, residential concrete forms, blueprint reading, and technical information on materials and methods of residential construction. Practical instruction is given in the use of tools and materials through carpentry laboratory work.

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
Courses of Instruction

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.

Carpentry 3
5.0 hours lecture, 15.0 hours laboratory
Prerequisite: CARP 212
Grading: letter grade or credit/no credit

This course presents a concise introduction to OSHA standards and regulations. This course is designed for those individuals needing to produce accurate project estimates; topics will 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.

Carpentry 1
1.6 hours lecture, 4.3 hours laboratory
Prerequisite: CARP 311
Grading: letter grade or credit/no credit

Covers safety, hand tools, power tools, foundations, intro to blueprint reading and field trips.

Carpentry 2
1.6 hours lecture, 4.3 hours laboratory
Prerequisite: CARP 311
Grading: letter grade or credit/no credit

This course is an introduction to the fundamentals of the building trades. Topics of instruction include safety, roof types, roof theory, exterior wall finish, interior finish, and stairway construction. Practical instruction is given in the use of tools and materials through carpentry laboratory work.

Residential Roof Framing
2.0 hours lecture, 6.0 hours laboratory
Recommended Preparation: CARP 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.

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 use of tools and materials through carpentry laboratory work.

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.

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.

Safety for the Building Trades
2.0 hours lecture
Grading: letter grade

This course presents a concise introduction to OSHA standards and regulations.

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.
Courses of Instruction

and vanishing. 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: CHEM 2 or qualification through the Chem assessment process AND MATH 130, 130B, qualification through the Math placement process, or one year high school Intermediate Algebra with a grade of B or better in the second semester.

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

Chem 1B is the second semester of a one year course and fulfills the general chemistry requirement for students in chemistry, engineering, life science, physics, pre-dental, pre-medical, and pre-nursing programs. Topics covered include equilibrium of weak acids and bases, slightly soluble salts and complex ions in aqueous solution. The basic principles of thermodynamics and electrochemistry are presented, along with an introduction to coordination, nuclear and organic chemistry. The lab stresses descriptive inorganic chemistry and qualitative analysis.

*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**CHEM 2**

**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 (CAN CHEM 6)**

**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 (CAN CHEM 8)**

**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**

**Organic Chemistry**

4.0 hours lecture, 5.0 hours laboratory

Prerequisite: CHEM 1A and 1B

Grading: letter grade or credit/no credit
The course emphasizes 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. The laboratory part of the course stresses the techniques involved in the synthesis of organic compounds. This is the first semester of a one year course which satisfies the Chemistry requirement for science, engineering, and pre-medical or pre-dental majors. The course is offered only in the 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

This course emphasizes bonding, structure, and reactions of organic compounds. Modern spectroscopic and analytical techniques are covered, and an emphasis is placed on reaction mechanisms and kinetics. The laboratory part of the course stresses techniques involved in the synthesis of organic compounds. This is the second semester of a one year course which satisfies the Chemistry requirement for science, engineering, and pre-medical or pre-dental majors. The course is only offered in the Spring Semester.

**Transfer Status:** Transferable to UC/CSU, see counselor for limitations.

**CHILD AND ADULT DEVELOPMENT-ADULT AND ELDER CARE (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.

**Transfer Status:** Transferable to CSU, see counselor for limitations.

**CHILD AND ADULT DEVELOPMENT - EARLY CHILDHOOD ED (CDECE)**

**CDECE 1**  1.0 unit

The Developing Professional
1.0 hour lecture
Grading: letter grade or credit/no credit

This course focuses on professional development in Early Childhood Education and explores various types of programs and opportunities for specific occupations. This course also provides students with an opportunity to conduct a job search, investigate the interviewing process, improve communication skills and build a plan for professional competency development.

**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

This course is for school food service managers, childcare and/or family day care providers who assume responsibility for child nutrition programs and education and education safety. The curriculum includes guidelines for compliance with current federal, state and local legislation associated with child feeding and safety. It provides an introduction to basic child and infant CPR and pediatric first aid instruction but does not provide certification. This course is 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.
Courses of Instruction

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 D5.
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, 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 D5.
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 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 47.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

CDECE 47M1  1.0 unit
Human Development (Adult Years)
1.0 hour lecture
Grading: letter grade or credit/no credit
This course serves as an introduction into the study of adult development and the aging process. Developmental changes in humans are explored, including: biosocial, cognitive and psychosocial from early adulthood through old age. This course fulfills the requirements for students who have completed a course in human development covering the prenatal-adolescent periods and who need a course specific to adult development.
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 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 D5.
Transfer Status: Transferable to 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
This course is a study of various socialization factors such as family, school and community and their effects on a child’s development. The importance of culture is explored as well as the dynamics of human relations in a multicultural, urban environment and in agencies concerned with health, education and welfare of children and families. This course 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
The course is an overview of early childhood programs, their histories, philosophies and emphases, methods of guidance, discipline, licensing and regulations for state, federal and private programs. An overview of philosophies of educating young children and learning while examining developmentally appropriate practices, including the influences of culture and inclusive environments on the developing child is also included. The course explores career paths and professional growth.
Transfer Status: Transferable to CSU, see counselor for limitations.

CDECE 54  3.0 units
Art & Creative Dev in Early Childhood D3
3.0 hours lecture
Grading: letter grade or credit/no credit
This course explores the principles and methods of providing creative expression and art experiences for young children, 3-5 years old. This course fulfills the state licensing requirements for programs/curriculum D3.
Transfer Status: Transferable to CSU, see counselor for limitations.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
<th>Description</th>
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</table>
| CDECE 55   | 3.0   | Music & Movement in Early Childhood D3           | 3.0 hours lecture
Grading: letter grade or credit/no credit
This course explores the principles and methods of providing music and movement experiences for young children, 3-5 years. Students develop skills to effectively sing, play simple musical instruments and use movement activities with young children.
Transfer Status: Transferable to CSU, see counselor for limitations. |
| CDECE 57   | 3.0   | Science & Math in Early Childhood D3             | 3.0 hours lecture
Grading: letter grade or credit/no credit
This course explores the principles and methods of planning, implementing and evaluating science and math experience for young children 3-5 years old. Students will develop strategies to foster the child’s natural curiosity about the environment and quantity through activities that encourage exploration, experimentation, problem solving and discovery through play. This course fulfills state requirements for programs/curriculum D3.
Transfer Status: Transferable to CSU, see counselor for limitations. |
| CDECE 58   | 2.0   | 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   | 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   | 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   | 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 administering preschool programs, emphasizing staffing issues, program quality and working with parents.
Transfer Status: Transferable to CSU, see counselor for limitations. |
| CDECE 61   | 3.0   | Child in the Multicultural Classroom D3          | 3.0 hours lecture
Grading: letter grade or credit/no credit
This course focuses on the philosophy, principles and methods relating to the teaching of multicultural young children and their parents. It meets state licensing requirements for program curriculum D3.
Transfer Status: Transferable to CSU, see counselor for limitations. |
| CDECE 66   | 3.0   | The Preschool Child D3                          | 2.0 hours lecture, 3.0 hours laboratory
Grading: letter grade
This course focuses on the skills and methods used to observe and document the physical, social, emotional, and cognitive development of the preschool child. The course meets state licensing requirements for programs/curriculum D3. Proof of negative TB test is required.
Transfer Status: Transferable to CSU, see counselor for limitations. |
| CDECE 68   | 3.0   | 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
This course provides students the opportunity to plan, prepare, execute and evaluate various experiences with preschool age children. Students will learn 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   | Work Experience — Child Development              | 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
This course focuses on the skills and methods used to observe and document the physical, social, emotional, and cognitive development of the preschool child. The course meets state licensing requirements for program curriculum D3. Proof of negative TB test is required.
Transfer Status: Transferable to CSU, see counselor for limitations. |
| CDECE 71AD | 2.0   | Work Experience — Child Development              | 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
This course focuses on the skills and methods used to observe and document the physical, social, emotional, and cognitive development of the preschool child. The course meets state licensing requirements for program curriculum D3. Proof of negative TB test is required.
Transfer Status: Transferable to CSU, see counselor for limitations. |
| CDECE 73AD | 4.0   | Work Experience — Child Development              | 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
This course focuses on the skills and methods used to observe and document the physical, social, emotional, and cognitive development of the preschool child. The course meets state licensing requirements for program curriculum D3. Proof of negative TB test is required.
Transfer Status: Transferable to CSU, see counselor for limitations. |
Courses of Instruction

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 81 2.0 units
Working with Parents
2.0 hours lecture
Grading: letter grade or credit/no credit
A study of principles and techniques for working with parents in community and school programs. A survey of background for understanding parent/child relationships in the changing social environments. Emphasizes developing skills and competencies which promote optimum cooperation between the school and the family. Transfer Status: Transferable to CSU, see counselor for limitations.

CDECE 200A 3.0 units
ECE Curriculum & Planning
3.0 hours lecture
Prerequisite: CDECE 66 and CDECE 45 or 47; Complete 2 of the following: CDECE 54 or 55 or 57 or 58
Grading: letter grade or credit/no credit
This course is study of early childhood education curriculum for children three-to five years of age. Methods for planning and implementing developmentally appropriate learning activities are covered. Strategies for using authentic child and program assessment in the preschool classroom are included. The focus is on curricular approaches, observation, lesson planning, practice and assessment.

CDECE 201 3.0 units
Literacy in Early Childhood
3.0 hours lecture
Grading: letter grade
This course will prepare current or future early childhood teachers and caregivers to enhance the early literacy outcomes of young children by improving teachers’ knowledge of early literacy development and their skills in teaching early literacy to young children from birth through age 5. This course is supplemented by the Early Steps to Reading Success “Heads Up Reading” Satellite broadcast transmission.

CDECE 252 2.0 units
Computers in the EC Classroom
1.0 hour lecture, 1.5 hours laboratory
Prerequisite: CDECE 45 or 47.
Grading: letter grade or credit/no credit
This course is a hands on experience to evaluate computer software based upon field and academic criteria and determine how software can facilitate children’s learning and thinking. The course also introduces basic technology and applications of computer use in the early childhood classroom.

CDECE 400 0.5 unit
ST ECE Thematic Topics
0.5 hour lecture
Grading: credit/no credit
This course will provide current theoretical and conceptual information relevant to the profession. Topics are based on pertinent themes to this program’s line of study and may include, but are not limited to infant and toddler, preschool and school-age education and care, curriculum, program organization, parent education, and supervision and management responsibilities in various childhood settings. This is a “special topics” course. This course’s subject matter will vary by semester. Please refer to the schedule of classes for a particular semester’s topic. This course may be repeated for credit as topics change.

CDECE 401 0.5 unit
ST ECE Developmental Topics
0.5 hour lecture
Grading: credit/no credit
This course will provide current theories, concepts, and strategies relevant to the profession in regards to child developmental levels. Topics are based on pertinent child development lines of study and may include, but are not limited to infant and toddler, preschool, school age, and the exceptional child. This is a “special topics” course. This course’s subject matter will vary by semester. Please refer to the schedule of classes for a particular semester’s topic. This course may be repeated for credit as topics change.

CDECE 431AD 0.5 unit
Mentor Seminar
0.5 hour lecture
Grading: credit/no credit
This course is a seminar for early childhood mentor-teachers designed to explore issues related to their role as mentors of beginning teachers. The seminar content will be individualized. The course is for mentor-teachers 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
This course is designed as an enrichment class for the experienced child development student. Students research current hot topics related to music and its effects on literacy development, problem solving skills, social and emotional development, and brain development. There is a focus on understanding and celebrating diversity, and reaching children with special needs.

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
This course is designed as an enrichment class for the experienced child development student. The course emphasizes dance/movement techniques to use with children. Lectures include how movement activities enhance children’s development in the physical, cognitive and social/emotional domains.

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.

**CHILD AND ADULT 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 AND ADULT DEVELOPMENT - FAMILY DEVELOPMENT (CDF)**

CDF 210A 3.0 units

Skills/Strat. for Family Workers Pt 1
3.0 hours lecture
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

Skills/Strat. for Family Workers Pt 2
3.0 hours lecture
Prerequisite: CDF 210A
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.

**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. 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.

Transfer Status: Transferable to CSU, see counselor for limitations.

**CDLL 51B 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. 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.

Transfer Status: Transferable to CSU, see counselor for limitations.

**CDLL 51C 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. 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.

Transfer Status: Transferable to CSU, see counselor for limitations.

**CDLL 51D 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. 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.

Transfer Status: Transferable to CSU, see counselor for limitations.

**CDLL 52A 2.0 units**

Preschool Child Techniques
1.0 hour lecture, 4.0 hours laboratory
Grading: letter grade or credit/no credit
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.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**CDLL 52B** 2.0 units  
*Preschool Child Techniques*  
1.0 hour lecture, 4.0 hours laboratory  
Grading: letter grade or credit/no credit  
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 a fingerprint clearance to participate.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**CDLL 52C** 2.0 units  
*Preschool Child Techniques*  
1.0 hour lecture, 4.0 hours laboratory  
Grading: letter grade or credit/no credit  
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 a fingerprint clearance to participate.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**CDLL 52D** 2.0 units  
*Preschool Child Techniques*  
1.0 hour lecture, 4.0 hours laboratory  
Grading: letter grade or credit/no credit  
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 a fingerprint clearance to participate.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**CDLL 91AD** 2.0 units  
*Special Studies*  
1.0 hour lecture, 3.0 hours laboratory  
Grading: letter grade or credit/no credit  
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.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**CDLL 231A** 2.0 units  
*Practicum for Working with Parents*  
1.0 hour lecture, 4.0 hours laboratory  
Grading: letter grade or credit/no credit  
Plan preschool/pre-kindergarten experiences for parents through lecture and lab participation. Proof of 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.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**CDLL 231B** 2.0 units  
*Practicum for Working with Parents*  
1.0 hour lecture, 4.0 hours laboratory  
Grading: letter grade or credit/no credit  
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.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**CDLL 231C** 2.0 units  
*Practicum for Working with Parents*  
1.0 hour lecture, 4.0 hours laboratory  
Grading: letter grade or credit/no credit  
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.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**CDLL 231D** 2.0 units  
*Practicum for Working with Parents*  
1.0 hour lecture, 4.0 hours laboratory  
Grading: letter grade or credit/no credit  
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.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**CDLL 232A** 0.5 unit  
*Organizing ECE Interest Centers*  
0.2 hour lecture, 0.5 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 during summer sessions.) Proof of 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.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**CDLL 232B** 0.5 unit  
*Organizing ECE Interest Centers*  
0.2 hour lecture, 0.5 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 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.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**CDLL 232C** 0.5 unit  
*Organizing ECE Interest Centers*  
0.2 hour lecture, 0.5 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 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.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*
Courses of Instruction

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 331A** 0.5 unit
Practicum for Working with Parents
0.3 hour lecture, 1.0 hour laboratory
Grading: letter grade or credit/no credit
Designed to offer an opportunity for the student to plan experiences for parents in the area of preschool/pre-kindergarten activities through lecture and laboratory 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 331B** 0.5 unit
Practicum for Working with Parents
0.3 hour lecture, 1.0 hour laboratory
Grading: letter grade or credit/no credit
Designed to offer an opportunity for the student to plan experiences for parents in the area of preschool/pre-kindergarten activities through lecture and laboratory 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 331C** 0.5 unit
Practicum for Working with Parents
0.3 hour lecture, 1.0 hour laboratory
Grading: letter grade or credit/no credit
Designed to offer an opportunity for the student to plan experiences for parents in the area of preschool/pre-kindergarten activities through lecture and laboratory 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 331D** 0.5 unit
Practicum for Working with Parents
0.3 hour lecture, 1.0 hour laboratory
Grading: letter grade or credit/no credit
Designed to offer an opportunity for the student to plan experiences for parents in the area of preschool/pre-kindergarten activities through lecture and laboratory 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 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 AND ADULT 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. 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 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 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 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 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 AND ADULT
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
This course is a study of the principles, methods and materials which will encourage creative expression in school children. School age environments, activities and behavior management techniques will be discussed. Hands on participation in creative activities will be featured.
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
This course is 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
This course is a survey of curriculum and activities appropriate for the school age child. Students who are interested in working with children in before and after-school care will practice developing, modifying, setting up and presenting age appropriate, school-age activities. These activities will cover all areas of the curriculum.
Transfer Status: Transferable to CSU, see counselor for limitations.
This course is a systematic study of developmentally appropriate learning in the inclusive classroom focusing on teaching methods and materials used in the instruction of children with special needs. Development and interpretation of an Individualized Education Program (IEP) as well as specific areas of curriculum development are also addressed.

Transfer Status: Transferable to CSU, see counselor for limitations.

CHINESE (CHIN)

CHIN 1 (CAN CHIN 2) 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 (CAN CHIN 4) 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)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Unit(s)</th>
<th>Title</th>
<th>Hours Lecture</th>
<th>Grading</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIT 601</td>
<td>0.0</td>
<td>Citizenship</td>
<td>3.0</td>
<td>LBCC Non-Graded Course</td>
<td>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.</td>
</tr>
</tbody>
</table>

### COMMUNICATIVE DISORDERS (COMDI)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Unit(s)</th>
<th>Title</th>
<th>Hours Lecture</th>
<th>Grading</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMDI 2A</td>
<td>3.0</td>
<td>American Sign Language, Beginning</td>
<td>3.0</td>
<td>Letter grade or credit/no credit</td>
<td>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.</td>
</tr>
<tr>
<td>COMDI 2B</td>
<td>3.0</td>
<td>American Sign Language, Beginning</td>
<td>3.0</td>
<td>Letter grade or credit/no credit</td>
<td>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.</td>
</tr>
<tr>
<td>COMDI 3A</td>
<td>3.0</td>
<td>American Sign Language, Intermediate</td>
<td>3.0</td>
<td>Letter grade or credit/no credit</td>
<td>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.</td>
</tr>
<tr>
<td>COMDI 3B</td>
<td>3.0</td>
<td>American Sign Language, Intermediate</td>
<td>3.0</td>
<td>Letter grade or credit/no credit</td>
<td>Second course in a sequence of four to prepare students to pass the certification test required to become a Cisco Certified Networking Associate (CNA). 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.</td>
</tr>
</tbody>
</table>

### COMPUTER ACADEMY CISCO NETWORKING (CISCO)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Unit(s)</th>
<th>Title</th>
<th>Hours Lecture</th>
<th>Grading</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISCO 250</td>
<td>1.0</td>
<td>Network Wiring Installation</td>
<td>0.5 lecture, 1.5 laboratory</td>
<td>Credit/no credit</td>
<td>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.</td>
</tr>
<tr>
<td>CISCO 251</td>
<td>3.0</td>
<td>Cisco Networking I, Introduction</td>
<td>2.5 lecture, 1.5 laboratory</td>
<td>Letter grade</td>
<td>First course in a sequence of four to prepare students to pass the certification test required to become a Cisco Certified Networking Associate (CNA). Intro to networking, devices, IP Addressing, ARP/RAPP, media and design, topology, cabling, electricity, electronics and management. Instruction is based on Cisco curriculum.</td>
</tr>
<tr>
<td>CISCO 252</td>
<td>3.0</td>
<td>Cisco Networking II, Routers</td>
<td>2.5 lecture, 1.5 laboratory</td>
<td>Letter grade</td>
<td>Second course in a sequence of four to prepare students to pass the certification test required to become a Cisco Certified Networking Associate (CNA). 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.</td>
</tr>
</tbody>
</table>
CISCO 253 3.0 units
Cisco Networking III, LAN
2.5 hours lecture, 1.5 hours laboratory
Prerequisite: CISCO 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.

CISCO 254 3.0 units
Cisco Networking IV, WAN
2.5 hours lecture, 1.5 hours laboratory
Prerequisite: CISCO 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.

COMPUTER AND BUSINESS INFORMATION SYSTEMS (CBIS)

CBIS 3A 1.0 unit
Windows Command Line
1.0 hour lecture, 0.5 hour laboratory
Recommended Preparation: CBIS 6A
Grading: letter grade
This course covers the Command Line OS maintenance and operation skills required for A+ certification and expected of computer technicians. Transfer Status: Transferable to CSU, see counselor for limitations.

CBIS 3B 1.0 unit
Advanced Operating Systems MS Windows
1.0 hour lecture, 0.5 hour laboratory
Recommended Preparation: CBIS 3A
Grading: letter grade
This course covers the Windows OS maintenance and operation skills required for A+ certification and expected of computer technicians. Transfer Status: Transferable to CSU, see counselor for limitations.

CBIS 6A (CAN BUS 6) 4.0 units
Intro to IT Concepts & Applications
3.0 hours lecture, 3.0 hours laboratory
Grading: letter grade
Formerly CBIS 6. This course is an Introduction to information systems and the common use of office applications. Word processing, spreadsheets, databases, presentation software, and basic internet use will be covered. Spreadsheet use for business will be emphasized. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

CBIS 6B 3.0 units
Intermediate Business Applications
2.0 hours lecture, 3.0 hours laboratory
Recommended Preparation: CBIS 6A
Grading: letter grade
Formerly CBIS 2. The second class in a three class series that teaches intermediate topics of word processor, spreadsheet, database, and presentation software, with an emphasis on help desk. Includes an intro to VBA. Transfer Status: Transferable to CSU, see counselor for limitations.

CBIS 6C 3.0 units
Advanced Business Application
2.0 hours lecture, 1.5 hours laboratory
Recommended Preparation: CBIS 6B
Grading: letter grade
Formerly CBIS 40. This is the third class in a three class series that teaches advanced topics of business word processor, spreadsheet, database, and presentation software. Topics covered include advanced office concepts, skills, VBA, integrated features, and help desk concepts. Transfer Status: Transferable to CSU, see counselor for limitations.

CBIS 7 1.0 unit
Business Programming Logic and Design
1.0 hour lecture, 0.5 hour laboratory
Recommended Preparation: CBIS 6A
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 14 3.5 units
Computer Programming/JAVA
3.0 hours lecture, 2.0 hours laboratory
Recommended Preparation: CBIS 6A and MATH 110 or 110B or first year of high school algebra.
Grading: letter grade
This course will cover the fundamentals of object-oriented programming using the java programming language. This course concentrates on the skills expected for modern information technology business programming. 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
Courses of Instruction

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 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
Grading: letter grade
This course covers concepts and technologies of database systems. Topics include data modeling, design, and the implementation of relational databases; Structured Query Language-SQL; concurrency control; distributed database systems; data warehousing; Web enabled database technologies; and the functions of database administration.
Transfer Status: Transferable to CSU, see counselor for limitations.

CBIS 41 3.0 units
Networking Fundamentals
3.0 hours lecture, 1.0 hour laboratory
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
Computer Technician Hardware Basics
3.0 hours lecture, 2.0 hours laboratory
Recommended Preparation: CBIS 6A
Grading: letter grade
Emphasizes IBM-compatible personal computers and the latest common components and hardware features. PC microprocessors, motherboards, buses, input/output controllers and memory, and other components are covered. Class lectures will be supplemented with “hands on” classroom labs using diagnostic software and tools. Prepares students for the hardware portion of the A+ exam. (see CBIS 3A and 3B for software portion of A+)

CBIS 206A 1.0 unit
Internet Basics
1.0 hour lecture, 0.5 hour laboratory
Recommended Preparation: CBIS 6
Grading: letter grade
The Internet has put the information of the world at our fingertips. This class covers the browsers, communication, searching and exploring for facts and fiction and designing a simple Web site. Designed for people who want to use the Internet in their work, in their
Courses of Instruction

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** 2.5 units
**World Wide Web Database Programming**
2.0 hours lecture, 2.0 hours laboratory
Recommended Preparation: CBIS 220
Grading: letter grade
An advanced web page construction course focusing on developing web sites to use a database coded in one of the popular server language such as (Perl, PHP, or Cold Fusion) on either a Apache or a Microsoft IIS servers.

**CBIS 207E** 2.5 units
**Advanced Web Construction**
2.0 hours lecture, 2.0 hours laboratory
Recommended Preparation: CBIS 220
Grading: letter grade
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 web site and using Layers, CSS, and forms.

**CBIS 208B** 4.0 units
**Advanced Visual Basic Programming**
3.0 hours lecture, 3.0 hours laboratory
Prerequisite: CBIS 208A
Recommended Preparation: CBIS 38
Grading: letter grade
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.

**CBIS 208C** 3.0 units
**Visual Basic for Application Programming**
2.0 hours lecture, 3.0 hours laboratory
Grading: letter grade
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.

**CBIS 210A** 3.0 units
**Novell Administration & Upgrades**
2.0 hours lecture, 3.0 hours laboratory
Recommended Preparation: CBIS 41
Grading: letter grade
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.

**CBIS 210B** 1.5 units
**Novell Adv Administration & Upgrades**
1.0 hour lecture, 1.5 hours laboratory
Prerequisite: CBIS 210A
Grading: letter grade
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.

**CBIS 211AD** 2.0 units
**Web Construction II**
1.0 hour lecture, 3.0 hours laboratory
Recommended Preparation: CBIS 207AD
Grading: letter grade
In this course, students will learn advanced techniques for designing, creating, formating and publishing web pages using different popular industry approaches. Advanced skills topics will be taught, such as creating dynamic pages, adding rich media to a web site, creating reusable assets and forms, creating animated graphics and adding database functionality.

**CBIS 212** 1.5 units
**Wireless Communications**
1.5 hours lecture, 0.5 hour laboratory
Recommended Preparation: CBIS 41
Grading: letter grade
In this class the student will learn how to install, use, and manage popular wireless technologies. These technologies include infrared, Bluetooth, and wireless local area networks. In the lab, the student will actually install and configure a wireless local area network. The students will learn how to set up a wireless network in their home and secure it from unauthorized outside access.

**CBIS 215** 1.5 units
**Novell NetWare Installation/Config.**
1.0 hour lecture, 1.5 hours laboratory
Prerequisite: CBIS 210B
Grading: letter grade
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.

**CBIS 216A** 3.5 units
**Introduction to C# Programming**
3.0 hours lecture, 2.0 hours laboratory
Recommended Preparation: CBIS 7
### Courses of Instruction

Grading: letter grade

This course is an introductory presentation of the C# language, including data structures and examples. Emphasis is placed on programming business applications including design, development, and documentation.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBIS 220</td>
<td>Microsoft Windows Server OS</td>
<td>2.0 hours lecture, 2.0 hours laboratory</td>
</tr>
<tr>
<td></td>
<td>Grading: letter grade or credit/no credit</td>
<td></td>
</tr>
</tbody>
</table>

**i-Net+ Internet Technologies**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBIS 222A</td>
<td>Advanced Java for Sun Certification I</td>
<td>3.0 units</td>
</tr>
<tr>
<td></td>
<td>2.5 hours lecture, 2.0 hours laboratory</td>
<td></td>
</tr>
</tbody>
</table>

**Recommended Preparation:** CBIS 14A

Grading: letter grade or credit/no credit

A course in advanced java programming designed to teach the skill set required to pass the Sun Microsystems java programming certification exam.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBIS 222B</td>
<td>Advanced Java for Sun Certification II</td>
<td>3.0 units</td>
</tr>
<tr>
<td></td>
<td>2.5 hours lecture, 2.0 hours laboratory</td>
<td></td>
</tr>
</tbody>
</table>

**Recommended Preparation:** CBIS 222A

Grading: letter grade or credit/no credit

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.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBIS 223</td>
<td>Unix/Linux Fundamentals</td>
<td>3.0 units</td>
</tr>
<tr>
<td></td>
<td>3.0 hours lecture, 2.0 hours laboratory</td>
<td></td>
</tr>
</tbody>
</table>

**Recommended Preparation:** MATH 110 or 110B or qualification through the Math assessment process.

**Recommended Preparation:** CBIS 6

Grading: letter grade

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.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBIS 225</td>
<td>Microsoft Windows Client OS</td>
<td>2.5 units</td>
</tr>
<tr>
<td></td>
<td>2.0 hours lecture, 2.0 hours laboratory</td>
<td></td>
</tr>
</tbody>
</table>

**Recommended Preparation:** Entry level computer knowledge in the use of PCs.

Grading: letter grade or credit/no credit

Learn to install, configure and administer Windows Client O.S. in a networking environment. Prepares the student to take the corresponding MCSE Certification Exam.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBIS 226</td>
<td>Microsoft Windows Server OS</td>
<td>2.5 units</td>
</tr>
<tr>
<td></td>
<td>2.0 hours lecture, 2.0 hours laboratory</td>
<td></td>
</tr>
</tbody>
</table>

**Recommended Preparation:** CBIS 225

Grading: letter grade or credit/no credit

Learn to install, configure and administer Windows Server in a networking environment. Prepare to take the corresponding MCSE Certification Exam.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBIS 227</td>
<td>Microsoft Windows Networking</td>
<td>2.5 units</td>
</tr>
<tr>
<td></td>
<td>2.0 hours lecture, 2.0 hours laboratory</td>
<td></td>
</tr>
</tbody>
</table>

**Recommended Preparation:** CBIS 226

Grading: letter grade or credit/no credit

Learn to install, configure and administer Windows Server Operating System networking services and protocols. Prepare to take the corresponding MCSE Certification Exam.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBIS 228</td>
<td>Microsoft Windows Directory Services</td>
<td>2.5 units</td>
</tr>
<tr>
<td></td>
<td>2.0 hours lecture, 2.0 hours laboratory</td>
<td></td>
</tr>
</tbody>
</table>

**Recommended Preparation:** CBIS 226

Grading: letter grade or credit/no credit

Learn to install, configure and administer Windows Server Directory Services. Prepare to take the corresponding MCSE Certification Exam.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBIS 229</td>
<td>Microsoft ISA Server</td>
<td>2.5 units</td>
</tr>
<tr>
<td></td>
<td>2.0 hours lecture, 2.0 hours laboratory</td>
<td></td>
</tr>
</tbody>
</table>

**Recommended Preparation:** CBIS 225, CBIS 226, CBIS 227 and CBIS 228

Grading: letter grade

This course is designed to develop skills necessary to install, configure and administer Microsoft Windows Internet Security and Acceleration (ISA) Server. This course also covers topics relevant to the MCSE Certification Exam for ISA Server and prepares the students to take the exam.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBIS 234</td>
<td>AS/400 Computer Operations</td>
<td>3.5 units</td>
</tr>
<tr>
<td></td>
<td>3.0 hours lecture, 2.0 hours laboratory</td>
<td></td>
</tr>
</tbody>
</table>

**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.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBIS 239AD</td>
<td>Oracle Designer</td>
<td>3.5 units</td>
</tr>
<tr>
<td></td>
<td>3.0 hours lecture, 2.0 hours laboratory</td>
<td></td>
</tr>
</tbody>
</table>

**Recommended Preparation:** CBIS 38 or CBIS 242

Grading: letter grade

An introduction to database and application development using Oracle designer tool set. Topics include inputting business system requirements into the Designer repository; identifying and performing the primary tasks to implement a Designer project; designing and generating application system that includes Oracle forms and Web PL/SQL application; as well as refining, generating, and building the database design.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBIS 240A</td>
<td>Solaris Unix Fundamentals</td>
<td>2.5 units</td>
</tr>
<tr>
<td></td>
<td>2.0 hours lecture, 2.0 hours laboratory</td>
<td></td>
</tr>
</tbody>
</table>

**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
Courses of Instruction

**CBIS 240B**  
**Solaris Unix- Systems Administration I**  
4.0 hours lecture, 2.0 hours laboratory  
Recommended Preparation: CBIS 240A  
Grading: letter grade or credit/no credit  
This course covers the basics of Unix systems administration. It presents 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**  
**Solaris Unix- Systems Administration II**  
4.0 hours lecture, 2.0 hours laboratory  
Recommended Preparation: 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**  
**Introduction to Oracle: SQL**  
2.0 hours lecture, 2.0 hours laboratory  
Recommended Preparation: CBIS 38 or work experience with databases.  
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. The course is also designed to help students to pass Oracle Certificate Test, Introduction to Oracle: SQL.

**CBIS 243**  
**Program with Oracle PL/SQL**  
2.0 hours lecture, 2.0 hours laboratory  
Recommended Preparation: CBIS 242  
Grading: letter grade  
This course covers how to write PL/SQL procedures, functions and packages in both the SQL*Plus and iSQL*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 Developer Associate certification exam. Upon completion of this course, students are ready to take Oracle Developer Professional level course: “Build Internet Applications” and other advanced courses.

**CBIS 244**  
**Oracle Forms: Build Internet Apps I**  
2.0 hours lecture, 2.0 hours laboratory  
Recommended Preparation: CBIS 243  
Grading: letter grade or credit/no credit  
In this course students learn about Oracle’s rapid application development tool- Oracle Forms for interactive internet applications. They learn to build and test applications, customize Forms, modify data access by creating event-related triggers. They also learn to create a single forms module and deploy it on the web or client/server with no changes to the module.

**CBIS 245**  
**Database and Business Intelligence**  
2.0 hours lecture, 2.0 hours laboratory  
Recommended Preparation: CBIS 38 or CBIS 242  
Grading: letter grade or credit/no credit  
This course offers students a study of current technologies for business intelligence with a focus on data warehouse design and implementation; OLAP (on-line analytical process) models and application development; data preparation and transformation techniques; DBMS/Web reporting tools; and report generating techniques. This course uses, but is not limited to Oracle or SQL Server tools.

**CBIS 246**  
**Oracle DBA Fundamentals**  
2.0 hours lecture, 2.0 hours laboratory  
Recommended Preparation: CBIS 242  
Grading: letter grade  
This course is for students who need Oracle DBA (Database Administration) training or preparation 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**  
**Computer Careers & Certification Paths**  
1.0 hour lecture, 0.5 hour laboratory  
Recommended Preparation: CBIS 6A  
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**  
**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**  
**Help Desk Concepts**  
1.5 hours lecture
Courses of Instruction

Prerequisite: CBIS 6A
Recommended Preparation: CBIS 200
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 270 1.0 unit
Introduction to Information Security
1.0 hour lecture
Grading: letter grade
This course provides students and professionals with the necessary managerial, technical, and legal background to support investment decisions in security technology. The course covers security from the perspective of hackers (i.e., technology issues and defenses) and lawyers (i.e., legal issues and defenses). The content is designed to help users quickly become current on what has become a fundamental business issue.

CBIS 271 3.0 units
Network Security Fundamentals
3.0 hours lecture, 1.0 hour laboratory
Recommended Preparation: CBIS 41, CBIS 220 and CBIS 270
Grading: letter grade
Network Security Fundamentals provides a comprehensive overview of network security and prepares you to take the CompTIA Security+ certification exam. This course covers general security concepts, communication network security, infrastructure security, cryptography basics, operational/organizational security, and computer forensics.

CBIS 492 2.5 units
ST Interpretive Programming Languages
2.0 hours lecture, 1.5 hours laboratory
Recommended Preparation: Basic knowledge of SQL or CBIS 38; and Basic knowledge of HTML or CBIS 220; and programming knowledge or CBIS 8B, 11, or 14
Grading: letter grade or credit/no credit
This course offers a study of popular interpretive programming languages. The course explores programming environments and tools as well as major and recently developed features of each specific language. Hands-on programming skills in application development are emphasized. Language examples include, but are not limited to Javascript, PHP, Perl, ASP.NET, CFML, and Python. This course may be repeated for credit as topics vary.

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.

COMIS 1 1.0 unit
Computer Information Competency
0.5 hour lecture, 1.5 hours laboratory
Grading: credit/no credit
The course is designed for students to develop current computer information competence or to transfer. It covers basic use of hardware, Internet knowledge and skills, word processing, spreadsheet, database queries, digital data presentations, and communications applications.
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)
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: CAOTC 39A (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
Recommended Preparation: CAOTC 39B (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
Grading: letter grade or credit/no credit
Intro to spreadsheet software for the office using Microsoft Excel on PCs. 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 41F  1.0 unit
Excel for Windows, Intermediate
0.5 hour lecture, 1.5 hours laboratory
Recommended Preparation: CAOTC41E (may be taken concurrently)
Grading: letter grade or credit/no credit
Continuation of CAOTC41E. 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 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 use the spreadsheet software’s database functions, develop macros and print reports.
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
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 42B  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 home and office to produce documents including forms, brochures, booklets, labels and press releases.
Transfer Status: Transferable to CSU, see counselor for limitations.

CAOTC 43A  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
Courses of Instruction

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 the brand of software offered. 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 43B 1.0 unit
Desktop Publishing-Business 2
0.5 hour lecture, 1.5 hours laboratory
Recommended Preparation: CAOTC 43A (may be taken concurrently)
Grading: letter grade or credit/no credit
Continuation of CAOTC 43A. 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 43C 1.0 unit
Desktop Publishing-Business 3
0.5 hour lecture, 1.5 hours laboratory
Recommended Preparation: CAOTC 43B (may be taken concurrently)
Grading: letter grade or credit/no credit
Continuation of CAOTC 43B. Apply special features of the software to create custom effects with text and graphics, develop style sheets and create reusable templates. Transfer Status: Transferable to CSU, see counselor for limitations.

CAOTC 43D 1.0 unit
Desktop Publishing-Business 4
0.5 hour lecture, 1.5 hours laboratory
Recommended Preparation: CAOTC 43C (may be taken concurrently)
Grading: letter grade or credit/no credit
Continuation of CAOTC 43C. Produce color publications, learn advanced printing techniques, use scanners and assemble lengthy documents. Transfer Status: Transferable to CSU, see counselor for limitations.

CAOTC 43E 1.0 unit
PowerPoint for Windows, Advanced
0.5 hour lecture, 1.5 hours laboratory
Recommended Preparation: CAOTC 44D
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 embed 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 44A 1.0 unit
Desktop Publishing-Business 1
0.5 hour lecture, 1.5 hours laboratory
Recommended Preparation: CAOTC 43A (may be taken concurrently)
Grading: letter grade or credit/no credit
An intro to presentation graphics software used with PCs in the office to produce business documents, including report, forms, brochures, newsletters and flyers. 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.

CAOTC 44C 1.0 unit
Business Graphics-Paint/Draw Software
0.5 hour lecture, 1.5 hours laboratory
Recommended Preparation: CAOTC 43A (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. See the class schedule for version of software offered. 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.

CAOTC 44D 1.0 unit
PowerPoint for Windows, Beginning
0.5 hour lecture, 1.5 hours laboratory
Recommended Preparation: CAOTC 43A (may be taken concurrently)
Grading: letter grade or credit/no credit
An intro to presentation graphics software used with PCs in the office to produce business documents, including report, forms, brochures, newsletters and flyers. 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.

CAOTC 44E 1.0 unit
Independent Project—Desktop Publishing
0.5 hour lecture, 1.5 hours laboratory
Recommended Preparation: CAOTC 43D
Grading: letter grade or credit/no credit
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 44F 1.0 unit
Independent Project—Business Graphics
0.5 hour lecture, 1.5 hours laboratory
Recommended Preparation: CAOTC 44C 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 software to meet an actual office need. 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 microcomputers in a Windows-based operating system. See the class schedule for version of software offered. Through hands-on practice, become familiar with sharing information on a network, sending/receiving/manipulating email, navigating the Internet, sending/receiving a facsimile (FAX) and using electronic bulletin board systems. Transfer Status: Transferable to CSU, see counselor for limitations.

CAOTC 46A 1.0 unit
Independent Project—Telecommunications
0.5 hour lecture, 1.5 hours laboratory
Recommended Preparation: CAOTC 44A
Grading: letter grade or credit/no credit
Advanced study using telecommunication software using IBM compatible microcomputers in a Windows-based operating system. See the class schedule for version of software offered. Through hands-on practice, become familiar with sharing information on a network, sending/receiving/manipulating email, navigating the Internet, sending/receiving a facsimile (FAX) and using electronic bulletin board systems. Transfer Status: Transferable to CSU, see counselor for limitations.
Courses of Instruction

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 CAOTT 200 or CAOTT 200C
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 236A 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 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
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 1.0 unit
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 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/or presently employed students seeking upgraded skills. This course provides hands-on computer training in desktop management using Lotus Notes.
Courses of Instruction

CAOTC 236D 1.0 unit
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
Hands-on activities which teach financial skills: setting up accounts, scheduling transactions, reconciling bank statements, tracking loans and mortgages, creating and updating investment accounts and using online services.

CAOTC 250A 2.0 units
Data Entry — Level 1
1.0 hour lecture, 3.0 hours laboratory
Recommended Preparation: Type 30 wpm
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 250B 3.0 units
Data Entry — Level 2
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 intermediate key stroking difficulty when entering data. The key stroking goal is 8,000 strokes per hour.

CAOTC 250C 3.0 units
Data Entry — Level 3
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 250D 2.0 units
Computer Transcription
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.

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
Courses of Instruction

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 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
The course develops the foundation skills that competent workers need to be competitive in the workplace. These skills include a thorough training in the mechanics of English: spelling, grammar, punctuation, sentence structure, and word usage. Emphasis will also be placed on developing 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 these 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
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
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
Using the Mac as a Tool for Learning
0.5 hour lecture, 1.5 hours laboratory
Grading: credit/no credit
This course provides an introduction to the Macintosh computer and software products helpful in performing classroom tasks. Students are given the opportunity to develop computer skills that will enhance their ability to effectively complete course work. This course satisfies the computer proficiency graduation requirement.
Transfer Status: Transferable to CSU, see counselor for limitations.

CPAS 10
Advanced Computer Skills for Learning
0.5 hour lecture, 1.5 hours laboratory
Recommended Preparation: Basic computer experience in word processing, spreadsheets and graphics or CPAS 1.
Grading: credit/no credit
This is an advanced course which explores the academic application of popular software packages. The student will learn to use the computer effectively to prepare documents for any class using word processing, desktop publishing, spreadsheets, graphics manipulation, web presentations, and Internet resources.
Transfer Status: Transferable to CSU, see counselor for limitations.

CPAS 805
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 11
Computer Programming/C++ I
3.0 hours lecture, 2.0 hours laboratory
Recommended Preparation: CBIS 6A and MATH 110 or 110B or first year of high school algebra.
Grading: letter grade
This is an introductory course in the 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 covered, thus providing a method for prototyping the commercial software development in business and industry.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

CS 12
Computer Programming/C++ II
3.0 hours lecture, 2.0 hours laboratory
Prerequisite: CS 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.

CS 13
C++ Data Structures and Algorithms
3.0 hours lecture, 2.0 hours laboratory
Recommended Preparation: CS 12 and MATH 50 or high school precalculus.
Grading: letter grade
This course continues the introduction to Object Oriented programming with C++ begun in CS 11 & 12, with an emphasis on algorithms, data structures and software engineering.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

CS 21
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
Introduction to Computer Science II
3.0 hours lecture, 2.0 hours laboratory
Prerequisite: CS 21
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 UC/CSU, see counselor for limitations.

CS 23
Fundamental Data Structures
3.0 hours lecture, 2.0 hours laboratory
Prerequisite: CS 22
Recommended Preparation: MATH 55A
Grading: letter grade
This is the third of three introductory courses in computer science. This course concentrates on implementation and mathematical analysis of data structures and algorithms. This course also covers storage allocation and memory management techniques in Java.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**CS 51**  
**Introduction to Computer Architecture**  
3.0 hours lecture, 2.0 hours laboratory  
Prerequisite: CS 21 and MATH 55A  
Grading: letter grade  
This course covers the principles and practice of computer architecture, both hardware and software, instruction sets and addressing modes, virtual memory, operating systems, and operation and interconnection of hardware elements. Laboratory work in this class will cover using low-level programming languages.  
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**CS 52**  
**Introduction to Software Engineering**  
3.0 hours lecture, 2.0 hours laboratory  
Prerequisite: CS 23  
Grading: letter grade  
This course covers an introduction to the concepts, methods, and current practice of software engineering; the study of large-scale software production; software life cycle models as an organizing structure; and the principles and techniques appropriate for each stage of production. Laboratory work in this class will involve a project illustrating these elements.  
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**COMPUTER/TYPING KEYBOARD (CAOTT)**

**CAOTT 200**  
**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**  
**Beginning Typing/Keyboarding**  
1.0 hour lecture, 1.0 hour laboratory  
Grading: letter grade or credit/no credit  
This course is for the person who desires to develop touch control of the computer keyboard. It emphasizes proper typing techniques and building basic speed and accuracy. It is typically offered as a self-paced, open-entry/open-exit course.

**CAOTT 200B**  
**Beginning Typing/Keyboarding C**  
1.0 hour lecture, 1.0 hour laboratory  
Recommended Preparation: CAOTT200A (may be taken concurrently)  
Grading: letter grade or credit/no credit  
This course will continue to develop skills in typing and/or computer keyboarding for business or personal use. Emphasis will be placed on increased speed and accuracy, reports, correspondence, and tables. This class is typically offered as self-paced, open-entry/open-exit instruction.

**CAOTT 200C**  
**Beginning Typing/Keyboarding**  
1.0 hour lecture, 1.0 hour laboratory  
Recommended Preparation: CAOTT200B (may be taken concurrently)  
Grading: letter grade or credit/no credit  
This course will continue to develop skills in typing and/or computer keyboarding for business or personal use. Emphasis will be placed on increased speed and accuracy, reports, correspondence, and employment documents. This class is typically offered as self-paced, open-entry/open-exit instruction.

**CAOTT 201**  
**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**  
**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**  
**Speed/Accuracy Bldg for Typists**  
1.0 unit  
3.0 hours laboratory  
Recommended Preparation: CAOTT 200 or 200C or 233 or type 25 wpm minimum.  
Grading: letter grade or credit/no credit  
This intermediate-level course helps to increase computer keyboarding speed and accuracy. Students receive individual analysis, tips on improving their technique, and guided practice. This class usually is scheduled as self-paced, open-entry/open-exit.

**CAOTT 233**  
**Computer Keyboarding**  
1.0 unit  
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**  
**Orientation for College Success**  
0.5 unit  
0.5 hour lecture  
Grading: letter grade or credit/no credit  
This course is recommended for all students and designed to orient them to the college environment and educational opportunities in a holistic manner. The course contains an introduction 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. Students 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 7 3.0 units**  
**College and Professional Success**  
3.0 hours lecture  
Grading: letter grade  
Students will compare and analyze student development theories for the purpose of defining internal and external obstacles to career and academic success. Throughout the course, students will practice, apply and evaluate integrative exercises related to academic achievement, self-exploration, career development and professional growth and development.  
*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  
This course presents a reflective model of decision-making that integrates theory and practice that is applicable in a variety of situations over an individual’s life span. Through a study of career decision-making, students explore the impact of psycho-social, physical and affects factors on their own cognitive processes. Through self-discovery a foundation for life-long learning skills is developed by the student with a focus on achieving success utilizing their 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.

**COUNS 800 1.0 unit**  
**Employment Skills and Self Concept**  
1.0 hour lecture  
Grading: credit/no credit

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**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.*

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**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 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  
This course teaches basic preparatory skills for baking. It includes use of tools, equipment, materials, basic characteristics of ingredients, fundamentals and principles of baking breads, rolls, croissants, danishes, cookies, sweet and savory dough.

**CULAR 205** 5.0 units  
**Baking and Pastry I**  
2.0 hours lecture, 9.0 hours laboratory  
Prerequisite: CULAR 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: CULAR 204  
Grading: letter grade  
Includes puff pastries and other exotic baked goods.

**CULAR 207** 5.0 units  
**Commercial Cake Decorating**  
2.0 hours lecture, 9.0 hours laboratory  
Grading: letter grade  
This course emphasizes 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 I**  
5.0 hours lecture, 20.0 hour laboratory  
Grading: letter grade  
This course emphasizes food service careers, weights, measures and safety. It also includes instruction in professionalism, equipment identification, salads & dressings, sandwiches, cold & hot appetizers, charcuterie, buffet, baking, yeast breads, quick breads, cakes, pastry doughs, 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: CULAR 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: CULAR 213B  
Grading: letter grade  
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  
This course emphasizes culinary training through direct employment in the industry. It also includes class instruction in work experience objectives, career goals, and culinary related employment issues.

**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
Courses of Instruction

Vocational learning experiences through employment directly related to the industry.

**DANCE (DANCE)**

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<th>Course Code</th>
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**DANCE 1** 3.0 units

Dance Forms Through the Ages
3.0 hours lecture
Grading: letter grade or credit/no credit
This course explores the world of dance including its role in culture, its development through history and the theatrical dance forms in contemporary America.

**DANCE 3AD** 1.0 unit

Musical Theatre Dance
1.0 hour lecture, 2.0 hours laboratory
Grading: letter grade or credit/no credit
This course introduces musical theatre dance styles from the 1940s to the present. It includes the study of ballet, jazz and tap techniques to prepare students for performance in musical theatre.

**DANCE 5AB** 1.0 unit

Beginning Tap
1.0 hour lecture, 2.0 hours laboratory
Grading: letter grade or credit/no credit
This course provides the opportunity to develop coordination, rhythm and performance skills. Some history of tap will be included.

**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
This is a continuing study of tap dance skills, emphasizing the intermediate level of dance. The course includes the study of terminology, tap history and tap styles.

**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.

**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.

**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
This course is a continuing study of ballet technique. It includes an increased emphasis on body alignment, musicality, strength and flexibility.

**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
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.

**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.

**DANCE 14AB** 1.0 unit

Beginning Modern Dance
1.0 hour lecture, 2.0 hours laboratory
Grading: letter grade or credit/no credit
This course emphasizes dance technique, musicality, improvisation and composition within the modern dance idiom.

**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
This course is the continuing study of modern dance techniques for the concert stage encompassing more complicated combinations taught at a quicker pace, with an emphasis of movement expression and a comparison of modern styles and choreographers.

**DANCE 18AD** 1.0 unit

Folk and Ethnic Dance
1.0 hour lecture, 2.0 hours laboratory
Grading: letter grade or credit/no credit
This course introduces dance from selected cultures and examines its role in society through the practice of dance traditions and rituals. Basic dance steps and styles are taught emphasizing coordination, rhythm and body awareness.

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 to 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 33AD 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 5AB or 6AB or 10AB or 11AB or 12AD or 14AB or 17AB or 18AD or 20AB or 21AB.
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 the initial class meeting.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

DANCE 41/2 1.0 unit
Dance Performance
4.0 hours laboratory
Corequisite: DANCE 5AB or 6AB or 10AB or 11AB or 12AD or 14AB or 17AB or 18AD or 20AB or 21AB.
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 5AB or 6AB or 10AB or 11AB or 12AD or 14AB or 17AB or 18AD or 20AB or 21AB.
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 5AB or 6AB or 10AB or 11AB or 12AD or 14AB or 17AB or 18AD or 20AB or 21AB.
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.

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
### Courses of Instruction

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 CSU, see counselor for limitations.*

**DMI 11**  
**Radiographic Techniques**  
1.0 hour lecture  
Prerequisite: DMI 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 CSU, see counselor for limitations.*

**DMI 12**  
**Contrast Fluoroscope/Radiographic Procedures**  
3.0 hours lecture  
Corequisite: DMI 11  
Grading: letter grade  
This course is a study of basic Fluoroscopy; Radiographic Contrast Media administration, pharmacology, safety, and treatments. Contrast Media examinations, Special Procedures, Digital Angiography, Vascular and Non-Vascular intervention, and Mammography are also discussed within the scope of this course.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**DMI 14**  
**Trends and Self-Assessment in Rad Tech**  
3.0 hours lecture  
Prerequisite: DMI 15 or current C.R.T. (Certified Radiologic Technologist).  
Grading: letter grade  
The purpose of this course is to prepare the students for the state and national licensure/certification in this discipline. Students will analyze their strengths and weaknesses, and formulate strategies to ensure successfully passing the State and National board examinations.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**DMI 15**  
**Computer Applications in Radiology**  
3.0 hours lecture  
Prerequisite: DMI 24  
Grading: letter grade  
This course is a study of the history of computer systems, hardware and software, and their uses in radiology. Specific areas covered are; CT, Digital Imaging, MRI, and automated radiology management systems.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**DMI 20**  
**Introduction to Radiologic Physics**  
3.0 hours lecture  
Prerequisite: DMI 10  
Grading: letter grade  
A study of the basic principles of physics involved in the production, behavior, modification and control of radiation.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**DMI 21**  
**Applied Radiological Physics**  
1.0 hour lecture, 3.0 hours laboratory  
Prerequisite: DMI 20  
Grading: letter grade  
This course is a study of the application of the interaction of radiation and matter, technique manipulation, quality assurance, and quality control. Students are introduced to advanced Medical Imaging including: digital imaging; ultrasond; nuclear medicine; radiation oncology; PET; SPECT; and bone densitometry.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**DMI 24**  
**Radiation: Biology and Protection**  
3.0 hours lecture  
Prerequisite: DMI 21  
Grading: letter grade  
This course presents a history of ionizing radiation exposure to humans. Cellular and biologic effects of ionizing radiation are explored, with specific emphasis as to ways of limiting exposure to patients and personnel. State and Federal regulations are discussed as they pertain to Diagnostic Medical Imaging.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**DMI 30**  
**Positioning for General Diagnostic Radiology**  
2.0 hours lecture, 3.0 hours laboratory  
Prerequisite: DMI 20  
Recommended Preparation: DMI 11  
Grading: letter grade  
This course is the study of positioning for general and specialized radiologic exams of the skeletal system and adjacent organ systems. The student will develop skill in positioning the patient, film, and x-ray tube, and select appropriate techniques to produce diagnostic quality radiographic images.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**DMI 31**  
**Positioning for Cranial Radiography**  
2.0 hours lecture, 3.0 hours laboratory  
Prerequisite: DMI 30  
Grading: letter grade  
This course is the study of positioning for general and specialized radiologic exams of the cranium and its contents. The student will develop skill in positioning the patient, film and x-ray tube, and select appropriate techniques to produce diagnostic quality radiographic images.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**DMI 40A**  
**Clinical Radiology**  
8.0 hours laboratory  
Prerequisite: DMI 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 6.0 units
Clinical Radiology
1.0 hour lecture, 23.0 hours laboratory
Prerequisite: DMI 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 6.0 units
Clinical Radiology
1.0 hour lecture, 13.0 hours laboratory
Prerequisite: DMI 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 11.0 units
Clinical Radiology
1.0 hour lecture, 31.0 hour laboratory
Prerequisite: DMI 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 11.0 units
Clinical Radiology
1.0 hour lecture, 31.0 hour laboratory
Prerequisite: DMI 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 3.0 units
Radiologic Pathology
3.0 hours lecture
Prerequisite: ANAT 41 and DMI 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: DMI 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: DMI 40C or current C.R.T. (Certified Radiologic Technologies) certification card.
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
This course is an introduction to diesel powered systems required to support engines in a variety of applications. The testing, analysis and repair of engines and their components in the array of powered system applications.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
<th>Lecture Hours</th>
<th>Laboratory Hours</th>
<th>Grading</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIESL 284</td>
<td>10.0</td>
<td>Highway Transport</td>
<td>5.0</td>
<td>15.0</td>
<td>letter grade or credit</td>
<td>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.</td>
</tr>
<tr>
<td>DIESL 287</td>
<td>10.0</td>
<td>Diesel Fuel Injection Systems</td>
<td>5.0</td>
<td>15.0</td>
<td>letter grade or credit</td>
<td>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.</td>
</tr>
<tr>
<td>DIESL 288</td>
<td>10.0</td>
<td>Diesel Engine Chassis</td>
<td>5.0</td>
<td>15.0</td>
<td>letter grade or credit</td>
<td>Learn safety, troubleshooting, repair and replacement of all components that are used on a diesel truck. Maintenance of the total chassis and service operations will be highlighted.</td>
</tr>
<tr>
<td>DIESL 289</td>
<td>10.0</td>
<td>Caterpillar 3406 and 3116 Engine</td>
<td>5.0</td>
<td>15.0</td>
<td>letter grade or credit</td>
<td>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.</td>
</tr>
<tr>
<td>DIESL 290</td>
<td>10.0</td>
<td>C.A.T. Transmissions and Final Drive</td>
<td>5.0</td>
<td>15.0</td>
<td>letter grade or credit</td>
<td>Covers steering, clutches, brakes, transmissions and final drive units for Caterpillar heavy equipment intended for off-highway use.</td>
</tr>
<tr>
<td>DIESL 291</td>
<td>10.0</td>
<td>C.A.T. Hydraulics</td>
<td>5.0</td>
<td>15.0</td>
<td>letter grade or credit</td>
<td>Covers hydraulics system.</td>
</tr>
<tr>
<td>DIESL 292</td>
<td>10.0</td>
<td>C.A.T. Chassis &amp; Electrical</td>
<td>5.0</td>
<td>15.0</td>
<td>letter grade or credit</td>
<td>Covers suspension, under carriage, tires, tracks and air conditioning.</td>
</tr>
<tr>
<td>DIESL 293AD</td>
<td>4.0</td>
<td>General Engines</td>
<td>3.0</td>
<td>3.0</td>
<td>letter grade</td>
<td>Tool and equipment; operation and maintenance of various types of diesel and spark ignited engines, including injection, fuel pump systems, governors and safety practice.</td>
</tr>
<tr>
<td>DIESL 391A</td>
<td>3.0</td>
<td>Hydraulics</td>
<td>2.0</td>
<td>3.0</td>
<td>letter grade or credit</td>
<td>This course is an introduction to Heavy Equipment Hydraulic Systems, required to support a variety of Heavy Diesel Applications. Topics will include Shop Safety Practices, Industry Terminology and Testing, Troubleshooting, Analysis and Repair of Hydraulic Components.</td>
</tr>
<tr>
<td>DIESL 391B</td>
<td>5.0</td>
<td>Caterpillar Electrical Systems</td>
<td>3.0</td>
<td>6.0</td>
<td>letter grade or credit</td>
<td>This course is an introduction to Heavy Equipment Electrical Systems required to support a variety of Heavy Diesel Applications. Course topics will include the testing, troubleshooting, analysis and repair of electrical components required to support an array of Diesel Powered Systems.</td>
</tr>
<tr>
<td>DIESL 392</td>
<td>3.0</td>
<td>Air and Hydraulic Brakes</td>
<td>2.0</td>
<td>3.0</td>
<td>letter grade or credit</td>
<td>This course is an introduction to the theory and fundamentals of air and hydraulic brake systems.</td>
</tr>
<tr>
<td>DRAFT 51A</td>
<td>3.0</td>
<td>Industrial Drafting I</td>
<td>2.0</td>
<td>4.0</td>
<td>letter grade</td>
<td>Covers orthographic projection, dimensioning, freehand sketching, auxiliary views, sections, shop methods and and drafting room practices. Use AutoCAD 2004 for 2D and 3D applications. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>DRAFT 51B</td>
<td>3.0</td>
<td>Industrial Drafting II</td>
<td>2.0</td>
<td>4.0</td>
<td>letter grade</td>
<td>Covers advanced dimensioning, surface quality, welding drawings, screw threads, fasteners, keys, keyways, springs, gears and bearings. Uses AutoCAD 2004 for 2D and 3D applications. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>DRAFT 52A</td>
<td>3.0</td>
<td>Advanced Industrial Drafting</td>
<td>2.0</td>
<td>4.0</td>
<td>letter grade</td>
<td>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.</td>
</tr>
</tbody>
</table>
Courses of Instruction

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
Recommended Preparation: DRAFT 201 or DRAFT 50A
Grading: letter grade
Industrial Standard ANSI (American National Standards Institute)/ASME (American Society of Mechanical Engineers)-Y14.5 Geometric Dimensioning and Tolerances (GD&T) is a course designed for Manufacturing Technology students, Drafting Technology students, and professional upgrade training. The course covers a review of conventional dimensional notation (non geometric tolerancing), clearance fits, tolerancing fundamentals, maximum material condition (MMC), least material condition (LMC), metric and inch dimensioning. GD&T conventions covered are: dimensioning and geometric tolerancing symbols, datums, material condition symbols, tolerances of form and profile, tolerances of orientation and runout, and location tolerances.
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 or credit/no credit
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 202AD 3.0 units
AutoCAD I, Fundamentals
2.0 hours lecture, 4.0 hours laboratory
Recommended Preparation: DRAFT 201
Grading: letter grade or credit/no credit
Draft202AD is an intermediate-level course aimed at individuals with a 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). The following topics are explored using AutoCAD Software: user interface, draw and edit commands, template drawing, dimensioning, model space/paper space electronic drawing sheets, file management, printing and plotting and the Window Operating System for CAD users.

DRAFT 203AD 3.0 units
AutoCAD II, Advanced Concepts
2.0 hours lecture, 4.0 hours laboratory
Recommended Preparation: DRAFT 202AD
Grading: letter grade or credit/no credit
Draft203AD is an intermediate level course aimed at individuals with a 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). Topics cover advanced 2D concepts and intermediate level 3D modeling using AutoCAD Software: user interface, advanced draw, edit, and query commands, template drawings, dimension 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.

DRAFT 204 4.0 units
3D Visualization/Animation
3.0 hours lecture, 3.0 hours laboratory
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 251AD 3.0 units
3D Modeling for Technical Animation
2.0 hours lecture, 4.0 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, surfacing with sub divisions, modeling with patches and splines, applying smoothing groups, assigning texture coordinates, animating objects, and basic rendering techniques.

DRAFT 252AD 3.0 units
Textures/Lighting — Technical Animation
2.0 hours lecture, 4.0 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.

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**Courses of Instruction**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRAFT 253AD</td>
<td>3.0 units</td>
</tr>
<tr>
<td><strong>3D Technical Animation and Production</strong></td>
<td></td>
</tr>
<tr>
<td>2.0 hours lecture, 4.0 hours laboratory</td>
<td></td>
</tr>
<tr>
<td>Grading: letter grade or credit/no credit</td>
<td></td>
</tr>
<tr>
<td>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, surfaceing with sub divisions, modeling with patches and splines, applying smoothing groups, assigning texture coordinates, animating objects, and basic rendering techniques.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DRAFT 273AD</th>
<th>4.0 units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Work Experience — Mechanical Drafting</strong></td>
<td></td>
</tr>
<tr>
<td>1.0 hour lecture, 12.5 hours laboratory</td>
<td></td>
</tr>
<tr>
<td>Corequisite: Enrollment in at least seven units including this course.</td>
<td></td>
</tr>
<tr>
<td>Recommended Preparation: Draft 201 or Draft 51A or Draft 202</td>
<td></td>
</tr>
<tr>
<td>Grading: letter grade or credit/no credit</td>
<td></td>
</tr>
<tr>
<td>Vocational learning experiences through employment directly related to careers in Mechanical Design Drafting. 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 and or internships directly related to occupational goals or careers of interest to the student.</td>
<td></td>
</tr>
</tbody>
</table>

**ECONOMICS (ECON)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1A (CAN ECON 2)</td>
<td>3.0 units</td>
</tr>
<tr>
<td><strong>Macro Economic Analysis</strong></td>
<td></td>
</tr>
<tr>
<td>3.0 hours lecture</td>
<td></td>
</tr>
<tr>
<td>Grading: letter grade or credit/no credit</td>
<td></td>
</tr>
<tr>
<td>This course examines the functioning of a mixed enterprise system. The class will include topics of the economic role of government, determination of national income, the banking system, and Federal Reserve policy. The instructional emphasis is on macroeconomic policy. Macroeconomics is concerned with the economy as a whole and large market segments. The attention is focused on such problems as; the level of unemployment, the rate of inflation, the nation’s total output of goods and services, fiscal and monetary policies.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ECON 1AH</th>
<th>3.0 units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Honors Macro Economic Analysis</strong></td>
<td></td>
</tr>
<tr>
<td>3.0 hours lecture</td>
<td></td>
</tr>
<tr>
<td>Prerequisite: Qualification for the Honors Program</td>
<td></td>
</tr>
<tr>
<td>Grading: letter grade or credit/no credit</td>
<td></td>
</tr>
<tr>
<td>This course examines the functioning of a mixed enterprise system. The class will include topics of the economic role of government, determination of national income, the banking system, and Federal Reserve policy. The instructional emphasis is on macroeconomic policy. Macroeconomics is concerned with the economy as a whole and large market segments. The attention is focused on such problems as; the level of unemployment, the rate of inflation, the nation’s total output of goods and services, fiscal and monetary policies.</td>
<td></td>
</tr>
</tbody>
</table>

**ELECTRICITY (ELECT)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELECT 41</td>
<td>2.0 units</td>
</tr>
<tr>
<td><strong>Technical Applications of Minicomputers</strong></td>
<td></td>
</tr>
<tr>
<td>1.0 hour lecture, 3.0 hours laboratory</td>
<td></td>
</tr>
<tr>
<td>Grading: letter grade</td>
<td></td>
</tr>
<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>
<td></td>
</tr>
</tbody>
</table>

Transfer Status: Transferable to CSU, see counselor for limitations.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Name</th>
<th>Lecture Hours</th>
<th>Laboratory Hours</th>
<th>Prerequisite(s)</th>
<th>Corequisite(s)</th>
<th>Grading</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELECT 200A</td>
<td>8.0</td>
<td>First Semester Industrial Electricity</td>
<td>6.0</td>
<td>6.0</td>
<td></td>
<td></td>
<td>letter grade</td>
<td>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. 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.</td>
</tr>
<tr>
<td>ELECT 200B</td>
<td>8.0</td>
<td>Second Semester Industrial Electricity</td>
<td>6.0</td>
<td>6.0</td>
<td>ELECT 200A</td>
<td></td>
<td>letter grade</td>
<td>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.</td>
</tr>
<tr>
<td>ELECT 200C</td>
<td>8.0</td>
<td>Third Semester Industrial Electricity</td>
<td>6.0</td>
<td>6.0</td>
<td>ELECT 200B</td>
<td></td>
<td>letter grade</td>
<td>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.</td>
</tr>
<tr>
<td>ELECT 200D</td>
<td>8.0</td>
<td>Fourth Semester Industrial Electricity</td>
<td>6.0</td>
<td>6.0</td>
<td>ELECT 200C</td>
<td></td>
<td>letter grade</td>
<td>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.</td>
</tr>
<tr>
<td>ELECT 202</td>
<td>3.0</td>
<td>Electrical Mathematics</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
<td>letter grade</td>
<td>A study of formulas used in electrical elementary theory, offering a review and application of various functions.</td>
</tr>
<tr>
<td>ELECT 204</td>
<td>3.0</td>
<td>First Semester Fundamentals of DC Electricity</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
<td>letter grade</td>
<td>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.</td>
</tr>
<tr>
<td>ELECT 209</td>
<td>3.0</td>
<td>Second Sem Fund of Motors/Generators</td>
<td>3.0</td>
<td></td>
<td>ELECT 204</td>
<td></td>
<td>letter grade</td>
<td>Operational theory and practices as associated with direct current motors and generators.</td>
</tr>
<tr>
<td>ELECT 210A</td>
<td>1.0</td>
<td>Laboratory Practices</td>
<td>3.0</td>
<td></td>
<td>ELECT 209</td>
<td></td>
<td>letter grade</td>
<td>Lab work associated with the fundamentals of DC electricity, electromagnetism, wiring, practice and hand tools.</td>
</tr>
<tr>
<td>ELECT 210B</td>
<td>1.0</td>
<td>Laboratory Practices</td>
<td>3.0</td>
<td></td>
<td>ELECT 210A</td>
<td></td>
<td>letter grade</td>
<td>Lab work associated with the fundamentals of AC electricity, AC principles and practices, as well as fundamentals of DC motors and generators.</td>
</tr>
<tr>
<td>ELECT 210C</td>
<td>1.0</td>
<td>Laboratory Practices</td>
<td>3.0</td>
<td></td>
<td>ELECT 212</td>
<td></td>
<td>letter grade</td>
<td>Lab work associated with motor controls and circuit diagrams.</td>
</tr>
<tr>
<td>ELECT 210D</td>
<td>1.0</td>
<td>Laboratory Practices</td>
<td>3.0</td>
<td></td>
<td>ELECT 210B</td>
<td></td>
<td>letter grade</td>
<td>Lab work associated with electrical measuring instruments, motors and transformers.</td>
</tr>
<tr>
<td>ELECT 212</td>
<td>3.0</td>
<td>Third Semester Fund of AC Electricity</td>
<td>3.0</td>
<td></td>
<td>ELECT 210C</td>
<td></td>
<td>letter grade</td>
<td>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.</td>
</tr>
<tr>
<td>ELECT 214</td>
<td>3.0</td>
<td>Fourth Semester AC Principles &amp; Pract</td>
<td>3.0</td>
<td></td>
<td>ELECT 214</td>
<td></td>
<td>letter grade</td>
<td>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.</td>
</tr>
<tr>
<td>ELECT 224</td>
<td>3.0</td>
<td>Electrical Motors and Transformers</td>
<td>3.0</td>
<td></td>
<td>ELECT 204 and 209</td>
<td></td>
<td>letter grade</td>
<td></td>
</tr>
</tbody>
</table>
Theory and applications of single and poly phase motors and transformers, testing and connection methods, troubleshooting and maintenance.

**ELECT 225**  
Algebra and Trigonometry for Technicians  
4.0 hours lecture  
Prerequisite: MATH 805 or MATH 815 or ELECT 202 or qualification through the Math assessment process  
Grading: letter grade  
This course will present basic algebra and trigonometry and their application to the solution of practical problems in technical (mechanical, electrical, construction) fields. This course is not open for credit to students registered in or with credit in MATH 225, 220, 250, 110 and 150. Formerly MATH 225.  

**ELECT 226**  
Solid State Fundamentals for Electrician  
2.5 hours lecture, 1.5 hours laboratory  
Prerequisite: ELECT 200B or ELECT 209  
Grading: letter grade  
This course covers electronic theory and practice as applied in industrial applications. Topics include component identification, schematic diagrams, circuit testing and troubleshooting industrial equipment. Safety issues involving high voltage industrial electronics are covered.

**ELECT 227**  
D.C. Variable Speed Drives  
1.0 hour lecture, 1.5 hours laboratory  
Prerequisite: ELECT 226  
Grading: letter grade  
This course covers the theory, circuit designs and application of direct current variable speed drives. Topics include applications, testing and troubleshooting.

**ELECT 228**  
A.C. Variable Speed Drives  
1.0 hour lecture, 1.5 hours laboratory  
Prerequisite: ELECT 226  
Grading: letter grade  
This course covers the theory, circuit designs and application of alternating current variable speed drives. Topics include applications, testing and troubleshooting.

**ELECT 229**  
Industrial Drive Systems  
2.5 hours lecture, 1.5 hours laboratory  
Prerequisite: ELECT 227 and ELECT 228  
Grading: letter grade  
This course covers electronic theory, practice and principles as applied to industrial applications. Topics include basic programming of PIC microcontrollers and commercial drives. Emphasis is placed on programming and application to modern industrial drive systems.

**ELECT 230A**  
Robotics Technology — Design  
2.5 hours lecture, 1.5 hours laboratory  
Grading: letter grade  
This course utilizes the engineering model of design, system integration and applications development as applied to the area of industrial and marine robotics technology, including power and control systems, troubleshooting, hydraulic and pneumatic systems, programming fundamentals, and issues relating to the operation of electrical equipment in harsh environments. Students may start the series in any segment to develop skills specific to each topic.  
Transfer Status: Transferable to CSU, see counselor for limitations.

**ELECT 230B**  
Robotics Technology — Integration  
2.5 hours lecture, 1.5 hours laboratory  
Grading: letter grade  
This course utilizes the engineering model of design, system integration and applications development as applied to the area of industrial and marine robotics technology, including power and control systems, troubleshooting, hydraulic and pneumatic systems, programming fundamentals, and issues relating to the operation of electrical equipment in harsh environments. Students may start the series in any segment to develop skills specific to each topic.  
Transfer Status: Transferable to CSU, see counselor for limitations.

**ELECT 230C**  
Robotics Technology — Applications  
2.5 hours lecture, 1.5 hours laboratory  
Grading: letter grade  
This course utilizes the engineering model of design, system integration and applications development as applied to the area of industrial and marine robotics technology, including power and control systems, troubleshooting, hydraulic and pneumatic systems, programming fundamentals, and issues relating to the operation of electrical equipment in harsh environments. Students may start the series in any segment to develop skills specific to each topic.  
Transfer Status: Transferable to CSU, see counselor for limitations.

**ELECT 240**  
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**  
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**  
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**  
Electrical Code-Advanced  
3.0 hours lecture  
Recommended Preparation: ELECT 245  
Grading: letter grade
Courses of Instruction

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 253** 2.0 units

OSHA Standards for Construction Safety

2.0 hours lecture

Grading: credit/no credit

This course covers OSHA policies, procedures, and standards, as well as construction safety and health principles. Topics include scope and application of the OSHA construction standards. Special emphasis is placed on those areas that are the most hazardous, using OSHA standards as a guide. Upon successful course completion, the student will receive an OSHA 30 Hour Construction Outreach Training Completion Card.

**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

Prerequisite: ELECT 275

Grading: letter grade

Learn to layout and bend rigid conduit correctly.

**ELECT 277** 3.0 units

Blueprint Reading for Electricians

3.0 hours lecture

Prerequisite: ELECT 204 and 209 and 212

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

Prerequisite: 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

Advanced theoretical and practical principles involving the control of direct and alternating current electric motors and automation systems. Topics covered include Programmable Logic Controllers, ladder logic, wiring, timing and programming.

**EMERGENCY MEDICAL TECHNOLOGY (EMT)**

**EMT 251** 3.0 units

Emergency Medical Technician

3.0 hours lecture

Recommended Preparation: AH 60

Grading: letter grade

This course will enable the student to develop basic skills in the assessment, rescue, immediate treatment and transport of the urgently ill or injured client. Course content 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

This course is designed to develop basic skills in the assessment, rescue, immediate treatment and transport of the urgently ill or injured client. Emphasis will be placed on identifying and correcting life threatening conditions, identifying rescue problems and developing a systematic approach to the care of the client and the performance of rescue activities. Integrated into this course will be relevant information on traumatic
injuries, medical emergencies, environment hazards, rescue techniques and equipment.

EMT 252AD 1.0 unit
Emergency Medical Tech I Refresher
1.0 hour lecture, 0.5 hour laboratory
Prerequisite: Current EMT — I 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)**

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<tr>
<th>Course Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>ENGR 3A</td>
<td>Engineering Graphics</td>
<td>3.0</td>
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<tr>
<td>ENGR 3B</td>
<td>Engineering Graphics</td>
<td>3.0</td>
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<tr>
<td>ENGR 17</td>
<td>Electrical Engineering Circuits</td>
<td>3.0</td>
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<tr>
<td>ENGR 17L</td>
<td>Electrical Engineering Circuits Lab</td>
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**ENGLISH (ENGL)**

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<tr>
<th>Course Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>ENGL 1</td>
<td>Reading and Composition</td>
<td>3.0</td>
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<tr>
<td>ENGL 1H</td>
<td>Honors Reading and Composition</td>
<td>3.0</td>
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<tr>
<td>ENGL 2</td>
<td>Introduction to Literature/Composition</td>
<td>3.0</td>
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</table>
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.

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<tr>
<th>Course Code</th>
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<th>Course Title</th>
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<tbody>
<tr>
<td>ENGL 3</td>
<td>4.0</td>
<td>Argumentative and Critical Writing</td>
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<td></td>
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<td>4.0 hours lecture</td>
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<td></td>
<td>Prerequisite: ENGL 1</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>An intro to the elements and uses of critical thinking and writing. Analytical, persuasive, evaluative and argumentative writing will be emphasized.</td>
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<tbody>
<tr>
<td>ENGL 3H</td>
<td>4.0</td>
<td>Honors Argumentative &amp; Critical Writing</td>
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<tr>
<td></td>
<td></td>
<td>4.0 hours lecture</td>
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<td>Prerequisite: Qualification for the Honors Program and ENGL 1.</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>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.</td>
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<tbody>
<tr>
<td>ENGL 6AD</td>
<td>3.0</td>
<td>Production of Literary Publications</td>
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<tr>
<td></td>
<td></td>
<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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<td></td>
<td>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.</td>
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<tbody>
<tr>
<td>ENGL 7</td>
<td>3.0</td>
<td>Editing a Literary Review</td>
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<tr>
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<td>3.0 hours lecture</td>
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<td>Grading: letter grade or credit/no credit</td>
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<td>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.</td>
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<tbody>
<tr>
<td>ENGL 18</td>
<td>3.0</td>
<td>Detective and Crime Fiction</td>
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<td>3.0 hours lecture</td>
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<td></td>
<td>Prerequisite: Eligibility for ENGL 1.</td>
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<td>Grading: letter grade or credit/no credit</td>
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<td></td>
<td>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.</td>
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<tr>
<td>ENGL 24</td>
<td>3.0</td>
<td>College Grammar</td>
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<td>3.0 hours lecture</td>
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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.

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<th>Course Code</th>
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<th>Course Title</th>
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<tbody>
<tr>
<td>ENGL 26</td>
<td>3.0</td>
<td>Creative Writing 1</td>
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<td></td>
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<td>3.0 hours lecture</td>
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<td>Prerequisite: Eligibility for ENGL 1</td>
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<td>Grading: letter grade or credit/no credit</td>
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<td></td>
<td>English 26 offers practical, supervised experience in the fundamentals of writing fiction and poetry.</td>
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<td>Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
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<tbody>
<tr>
<td>ENGL 27A</td>
<td>3.0</td>
<td>Creative Writing 2: Poetry</td>
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<tr>
<td></td>
<td></td>
<td>3.0 hours lecture</td>
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<td></td>
<td></td>
<td>Prerequisite: ENGL 26</td>
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<td>Grading: letter grade or credit/no credit</td>
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<td></td>
<td>English 27A offers advanced, practical experience in writing, appreciating and analyzing poetry.</td>
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<tbody>
<tr>
<td>ENGL 27B</td>
<td>3.0</td>
<td>Creative Writing 2: Fiction</td>
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<tr>
<td></td>
<td></td>
<td>3.0 hours lecture</td>
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<td></td>
<td></td>
<td>Prerequisite: ENGL 26</td>
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<td></td>
<td></td>
<td>Grading: letter grade or credit/no credit</td>
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<td></td>
<td>English 27B offers advanced, practical experience in writing, appreciating and analyzing fiction.</td>
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<tbody>
<tr>
<td>ENGL 27C</td>
<td>3.0</td>
<td>Creative Writing 2: Bio/Autobiography</td>
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<td>3.0 hours lecture</td>
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<td></td>
<td>Prerequisite: ENGL 26</td>
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<td>Grading: letter grade or credit/no credit</td>
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<td>English 27C offers advanced, practical experience in investigating, writing, and appreciating autobiographical and biographical material for use in narrative sketches, including family history and the journal.</td>
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<tr>
<td>ENGL 27D</td>
<td>3.0</td>
<td>Creative Writing 2: Stage/Screen Writing</td>
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<td>3.0 hours lecture</td>
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<td></td>
<td>Prerequisite: ENGL 26</td>
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<td>Grading: letter grade or credit/no credit</td>
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<td></td>
<td>English 27D offers advanced, practical, and 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.</td>
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<tr>
<td>ENGL 27E</td>
<td>3.0</td>
<td>Creative Writing 2: The Novel</td>
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<td>3.0 hours lecture</td>
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<td>Prerequisite: ENGL 26</td>
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Courses of Instruction
Courses of Instruction

Grading: letter grade or credit/no credit

English 27E 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; and examines models from various genres (literary classics, historical fiction, detective fiction, romance, science fiction and others). Students 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 3.0 units

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, Rice, Koontz, and Straub.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ENGL 32 3.0 units

Masterpieces/Asian Literature (in English)
3.0 hours lecture
Prerequisite: Eligibility for ENGL 1.
Grading: letter grade or credit/no credit

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 3.0 units

Mythology
3.0 hours lecture
Prerequisite: Eligibility for ENGL 1.
Grading: letter grade or credit/no credit

This class focuses on the 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, philosophy, 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

English 38 is a college-level course that provides an examination and analysis of the narratives, poetry, and teachings of the Old Testament, emphasizing a literary point of view. The course is designed for an audience interested in broadening their understanding of the literary characteristics and the cultural and historical contexts of various books of the Old Testament.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ENGL 39 3.0 units

The Bible as Lit: The New Testament
3.0 hours lecture
Prerequisite: Eligibility for ENGL 1.
Grading: letter grade or credit/no credit

English 39 is a college-level course that provides an examination and analysis of the narratives, poetry, parables, and letters of the New Testament and Apocrypha, emphasizing a literary point of view. The course is designed for an audience interested in broadening their understanding of the literary characteristics and the cultural and historical contexts of the books of the New Testament and the Apocrypha.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ENGL 41 (CAN ENGL 14) 3.0 units

American Literature I
3.0 hours lecture
Prerequisite: Eligibility for ENGL 1.
Grading: letter grade or credit/no credit

This course is a survey of American literature from the colonial period to the Civil War. Readings will include authors of diverse cultural backgrounds: African American, European American, Hispanic American, Native American.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ENGL 42 (CAN ENGL 16) 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  
Introduction to Shakespeare  
3.0 units  
3.0 hours lecture  
Prerequisite: Eligibility for ENGL 1.  
Grading: letter grade or credit/no credit  
This course involves reading, discussion, and analysis of seven plays and selected sonnets as it presents Shakespeare as a major literary figure in the context of the Elizabethan and Jacobean periods and in the context of the history of British literature.  
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ENGL 43B  
Introduction to Shakespeare  
3.0 units  
3.0 hours lecture  
Prerequisite: Eligibility for ENGL 1.  
Grading: letter grade or credit/no credit  
This course involves reading, discussion, and analysis of seven plays (different from those in 43A) and selections from the longer romance poems as it presents Shakespeare as a major literary figure in the context of the Elizabethan and Jacobean periods and the history of British literature.  
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ENGL 44  
Literature of the Western World I  
3.0 units  
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  
Honors Lit of the Western World I  
3.0 units  
3.0 hours lecture  
Prerequisite: Qualification for the Honors Program and Eligibility for ENGL 1.  
Grading: letter grade or credit/no credit  
An honors course that offers 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 45  
Literature of the Western World II  
3.0 units  
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  
Honors Lit of the Western World II  
3.0 units  
3.0 hours lecture  
Prerequisite: Qualification for the Honors Program and Eligibility for ENGL 1.  
Grading: letter grade or credit/no credit  
An honors course that focuses on readings in literature of the Western World, with emphasis on European literature in translation, covering works from the Renaissance to contemporary times and emphasizing the appreciation of aesthetic, philosophical, and cultural concepts.  
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ENGL 46 (CAN ENGL 8)  
Survey of British Literature I  
3.0 units  
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 47 (CAN ENGL 10)  
Survey of British Literature II  
3.0 units  
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  
Modern & Contemporary Literature  
3.0 units  
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  
Honors Modern/Contemporary Literature  
3.0 units  
3.0 hours lecture  
Prerequisite: Qualification for the Honors Program and Eligibility for ENGL 1.  
Grading: letter grade or credit/no credit  
This class is a study of imaginative literature written from the late 19th through the early 21st centuries. Writers chosen will represent world literature and will generally be those who have exerted a strong influence on contemporary attitudes, ideas, aesthetics, and values. The course will explore the revolutionary ways of writing and seeing that are peculiar to recent major artists.  
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

ENGL 79  
ST Literature of Diversity  
3.0 units  
3.0 hours lecture  
Prerequisite: Eligibility for ENGL 1.  
Grading: letter grade or credit/no credit
Courses of Instruction

This course offers an introductory study of literature—centering on 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. The course explores the revolutionary ways in which “minority” 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. This is a special topics course. This course’s subject matter will vary by semester. Please refer to the schedule of classes for a particular semester’s topic. This course may be repeated for credit as topics change.

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 UC/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: letter grade or 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.

READ 82 3.0 units
Proficient Reading
3.0 hours lecture
Prerequisite: Qualification through Reading assessment process or READ 883.
Grading: letter grade or credit/no credit
Read 82 provides instruction in the strategies necessary for college reading with an emphasis on the application of comprehension, vocabulary and critical reading skills to academic and technical reading assignments. Read 82 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
This course focuses on power reading strategies, analysis of written discourse, and application of flexible reading techniques to personal, professional, and academic reading. It is designed 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 comprehesion 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
This course focuses on individualized study with a reading specialist to supplement instruction in the regular reading and vocabulary classes in which the student is enrolled. The reading specialist will reinforce skills presented in class, such as strategies for improving comprehension, vocabulary development, critical analysis, reading rate, and other study skills.

### EWRC 887AD 0.5 unit
**Academic Reading**
0.2 hour lecture, 0.9 hour laboratory
Grading: credit/no credit
This course focuses on individualized study with a reading specialist, with emphasis on reading skills required in college courses. Students will learn comprehension, vocabulary, study skills, critical reading and/or the rate of reading. The class is 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.

### EWRC 891AD 0.5 unit
**Spelling Principles**
0.2 hour lecture, 0.9 hour laboratory
Grading: credit/no credit
This is an introductory course designed to teach the fundamental reading skills of phonics, word analysis, and comprehension through individualized assignments.

### EWRC 892AB 0.5 unit
**Phonics/Reading Fundamentals**
0.2 hour lecture, 0.9 hour laboratory
Grading: credit/no credit
This course offers individualized instruction in basic writing skills for students placed at this level. Activities include writing complete sentences, punctuating sentences, spelling correctly and composing short pieces of writing.

### EWRC 893AC 0.5 unit
**Punctuation**
0.2 hour lecture, 0.9 hour laboratory
Grading: credit/no credit
A self-paced individualized course covering all aspects of the punctuation of English sentences.

### EWRC 895AB 0.5 unit
**Functional Writing**
0.3 hour lecture, 0.7 hour laboratory
Grading: credit/no credit
This course offers individualized instruction in basic writing skills for students placed at this level. Activities include writing complete sentences, punctuating sentences, spelling correctly and composing short pieces of writing.
Courses of Instruction

After being recommended for further work by a classroom English instructor, students in this course will receive the help they need beyond ENGL 105 or 801A-B in order to qualify for and/or succeed in the next higher course. This course provides individualized instruction in the composing process and helps improve skills in the conventions of written English: grammar, sentence structure, punctuation and spelling.

EWRC 899AD 0.5 unit
English Adjunct
0.2 hour lecture, 0.9 hour laboratory
Grading: credit/no credit
A study of writing strategies, offering individualized instruction in all phases of the writing process (planning, drafting, revising and editing) and helping students improve their skills in the conventions of written English: grammar, usage, punctuation, spelling and mechanics.

ENGLISH AS A SECOND LANGUAGE (ESL)

ESL 33 5.0 units
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 5.0 units
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 5.0 units
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 5.0 units
College Engl/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 English 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
To prepare for college level writing, ESL 54X provides ESL students with intensive sentence structure practice while they learn to write coherent paragraphs incorporating the use of transitional devices. Students will be introduced to and practice paraphrasing. 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
ESL 56X uses intensive summarizing and writing of conceptual paragraphs that incorporate the elements of cohesion, unity and support to prepare students for college level writing. Rhetorical modes covered include
narration, description, explanation and persuasion. All writing assignments are done on personal computers.

Prerequisite: One semester ESL 146AB.

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: One semester of ESL 147AB and qualification through the ESL Department reading assessment process, or ESL 63, or eligibility for ESL 56.
Grading: letter grade or credit/no credit
“College Reading and Listening for ESL Students” emphasizes strategies for effective reading and lecture comprehension; enhancement of critical reading; listening and notetaking; 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
ESL 146AB is 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. The course provides 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 included in the course are the writing of multi-clause sentences and work 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
ESL 147AB is the second 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. The course provides 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 included in the course are the writing of multi-clause sentences and 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.
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| ESL 644    | 0.0   | 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   | 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   | 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 a passage. |
| ESL 801AB  | 0.5   | 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 a passage. |
| ESL 802AB  | 0.5   | 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 a passage. |
| ESL 803AB  | 0.5   | 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   | 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 the necessary skills to find facts, details and the main idea of a passage. |
| ESL 805AB  | 0.5   | 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  | 0.5   | 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 807AB  | 0.5   | Reading Skills for ESL Students           | 1.5 hours lecture
Prerequisite: One semester of ESL 806AB
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 808AB  | 0.5   | Reading Skills for ESL Students           | 1.5 hours lecture
Prerequisite: One semester of ESL 807AB
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 809AB  | 0.5   | Reading Skills for ESL Students           | 1.5 hours lecture
Prerequisite: One semester of ESL 808AB
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  | 1.0   | 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 811AB  | 0.5   | 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. |
## Courses of Instruction

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| ESL 813AB  | Conversation 2                                  | 0.5    | 1.5 hours lecture  
Prerequisite: ESL 645 or one semester of ESL 845AB  
Grading: credit/no credit  
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 giving introductions, family traditions, comparing US immigration over time, expressing wants, apologizing and career changes. |
| ESL 814AB  | Composition for ESL Students                    | 0.5    | 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. |
| ESL 815    | Accent Reduction                                | 2.0    | 6.0 hours lecture  
Recommended Preparation: ESL 645 or ESL 845  
Grading: credit/no credit  
This intensive semester-long pronunciation course for intermediate to advanced non-native speakers focuses on the mastery of the English vowel/consonant sound system, stress patterns, melody, rhythm, and intonation of intelligible speech. Extended contextual practice enables students to modify nonstandard pronunciation patterns and achieve improved oral communications. |
| ESL 816AB  | Preparation for College Classes                 | 0.5    | 1.5 hours lecture  
Prerequisite: ESL 645 or one semester of ESL 845AB  
Grading: credit/no credit  
ESL 816, Preparation for College Courses, improves college study techniques, provides college orientation and gives information on opportunities for further study. |
| ESL 818AB  | Vocabulary Development                          | 0.5    | 1.5 hours lecture  
Prerequisite: ESL 645 or one semester of ESL 845AB  
Grading: credit/no credit  
Increases the English vocabulary range of students who do not speak English as their mother tongue. |
| ESL 819A   | Conversation at Crossroads Cafe                 | 0.5    | 1.5 hours lecture  
Recommended Preparation: Eligibility for ESL 842 or equivalent skills as determined by placement exam  
Grading: credit/no credit  
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 giving introductions, family traditions, comparing US immigration over time, expressing wants, apologizing and career changes. |
| ESL 819B   | Conversation at Crossroads Cafe                 | 0.5    | 1.5 hours lecture  
Recommended Preparation: Eligibility for ESL 842 or equivalent skills as determined by placement exam  
Grading: credit/no credit  
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 giving introductions, family traditions, comparing US immigration over time, expressing wants, apologizing and career changes. |
Courses of Instruction

**ESL 840AB**  
Introduction to College English 0  
6.0 hours lecture  
Grading: credit/no credit  
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.

**ESL 841AB**  
Introduction to College English 1  
6.0 hours lecture  
Prerequisite: Qualify through the ESL placement process or ESL 640 or one semester of ESL 840AB.  
Grading: credit/no credit  
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.

**ESL 842AB**  
Introduction to College English 2  
6.0 hours lecture  
Prerequisite: Qualify through the ESL placement process or ESL 641 or one semester of ESL 841AB.  
Grading: credit/no credit  
Third 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.

**ESL 843AB**  
Introduction to College English 3  
6.0 hours lecture  
Prerequisite: One semester of ESL 642/842AB.  
Grading: credit/no credit  
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.

**ESL 844AB**  
Introduction to College English 4  
6.0 hours lecture  
Prerequisite: ESL 643 or one semester of ESL 843AB or equivalent skills as determined by ESL assessment process.  
Grading: credit/no credit  
ESL 844 is the fifth of a six-course series in the basics of English structure designed to bring beginners up to basic college level in the language and prepare them for success in academic and vocational programs offered by the college. Emphasis is on the mastery of productive grammatical features and on comprehension of spoken and written English.

**ESL 845AB**  
Introduction to College English 5  
6.0 hours lecture  
Prerequisite: One semester of ESL 644/844AB  
Grading: credit/no credit  
ESL 845 is the sixth of a six-course series designed to bring beginners up to basic college level in the language and prepare them for success in academic and vocational programs offered by the college. Emphasis is on the mastery of productive grammatical features and on comprehension of spoken and written English.

**ENGLISH AS A SECOND LANGUAGE, LEARNING CENTER**

**ESLCC 699**  
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**  
ESL 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**  
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  
A semester length course which gives intermediate students the skills needed to communicate effectively. American culture will be learned via role-playing activities, journal writings, interviews, readings, library/internet research, etc. Crosscultural and intercultural differences will also be emphasized. Idiomatic language will be taught.

**ESLV 271**  
Improving Fluency in Oral Communications  
6.0 hours lecture  
Prerequisite: Equivalent skills as determined by ESL placement process or ESL 645 or one semester of ESL 845AB.
Courses of Instruction

Grading: letter grade or credit/no credit

An intermediate to advanced level communication course designed to develop fluency and confidence in spoken English, improve listening and pronunciation skills, teach common proverbs and idiomatic expressions used in Standard North American English, and provide practice in interpersonal communication skills.

ESLV 272 2.0 units
Communication for the World of Work
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, job applications, understanding work-related policies and procedures will be taught. Idiomatic language related to the world of work will be emphasized.

ESLV 273 2.0 units
Intermediate Grammar
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 semester long intermediate level ESL course which teaches grammatical concepts of the English language. Grammar is taught in form-focused language-learning activities with ample opportunity for communicative interaction.

ESLV 274 2.0 units
Reading about the United States
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
This intermediate level reading course acquaints students with various cultural aspects of life in the United States. Students read and discuss narratives and general information articles from journals.

ESLV 275 2.0 units
Writing for the World of Work
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
This course is an intermediate level course to help students who encounter writing difficulties on the job. Memos, faxes, cover letters, general business letters, resumes, punctuation, and autobiography will be taught.

ESLV 275X 2.0 units
A computer-assisted, intermediate-level writing course which helps students who encounter writing difficulties on the job. Memos, faxes, cover letters, general business letters, resumes, punctuation, and autobiography will be taught.

ENGLISH AS A SECOND LANGUAGE, VOCATIONAL SURVIVAL

ESLV 620 0.0 unit
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.

ESLV 621 0.0 unit
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.

ESLV 622 0.0 unit
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.

ESLV 623 0.0 unit
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.

ESLV 624 0.0 unit
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.

ESLV 625 0.0 unit
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.

ENVIRONMENTAL SCIENCE
(ENVRS)

ENVRS 1 3.0 units
Energy for the Future
3.0 hours lecture
Grading: letter grade or credit/no credit
This is an introductory physical science 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 basic physical science, energy production and consumption, scarcity of resources, conservation, pollution, governmental regulation, and developments in environmental remediation.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

FAMILY AND CONSUMER STUDIES (FACS)

FACS 50 3.0 units
Consumer Awareness
3.0 hours lecture
Grading: letter grade or credit/no credit
Students will learn to function effectively as a consumer in todays marketplace. Topics include: 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.

FACS 64 3.0 units
Life Management
3.0 hours lecture
Grading: letter grade or credit/no credit
This course helps the student develop the abilities, skills and attitudes needed in planning and managing for todays living. Topics include decision-making, time management, energy conservation and dealing with change.
Transfer Status: Transferable to CSU, see counselor for limitations.

FACS 211A 3.0 units
College & Career Opportunities for Women
3.0 hours lecture
Grading: letter grade or credit/no credit
This is a study of womens roles and examinines personal development and the educational and career opportunities available to women. The course focuses on self assessment, goal planning and personal vision.

FACS 211B 3.0 units
College & Career Opportunities for Women
3.0 hours lecture
Grading: letter grade or credit/no credit
This course is a study of womens roles exploring personal potential and the educational and career opportunities available. Skills, experience and educational requirements for specific careers will be discussed. Resume writing and interview techniques are included.

FACS 350M1 1.0 unit
Consumer Awareness: Money Management
1.0 hour lecture
Grading: letter grade or credit/no credit
This course covers the handling of debt, applying for credit, credit rights and wise money management.

FACS 364 1.0 unit
Life Management
1.0 hour lecture
Grading: letter grade or credit/no credit
Strategies for effective time-management; concepts of values and goals as related to decision-making resource allocation.

FACS 607 0.0 unit
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.

FACS 650 0.0 unit
Special Topics in Consumer Education
3.0 hours lecture
Grading: LBCC Non-Graded Course
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.

FACS 664 0.0 unit
Life Management
3.0 hours lecture
Grading: LBCC Non-Graded Course
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.

FACS 691 0.0 unit
Basic Home Living Skills
6.0 hours laboratory
Grading: LBCC Non-Graded Course
Provides fundamentals of food preparation and service, nutrition, safety, sewing and related activities, personal hygiene and leisure-time activities.

FACS 864 3.0 units
Introduction to Life Management
3.0 hours lecture
Grading: credit/no credit
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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
<th>Lecture Hours</th>
<th>Laboratory Hours</th>
<th>Grading</th>
<th>Recommended Preparation</th>
<th>Description</th>
<th>Transfer Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>FD 3</td>
<td>2.0</td>
<td>Intro to Careers in Design/Merchandising</td>
<td>2.0</td>
<td></td>
<td></td>
<td></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>
<td></td>
</tr>
<tr>
<td>FD 5</td>
<td>2.0</td>
<td>Intro/Manufacturing for Design/Merchandising</td>
<td>2.0</td>
<td></td>
<td></td>
<td></td>
<td>This course serves as an introduction to garment manufacturing in the apparel industry; from the design concept through sourcing and pricing to the production of a clothing line. Course required for fashion design and fashion merchandising majors. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
<td></td>
</tr>
<tr>
<td>FD 9</td>
<td>3.0</td>
<td>Clothing Selection</td>
<td>3.0</td>
<td></td>
<td></td>
<td></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>
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</tr>
<tr>
<td>FD 10 (CAN FCS 6)</td>
<td>3.0</td>
<td>Textile Fibers and Fabrics</td>
<td>3.0</td>
<td></td>
<td></td>
<td></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>
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</tr>
<tr>
<td>FD 20 (CAN FCS 22)</td>
<td>3.0</td>
<td>Introduction to Fashion Merchandising</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
<td>This course explains and illustrates the scope of the fashion industry, its value, development and job potential. Included are an overview of curriculum content and the inter-relationship of the courses involved. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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</tr>
<tr>
<td>FD 22A</td>
<td>1.5</td>
<td>Merchandising for Profit I</td>
<td>1.5</td>
<td></td>
<td></td>
<td></td>
<td>Recommended Preparation: FD 20 Grading: letter grade or credit/no credit This course covers the calculation, interpretation and analysis of the profit and loss statement. Basic pricing and repricing of merchandise and the importance of markup to profitable merchandising is explained and discussed. The course is typically offered for 9 weeks. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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<tr>
<td>FD 22B</td>
<td>1.5</td>
<td>Merchandising for Profit II</td>
<td>1.5</td>
<td></td>
<td></td>
<td></td>
<td>Recommended Preparation: FD 20 Grading: letter grade or credit/no credit This course emphasizes quantitative merchandising techniques as applied to inventory and dollar control, discounts, dating procedures and shipping terms. The course is typically offered for 9 weeks. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
<td></td>
</tr>
<tr>
<td>FD 23</td>
<td>3.0</td>
<td>Fashion/Merchandise Buying</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
<td>This course is designed to provide the knowledge of the functions of buying merchandise for retail or wholesale businesses. Required for all Fashion Merchandising Majors. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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</tr>
<tr>
<td>FD 24AB</td>
<td>1.5</td>
<td>Beginning Sewing</td>
<td>1.0</td>
<td>2.0</td>
<td></td>
<td></td>
<td>Recommended Preparation: FD 20 Grading: letter grade or credit/no credit This course covers the construction of simple garments using basic techniques of clothing construction. Principles and methods related to constructing both woven and knit fabrics will be covered. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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</tr>
<tr>
<td>FD 25AB</td>
<td>1.5</td>
<td>Intermediate Sewing</td>
<td>1.0</td>
<td>2.0</td>
<td></td>
<td></td>
<td>Recommended Preparation: FD 20 Grading: letter grade or credit/no credit This course focuses on 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.</td>
<td></td>
</tr>
<tr>
<td>FD 26AB</td>
<td>2.0</td>
<td>Advanced Sewing</td>
<td>1.0</td>
<td>3.0</td>
<td></td>
<td></td>
<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>
<td></td>
</tr>
<tr>
<td>FD 27AB</td>
<td>1.5</td>
<td>Production Sewing</td>
<td>1.0</td>
<td>2.0</td>
<td></td>
<td></td>
<td>Recommended Preparation: FD 20 Grading: letter grade or credit/no credit This course focuses on the principles and methods of stitching and garment construction on power industrial machines as applied to the production methods of the garment manufacturing industry. Occupational certificate is awarded upon completion for eight units. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
<td></td>
</tr>
</tbody>
</table>
FD 29AB  2.0 units
Tailoring
1.0 hour lecture , 3.0 hours laboratory
Grading: letter grade or credit/no credit
This course covers the principles of tailoring techniques
and finishes as applied to men’s or women’s clothing.
Transfer Status: Transferable to CSU, see counselor for
limitations.

FD 32  3.0 units
History of Fashion
3.0 hours lecture
Grading: letter grade or credit/no credit
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.

FD 36A  1.5 units
Pattern Drafting I: Basic Block
1.0 hour lecture , 1.5 hours laboratory
Grading: letter grade or credit/no credit
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.

FD 36B  1.5 units
Pattern Drafting II: Pattern Manipulation
1.0 hour lecture , 1.5 hours laboratory
Recommended Preparation: FD 36A
Grading: letter grade or credit/no credit
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.

FD 37A  1.5 units
Pattern Draping I: Basic Sloper
1.0 hour lecture , 1.5 hours laboratory
Grading: letter grade or credit/no credit
This is a beginning course which includes freehand
methods of pattern making and creating the basic sloper
in muslin on dress forms. 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.

FD 37B  1.5 units
Pattern Draping II: Sloper Manipulations
1.0 hour lecture , 1.5 hours laboratory
Recommended Preparation: FD 37A
Grading: letter grade or credit/no credit
This is an intermediate course in the freehand methods
(draping) of manipulating a basic sloper to create
finished designs. Each muslin is turned into a paper
pattern, cut and constructed to produce a finished
garment.
Transfer Status: Transferable to CSU, see counselor for
limitations.

FD 38A  3.0 units
Fashion Design I
2.0 hours lecture , 3.0 hours laboratory
Recommended Preparation: FD 36B and one semester of
214AB or 215AB (may be taken concurrently)
Grading: letter grade or credit/no credit
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.

FD 38B  3.0 units
Fashion Design II
2.0 hours lecture , 3.0 hours laboratory
Recommended Preparation: FD 37B or one semester of
214AB or 215AB (may be taken concurrently)
Grading: letter grade or credit/no credit
An advanced course that provides an opportunity to
design, illustrate, draft and construct sample scale
designs for a portfolio or fashion showing.
Transfer Status: Transferable to CSU, see counselor for
limitations.

FD 38C  3.0 units
Fashion Design III
2.0 hours lecture , 3.0 hours laboratory
Recommended Preparation: FD 38B
Grading: letter grade or credit/no credit
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.

FD 38D  3.0 units
Fashion Design IV
2.0 hours lecture , 3.0 hours laboratory
Recommended Preparation: FD 38C
Grading: letter grade or credit/no credit
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 toilets with the first garment from the
line.
Transfer Status: Transferable to CSU, see counselor for
limitations.

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
Grading: letter grade or credit/no credit
This beginning sketch course focuses on the skills necessary for the fashion industry. Students will learn to draw all aspects of garments on the figure and in flat technical drawings using a croquis (template). Fabrics will be rendered in color using marker techniques. The updated fashion figure proportion will be covered. Students will 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
This is a beginning drawing class for both design and merchandising students which stresses the basic proportions of the female and male fashion figure. The course will cover figure proportion, body movement, action poses, head, hand, foot and leg studies, and various drawing styles and mediums for expressing the fashion figure.

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
This course provides the student enrolled in a Fashion Design course an opportunity for additional hours working in the Fashion Design Lab. 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 232AB 0.5 unit
Specialized Sewing Tech: Christmas Craft
0.5 hour lecture, 1.0 hour laboratory
### Courses of Instruction

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FD 233AB</td>
<td>Specialized Sewing Tech: Lingerie Const</td>
<td>0.5</td>
<td>Sewing and fitting of garments using appropriate techniques for specific fabrics and functions. Provides the necessary skills for employment in the apparel trades.</td>
</tr>
<tr>
<td>FD 234AB</td>
<td>Specialized Sewing Tech: Winter Sports</td>
<td>0.5</td>
<td>Sewing and fitting of garments using appropriate techniques for specific fabrics and functions. Provides the necessary skills for employment in the apparel trades.</td>
</tr>
<tr>
<td>FD 235AB</td>
<td>Specialized Sewing Tech: Quick Sew</td>
<td>0.5</td>
<td>Sewing and fitting of garments using appropriate techniques for specific fabrics and functions. Provides the necessary skills for employment in the apparel trades.</td>
</tr>
<tr>
<td>FD 236AB</td>
<td>Specialized Sewing Tech: Couture Finish</td>
<td>0.5</td>
<td>Sewing and fitting of garments using appropriate techniques for specific fabrics and functions. Provides the necessary skills for employment in the apparel trades.</td>
</tr>
<tr>
<td>FD 242AD</td>
<td>Introduction to Fashion Modeling</td>
<td>2.0</td>
<td>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.</td>
</tr>
<tr>
<td>FD 244AD</td>
<td>Computer Patternmaking</td>
<td>1.0</td>
<td>This course is designed to provide hands-on training utilizing the latest versions of apparel pattern making software technology, such as PDS 2000 (Pattern Design System by Gerber Technology). Industry techniques and methods for creating and manipulating apparel patterns are presented.</td>
</tr>
<tr>
<td>FD 245AD</td>
<td>Computer Applications in Fashion</td>
<td>1.0</td>
<td>This course is a survey and critical analysis of the adventure and/or action and/or war films genre within the American film industry.</td>
</tr>
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</table>


- **FD 258AD** 1.0 unit
  - **Swimwear**
    - 0.5 hour lecture, 1.5 hours laboratory
    - Grading: letter grade or credit/no credit
    - This course instructs the student in the design, sewing, and fitting of swimwear. Special emphasis is given to patterns, stretch fabrics, bra construction and fitting issues. This class is typically taught in 9 weeks.

- **FD 332** 1.0 unit
  - **History of Fashion**
    - 1.0 hour lecture
    - Grading: letter grade or credit/no credit
    - This course is a vehicle to transport students out of the classroom setting and into the Fashion World to study present trends and markets, and research past fashion trends.

### Film (FILM)

- **FILM 1** 3.0 units
  - **Introduction to Film**
    - 3.0 hours lecture
    - Grading: letter grade or credit/no credit
    - This course serves as an introduction to the evaluation of film as an art form through an analysis and appreciation of its aesthetics, history, literature, creative techniques and expression of its societies and 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
    - This course is a 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.
    - 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
    - This course is a survey and critical analysis of the comedy and/or the melodrama and/or the musical films genre within the American film industry.
    - 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
    - This course is a survey and critical analysis of the adventure and/or action and/or war films genre within the American film industry.
    - 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
This course is a survey and critical analysis of the horror
and/or science fiction film genre within the American
film industry.
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, 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 CSU, see counselor
for limitations.

FIRE SCIENCE (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.

FIRE 2 3.0 units
Fire Prevention Technology
3.0 hours lecture
Grading: letter grade
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.
Courses of Instruction

Transfer Status: Transferable to CSU, see counselor for limitations.

FIRE 3 3.0 units
Fire Protection Equipment and Systems
3.0 hours lecture
Grading: letter grade
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. Transfer Status: Transferable to CSU, see counselor for limitations.

FIRE 4 3.0 units
Building Construction
3.0 hours lecture
Grading: letter grade
This course will cover the components of building construction methods which are relevant to firefighters’ safety. The components of building design and methods of construction of structures are known to be key factors when inspecting buildings, preplanning fire operations and operating at fire scenes. The development and evolution of building and fire codes will be analyzed and compared to previous fires which have occurred in residential, commercial and industrial occupied structures. Transfer Status: Transferable to CSU, see counselor for limitations.

FIRE 5 3.0 units
Fire Behavior and Combustion
3.0 hours lecture
Grading: letter grade
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. Transfer Status: Transferable to CSU, see counselor for limitations.

FIRE 6A 2.0 units
Fire Command 1A
2.2 hours lecture
Grading: letter grade
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. Must attend each day and pass a test for course credit. Transfer Status: Transferable to CSU, see counselor for limitations.

FIRE 6B 2.0 units
Fire Command 1B
2.2 hours lecture
Grading: letter grade
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. Transfer Status: Transferable to CSU, see counselor for limitations.
Courses of Instruction

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 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.

FIRE 42E 2.0 units
Fire Management 2E
2.2 hours lecture
Grading: letter grade
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.
Transfer Status: Transferable to CSU, see counselor for limitations.

FIRE 53 3.0 units
Fire Hydraulics
3.0 hours lecture
Grading: letter grade
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.
Transfer Status: Transferable to CSU, see counselor for limitations.

FIRE 54 3.0 units
Hazardous Materials 1
3.0 hours lecture
Grading: letter grade
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.
Transfer Status: Transferable to CSU, see counselor for limitations.

FIRE 58 3.0 units
Intro to Fire Company Administration
3.0 hours lecture
Courses of Instruction

Grading: letter grade
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.
Transfer Status: Transferable to CSU, see counselor for limitations.

**FIRE 60**  3.0 units
Fire Investigation 1
3.0 hours lecture
Grading: letter grade
Learn to determine causes of fires (accidental, suspicious and incendiary), types of fires, related laws, intro to arson and incendiaries, recognize and preserve evidence, interview witnesses and suspects, arrest and detention procedures, court procedures and to give court testimony.
Transfer Status: Transferable to CSU, see counselor for limitations.

**FIRE 61**  3.0 units
Rescue Practices
3.0 hours lecture
Grading: letter grade
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.
Transfer Status: Transferable to CSU, see counselor for limitations.

**FIRE 62**  3.0 units
Fire Apparatus and Equipment
3.0 hours lecture
Grading: letter grade
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.
Transfer Status: Transferable to CSU, see counselor for limitations.

**FIRE 64**  3.0 units
Hazardous Materials 2
3.0 hours lecture
Grading: letter grade
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.
Transfer Status: Transferable to CSU, see counselor for limitations.

**FIRE 65**  3.0 units
Fundamentals of Fire Safety
3.0 hours lecture
Grading: letter grade
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.
Transfer Status: Transferable to CSU, see counselor for limitations.

**FIRE 66**  3.0 units
Intro to Related Codes & Ordinances
3.0 hours lecture
Grading: letter grade
Familiarization and interpretation of national, state and local codes and ordinances which influence the field of fire prevention.
Transfer Status: Transferable to CSU, see counselor for limitations.

**FIRE 240AD**  0.5 unit
Firefighter I Physical Agility
0.2 hour lecture , 0.9 hour laboratory
Grading: letter grade or credit/no credit
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
Courses of Instruction

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 303** 1.0 unit

Intro to Fire Company Administration
2.2 hours lecture
Grading: credit/no credit
Designed for in-service fire personnel and presents a total management system, from firefighting techniques to strategies and tactics of command.

**FIRE 353** 1.0 unit

Fire Hydraulics/Driver Operator 1B
2.2 hours lecture
Grading: credit/no credit
A study of fire hydraulics as related to apparatus and equipment, including water supplies, services, operations and techniques. Designed for in-service training to meet requirements for certification by the state fire marshal.

**FIRE 354** 1.0 unit

Hazmat/First Responder
2.2 hours lecture
Grading: credit/no credit
Designed for in-service fire personnel and presents a total management system, from firefighting techniques to strategies and tactics of command.

**FIRE 354M1** 1.5 units

Hazmat/First Responder II
1.5 hours lecture
Grading: credit/no credit
Covering first responder techniques associated with hazardous materials designed for in-service training to meet OSHA standards.

**FIRE 361** 1.0 unit

Rescue Practices/Disaster Preparedness
1.1 hours lecture
Grading: credit/no credit
Covering rescue problems and techniques related to earthquakes, emergency rescue, care of victims, evacuation procedures and steps for earthquake preparedness and survival.

**FIRE 362** 1.0 unit

Apparatus & Equipment-Operator 1A
2.2 hours lecture
Grading: credit/no credit
A study of fire apparatus and related operating principles and procedures. Designed for in-service training to meet requirements for certification by the state fire marshal.

**FIRE 400A** 1.0 unit

ST 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. This is a special topics course. This course’s subject matter will vary by semester. Please refer to the schedule of classes for a particular semester’s topic. This course may be repeated for credit as topics change.

**FIRE 400B** 2.0 units

ST Fire Science
2.0 hour 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. Modules are designed to meet criteria specified in NFPA standards. This is a special topics course. This course’s subject matter will vary by semester. Please refer to the schedule of classes for a particular semester’s topic. This course may be repeated for credit as topics change.

**FIRE 400C** 3.0 units

ST 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. This is a special topics course. This course’s subject matter will vary by semester. Please refer to the schedule of classes for a particular semester’s topic. This course may be repeated for credit as topics change.

**FIRE 400D** 3.0 units

ST Fire Science
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 and the Marine Safety Association. This is a special topics course. This course’s subject matter will vary by semester. Please refer to the schedule of classes for a particular semester’s topic. This course may be repeated for credit as topics change.
Courses of Instruction

**FIRE 400E** 3.5 units
ST Fire Science
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. 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. This is a special topics course.
This course’s subject matter will vary by semester. Please refer to the schedule of classes for a particular semester’s topic. This course may be repeated for credit as topics change.

**FIRE 400F** 5.0 units
ST 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. This is a special topics course.
This course’s subject matter will vary by semester. Please refer to the schedule of classes for a particular semester’s topic. This course may be repeated for credit as topics change.

**FLORAL DESIGN (FLO)**

**FLO 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.

**FLO 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.

**FLO 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
**FLO 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 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.

**FLO 288** 2.0 units
Advanced Floral Design
1.5 hours lecture, 1.5 hours laboratory
Recommended Preparation: ID 286A-B and ID 287A-B-C
Grading: letter grade or credit/no credit
This course provides students with the techniques for the planning, design and execution of intricate and creative floral arrangements. Topics include terminology, application and methods for creating designs in less time for profit. This course is required for students in the Floral Design Certificate Program.

**FLO 289** 3.0 units
Applied Floral Shop Operation
3.0 hours lecture
Grading: letter grade or credit/no credit
This course presents techniques for starting a retail or home base floral business. Topics range from licensing procedures to shop layout and day to day operation including the handling of perishable floral materials. Policies, pricing, personnel and selling techniques are examined. Required Floral Design Majors.

**FOOD AND NUTRITION (F_N)**

**F_N 20 (CAN FCS 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.
Courses of Instruction

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**F_N 21 (CAN FCS 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 UC/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
This course is designed to assist the athlete and those who are physically active in examining his or her special nutritional needs based upon current research. Topics that are emphasized in the course include 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 meals. This course is typically offered for nine weeks.
Transfer Status: Transferable to UC/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 supervisory 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
This course provides supervised clinical field experience in health care facilities for dietetic service supervisor and dietetic technician program students. 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
This course 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
This course presents the principles of and indication for medical nutrition therapy in the treatment of diseases and disorders. Course content applies to dietetics programs in hospitals, convalescent and extended care facilities.

**F_N 233A 1.0 unit**
Special Topics — Medical Charting
1.0 hour lecture
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

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Courses of Instruction

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
This course presents advanced study of medical nutrition therapy 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
This course serves as an introduction to the development of professionalism and a team concept in the dietetic health care system. The course examines financing, planning and regulating health care services related to dietetics, as well as the standards of professional responsibility and code of ethics 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
This course provides supervised clinical experience in health care facilities for students in the Dietetic Technician Program. Students will 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
This course provides 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. This course 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
This course covers the most recent information on nutritional facts and fallacies emphasizing personal health and lifestyle.

F_N 255B 1.0 unit
Nutrition/Pregnancy, Infants, Children
1.0 hour lecture
Grading: letter grade or credit/no credit
This course provides the most recent information in the specific areas of nutrition. Nutritional facts and fallacies and life cycle nutrition focusing on pregnancy, infants and childhood are emphasized.

F_N 255C 1.0 unit
Nutrition for Adults and Aging
1.0 hour lecture
Grading: letter grade or credit/no credit
This course provides the most recent information in the specific area of nutrition. Facts and fallacies and life cycle nutrition focusing on seniors are emphasized.

F_N 255D 1.0 unit
Vegetarian Lifestyle
1.0 hour lecture
Grading: letter grade or credit/no credit
This course 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. The course is typically offered for nine weeks.

F_N 256 2.0 units
Weight Control & Energy Balance
2.0 hours lecture
Grading: letter grade or credit/no credit
This course presents techniques of long term weight control. The following areas are addressed in this course: assessment of ideal body weight, techniques of diet/behavior modification, emotional eating triggers, and principles of energy balance through the modification of diet.

F_N 260AD 1.5 units
Cultural Foods
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**  1.5 units

**Modern Meals**
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**  1.5 units

**Meal Preparation for 1 and 2 Persons**
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.

**F_N 341AB**  1.0 unit

**Modern Meals**
1.0 hour lecture  
Grading: letter grade or credit/no credit

This course 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 360AD**  0.5 unit

**Cultural Foods**
0.5 hour lecture, 1.0 hour laboratory  
Grading: letter grade or credit/no credit

This course 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 361AD**  0.5 unit

**Modern Meals**
0.5 hour lecture, 1.0 hour 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 362AD**  0.5 unit

**Cooking for Singles**
0.5 hour lecture, 1.0 hour laboratory  
Grading: letter grade or credit/no credit

This course is designed to teach meal planning and food preparation for the single person. This course will emphasize the preparation of nutritious, convenient, economical and attractive meals.

**FOREIGN STUDIES (FRSTU)**

**FRSTU 11A**  3.0 units

**Language & Cultures of Western Europe**
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**  3.0 units

**Language & Cultures of Western Europe**
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**  1.0 unit

**Forklift Safety and Operation**
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.

**FRENCH (FREN)**

**FREN 1 (CAN FREN 2)**  5.0 units

**Elementary French**
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 (Part of CAN FREN SEQUENCE A)**  3.0 units

**Elementary French 1A**
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 (Part of CAN FREN SEQUENCE A)**  2.0 units

**Elementary French 1B**
2.0 hours lecture, 1.0 hour laboratory  
Prerequisite: FREN 1A

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 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
This course is a continuation of the study of basic French vocabulary and 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 (Part of CAN FREN SEQUENCE A) 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 (Part of CAN FREN SEQUENCE A) 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
This is a continuation of the review of French grammar, emphasizing 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
This course provides an intensive study and practice in French conversation based on practical situations, French and Francophone culture, and current events.
Transfer Status: Transferable to UC/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
Students explore Francophone culture via articles, essays, realia, short stories, fables, biographies, etc. The course includes grammar review stressing oral and written composition, as well as acquisition of topic-related vocabulary, to improve fluency in the target language. 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
Students explore Francophone culture via articles, essays, realia, short stories, fables, biographies, etc. The course includes grammar review stressing oral and written composition, as well as acquisition of topic-related vocabulary, to improve fluency in the target language. 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
Students explore Francophone politics and current events via articles, essays, realia, etc. The course includes grammar review stressing oral and written composition, as well as acquisition of topic-related vocabulary, to improve fluency in the target language. 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
Students explore Francophone literature via short stories, fables, novels, poems, etc. The course includes grammar review stressing oral and written composition, as well as acquisition of topic-related vocabulary, to improve fluency in the target language. Outside reading and reporting in the field of study are required.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.
Courses of Instruction

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**

The Global Economy
3.0 hours lecture
Grading: letter grade or credit/no credit
This course examines the location and organization of international economic activities from an economic, cultural, political, and environmental perspective. Topics covered by a faculty team drawn from Economics and Geography include the spatial distribution of resources and production, global flows of information, capital and labor, and regional inequalities such as income distribution, poverty, discrimination and standard of living. This class is recommended for students in business, social science and liberal arts with an interest in global and international issues, including regional and social inequalities, marketing and international trade, and tourism. This course is 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
This course provides an introduction to mapping and geographic information science, which includes computer systems and software for geographic analysis, cartography, global positioning systems and remote sensing. Included are geographic concepts for spatial analysis and work on practical applications with computer software.
*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 or credit/no credit
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 (CAN GEOG 2) 3.0 units**

Earth Surface Study
3.0 hours lecture
Grading: letter grade or credit/no credit
This is an introductory physical science course, which will emphasize an understanding of the salient scientific principles underlying the spatial distribution of phenomena that exist in the Earth’s hydrosphere, biosphere, atmosphere, and lithosphere and the role humans play within these systems.
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

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 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
This is a field trip class offering three single-day field trips, including the San Andreas Fault, Palos Verdes Hills and the Santa Ana Mountains-Dana Point. The purpose of these trips is to acquaint students with the local geology and associated environmental problems. This class does not fulfill the requirement for a laboratory science.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

GEOL 2L 1.0 unit
General Geology, Physical Geology Lab
1.0 hour lecture, 2.0 hours laboratory
Prerequisite: GEOL 2 (may be taken concurrently)
Grading: letter grade or credit/no credit
This class provides laboratory exercises in identification of rocks and minerals, an introduction to geologic time and dating techniques, reading and interpretation of topographic maps and aerial photographs, study of geologic structures, faults and geomorphology.
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, 2, 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
Geology 7AD is a field studies course to geologically interesting areas of the west. The emphasis of the course 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 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 weekend field trips. Offered spring semester.
Transfer Status: Transferable to 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 GER 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.

**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 8) 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 counselor 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
Courses of Instruction

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.

GER 8AD 2.0 units
Spoken German
3.0 hours lecture
Prerequisite: GER 2 or 2A and 2B
Grading: letter grade or credit/no credit
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.

Transfer Status: Transferable to CSU, see counselor for limitations.

GER 25A 3.0 units
Advanced German: Culture in Literature
3.0 hours lecture
Prerequisite: GER 4
Grading: letter grade or credit/no credit
The study of German culture in short stories, fables, biographies, etc. Review grammar, stressing oral and written composition and 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 respective field of study are included.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

HEALTH EDUCATION (HLED)

HLED 2 2.0 units
Introduction to Health Education
2.0 hours lecture
Grading: letter grade or credit/no credit
This course is designed to promote desirable health attitudes and to provide up-to-date information in the areas of individual, family and community health. This course is not open for credit to students registered in or with credit in HLED 3. This course fulfills the AA/AS degree requirements in health education.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

HLED 3 3.0 units
Contemporary Health Problems
3.0 hours lecture
Grading: letter grade or credit/no credit
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.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

HLED 4 3.0 units
Women’s Health Issues
3.0 hours lecture
Grading: letter grade or credit/no credit
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.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

HLED 5 3.0 units
Men's Health Issues
3.0 hours lecture
Grading: letter grade
This course is designed to explore contemporary health issues and how they affect men. A variety of topics will be addressed, including; cardiovascular disease, relationships and sexuality, alcohol and substance abuse, stress, and psychological health. These topics will be examined in relation to how they influence the wellness of men.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

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.
Courses of Instruction

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
This class is a survey of British history from antiquity through the reign of Queen Anne (1714). The course focuses on the political, social, religious and intellectual institutions of ancient and medieval English history, with a special emphasis given to the evolution of British political philosophy and law and its impact on European history.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

HIST 5B 3.0 units
History of England and Great Britain
3.0 hours lecture
Grading: letter grade
This class is a survey of English history from the accession of George I of Hanover (1714) to the present with an emphasis on the creation and expansion of the British Empire, the Industrial Era, and the collapse of the European hegemony during World War I and II. Particular attention will be given to the postwar adjustment of the United Kingdom to the new set of realities that emerged in the second half of the 20th century.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

HIST 6 3.0 units
History of Russia
3.0 hours lecture
Grading: letter grade
This course is a survey of Russian history from the founding of the Russian state to the present. It 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 3.0 units
History of the Americas
3.0 hours lecture
Grading: letter grade
A comprehensive survey of the Western Hemisphere from the development of its earliest human communities, subsequent encounter with European civilization and the formation of colonial empires. The course focuses on a comparative analysis of the social, economic and political structures of the region through the movement for independence in the nineteenth century. Recommended for Spanish majors. CSU/UC transferable.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

HIST 8AH 3.0 units
Honors History of the Americas
3.0 hours lecture
Prerequisite: Qualification for the Honors Program 
Grading: letter grade
A comprehensive survey of the Western Hemisphere from the development of its earliest human communities, subsequent encounter with European civilization and the formation of colonial empires. The course focuses on a comparative analysis of the social, economic and political structures of the region through the movement for independence in the nineteenth century. Recommended for Spanish majors. CSU/UC transferable.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

HIST 8B 3.0 units
History of the Americas
3.0 hours lecture
Grading: letter grade
This course presents a comprehensive survey of the distinct national identities of the nations of the Western Hemisphere as they developed and matured during the nineteenth and twentieth centuries. The course focuses on a comparative analysis of North and South America as the new nations struggled with economic, political and social issues. It is recommended for Spanish majors.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

HIST 8BH 3.0 units
Honors History of the Americas
3.0 hours lecture
Prerequisite: Qualification for the Honors Program 
Grading: letter grade
A comprehensive survey of the distinct national identities of the nations of the Western Hemisphere as they developed and matured during the nineteenth and twentieth centuries. The course focuses on a comparative analysis of North and South America as the new nations struggled with economic, political and social issues. Recommended for Spanish majors.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

HIST 9A 3.0 units
History of China
3.0 hours lecture
Grading: letter grade or credit/no credit
This class is a survey of Chinese history from antiquity to the present with an emphasis on the modern era. Particular attention is given to the evolution of the traditional China, the Chinese way of life, and the dynastic cycle as well as the impact of modernization, the imperial era, and the building of a new society during the 20th century.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

HIST 9B 3.0 units
History of Japan and Korea
3.0 hours lecture
Grading: letter grade or credit/no credit
This class is a survey of Japanese and Korean history from antiquity to the present with an emphasis on the modern era. Particular attention is given to the relationship of both countries to traditional China, the development of a unique way of life in each, and the
Courses of Instruction

Impact of modernization and the imperial era on these two societies during the 19th and 20th centuries.

**Transfer Status:** Transferable to UC/CSU, see counselor for limitations.

**HIST 9C**
History of India and Southeast Asia
3.0 units
Grading: letter grade or credit/no credit
This class is a survey of the history of India and Southeast Asia from antiquity to the present. Emphasis is placed on the political, economic, social, religious and intellectual institutions of traditional India and representative cultures in Southeast Asia. Special attention is given to the impact of modernization on the Subcontinent, the development of modern India, and the history of representative cultures of Southeast Asia: Vietnam, Laos, Cambodia, Thailand, Burma, Malay, Sumatra, and Java.

**Transfer Status:** Transferable to UC/CSU, see counselor for limitations.

**HIST 10 (CAN HIST 8)**
Hist/Early America (Colonial-Reconstr)
3.0 units
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.

**Transfer Status:** Transferable to UC/CSU, see counselor for limitations.

**HIST 11 (CAN HIST 10)**
Hist/Modern America (Reconstr-Present)
3.0 units
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.

**Transfer Status:** Transferable to UC/CSU, see counselor for limitations.

**HIST 18**
History of Mexico
3.0 units
Grading: letter grade or credit/no credit
A survey of the historical and cultural development from the pre-Columbian era to the present. Emphasizes the major intellectual, social and political movements in the formation of modern Mexico.

**Transfer Status:** Transferable to UC/CSU, see counselor for limitations.

**HIST 25**
History of American Woman
3.0 units
Grading: letter grade
Survey of the history of women in America from Native Americans and the colonial period to the present. Emphasis on relevant political, economic, and social factors. Satisfies the U.S. History requirement for the AA Degree.

**Transfer Status:** Transferable to UC/CSU, see counselor for limitations.

**HIST 27A**
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**
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**
History of California
3.0 units
Grading: letter grade or credit/no credit
A comprehensive survey of the history 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**
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.
**Courses of Instruction**

**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
Students in this course will learn greenhouse structures, 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, wholesale and retail sales, 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 10B** 4.0 units
Greenhouse Management and Operation
2.0 hours lecture, 6.0 hours laboratory
Grading: letter grade or credit/no credit
Students in this course will learn greenhouse structures, 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, wholesale and retail sales, 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 11A** 3.0 units
Plant Identification—Trees
2.0 hours lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
Focuses on the study of trees, including identification, culture and landscape uses.
Transfer Status: Transferable to CSU, see counselor for limitations.

**HORT 11B** 3.0 units
Plant Identification—Shrubs
2.0 hours lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
Focuses on the study of shrubs, including identification, culture and landscape uses.
Transfer Status: Transferable to CSU, see counselor for limitations.

**HORT 11C** 3.0 units
Plant Identification—Herbaceous
2.0 hours lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
Focuses on the study of herbaceous plants, including identification, culture and landscape uses.
Transfer Status: Transferable to CSU, see counselor for limitations.

**HORT 11D** 3.0 units
Plant Identification—Tropicals
2.0 hours lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
Focuses on the study of tropical plants, including identification, culture and landscape uses.
Transfer Status: Transferable to CSU, see counselor for limitations.

**HORT 15A** 2.0 units
Basic Horticulture
1.5 hours lecture, 1.5 hours laboratory
Grading: letter grade or credit/no credit
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** 2.0 units
Basic Horticulture
1.5 hours lecture, 1.5 hours laboratory
Grading: letter grade or credit/no credit
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 20** 3.0 units
Principles of Landscape Design
3.0 hours lecture
Grading: letter grade or credit/no credit
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 21** 3.0 units
Principles of Landscape Design
3.0 hours lecture
Grading: letter grade or credit/no credit
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 26A** 3.0 units
Plant Propagation
2.0 hours lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
Learn sexual and asexual propagation of foliage, annual, perennial, tropical, flowering and ornamental plants, operation and maintenance of propagation chambers and greenhouse and shade house systems.
Transfer Status: Transferable to CSU, see counselor for limitations.

**HORT 26B** 3.0 units
Plant Propagation
2.0 hours lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
Learn sexual and asexual propagation of foliage, annual, perennial, tropical, flowering and ornamental plants, operation and maintenance of propagation chambers and greenhouse and shade house systems.
Transfer Status: Transferable to CSU, see counselor for limitations.

**HORT 28A** 3.0 units
Horticulture Equipment Operation (Fall)
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.
 Courses of Instruction

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
Students in this course will learn to diagnose pests and diseases of ornamental plants and turf, chemical and biological control and their regulation, local, and state and federal laws pertaining to pesticide application. Students will 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 227 2.0 units
Interior Plant Design/Installation/Maint.
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 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

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 315 1.5 units
Basic Horticulture
1.0 hour lecture, 1.5 hours laboratory
Grading: letter grade or credit/no credit
An intro to the basics of the horticulture industry. The focus is on soil types, potting and transplanting, propagation, fertilizers, budding and grafting.

HORT 315M2 1.0 unit
Landscape Design
0.5 hour lecture, 1.1 hours laboratory
Grading: letter grade or credit/no credit
An intro to the basics of the horticulture industry. The focus is on soil types, potting and transplanting, propagation, fertilizers, budding and grafting.

HORT 323AD 0.5 unit
Landscape Design
0.4 hour lecture, 1.1 hours laboratory
Grading: letter grade or credit/no credit
Aids students in developing a basic knowledge of the theory and application of soil preparation, equipment operation, planting, maintenance and techniques.

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 maintenance, 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 lectures 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  
Introduction to Victimology  
3.0 hours lecture  
Grading: letter grade  
Explore the cost of victimization to society. Emphasizes information on existing resources, the 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  
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  
Introduction to Gerontology  
3.0 hours lecture  
Grading: letter grade  
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  
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  
Introduction to Addictive Behaviors  
3.0 units  
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  
Introduction to Chemical Dependency  
3.0 units  
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  
Case Management: Treatment & Aftercare  
3.0 units  
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  
Stress Mgmt for the Helping Professional  
3.0 units  
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  
Physiology & Pharmacology of Drugs  
3.0 units  
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.
Courses of Instruction

sessions. Designed for students interested in the helping professions.

**HS 48** 3.0 units

**Group & Family Process**

3.0 hours lecture

Prerequisite: HS 43 or 45 or 47

Grading: letter grade

Students will explore the counseling process from the perspective of both the client and counselor. Therapeutic orientations of group/family counseling will be learned and applied through class role playing. Course is designed for students interested in the helping professions. Course will assist students in preparation for the California Association of Alcohol/Drug Educators (CAADE) and/or California Association of Alcohol and Drug Abuse Counselors (CAADAC) certification.

Transfer Status: Transferable to CSU, see counselor for limitations.

**HS 50** 3.0 units

**Law and Ethics**

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 the helping professions.

**HS 71AD** 2.0 units

**Work Experience — Human Services**

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

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 work experiences in the Alcohol/Drug treatment and Human Services disciplines.

Transfer Status: Transferable to CSU, see counselor for limitations.

**HS 72AD** 3.0 units

**Work Experience — Human Services**

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

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 Studies and Human Services disciplines.

Transfer Status: Transferable to CSU, see counselor for limitations.

**HS 73AD** 4.0 units

**Work Experience — Human Services**

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.

**Transfer Status:**

Transferable to CSU, see counselor for limitations.

**HS 207** 3.0 units

**Development of Helping/Listening Skills**

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** 3.0 units

**Human Connections in a Changing Society**

3.0 hours lecture

Grading: letter grade or credit/no credit

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** 3.0 units

**Stress on Caregivers to Elderly**

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** 3.0 units

**Elderly Care Issues**

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** 3.0 units

**HIV & Cultural Competence in Treatment**

3.0 hours lecture

Prerequisite: HS 41 or 43 or 45 or 46

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 or 45 or 46
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/recreation 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

This course compares and contrasts major civilizations using interdisciplinary teams of faculty drawn from the Humanities and the Social Sciences. These teams study two or more major cultures to determine how these human communities met their basic biological, material, spiritual and intellectual needs, and experienced both continuity and change through time.

*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 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 PHIL 3 or PSYCH 3.

*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

This course explores the multicultural nature of American society from a Humanities and Social Sciences perspective. The course examines how ethnic groups in America have constructed artistic, literary, musical, philosophical and religious identities based on their traditions and experiences and seeks to understand the United States as a common culture. Using the Social Sciences to compare and contrast the origins, living conditions and experiences of Americas constituent populations, the course analyzes 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 8A-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 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 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 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. Selection of materials and products used in interior environments will be emphasized for the functional aesthetic quality.

**ID 5**  
Interior Design Studio I  
2.0 hours 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  
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.
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| 70AD  | Work Experience Issues-Interior Design                  | 1.0   | 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. |
| 71AD  | Work Experience: Interior Design                        | 1.0   | 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. |
| 72AD  | Work Experience: Interior Design                        | 2.0   | 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. |
| 73AD  | Work Experience: Interior Design                        | 3.0   | 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. |
| 76    | History of American Material Culture                     | 2.0   | 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.  
3 Types of artifacts to be studied include furniture, architecture, metal, ceramics, textiles, glass and prints.  
Transfer Status: Transferable to CSU, see counselor for limitations. |
| 80    | History of Interiors and Furnishings I                   | 3.0   | 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. |
| 90    | History of Interiors and Furnishings II                  | 3.0   | 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. |
| 200   | Interior Illustration                                   | 2.0   | 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, casting and shadowing of interior elements. |
| 210   | Fundamentals of Lighting                                | 3.0   | 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. |
| 215   | Interior Design Studio I                                | 2.0   | 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. |
| 230   | Business and Professional Practice                      | 3.0   | 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. |
| 270A  | Exploring Interior Design                               | 2.0   | 2.0 hours lecture  
Grading: letter grade or credit/no credit  
This is an introductory course designed for the person who is redecorating, remodeling or seeking new ideas or information about future purchases in home furnishings. Course topics include clients, design elements and principles, interior materials, choosing furniture, lighting, fireplaces and stairs. |
| 270B  | Exploring Interior Design                               | 2.0   | 2.0 hours lecture  
Grading: letter grade or credit/no credit  
This is an introductory course designed for the person who is redecorating, remodeling or seeking new ideas or information about future purchases in home furnishings. Course topics include clients, design elements and principles, interior materials, choosing furniture, lighting, fireplaces and stairs. |
This is an introductory course designed for the person who is redecorating, remodeling or seeking new ideas and information about future purchases in home furnishings. Course topics include color, choosing furniture, window and wall treatments, floor coverings, lighting and accessories.

**Residential Furnishings**

1.0 hour lecture
Grading: letter grade or credit/no credit
This is a practical course for someone ready to buy a new home or remodel an existing one. Topics include tips on how to “master plan” a decorating idea and information on the latest trends and styles in interior design.

**ITALIAN (ITAL)**

**ITAL 1 (CAN ITAL 2)** 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.
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**ITAL 1B**

2.0 units

**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 (CAN ITAL 4)**

5.0 units

**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 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 2A**

3.0 units

**Elementary Italian**

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**

2.0 units

**Elementary Italian**

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**

5.0 units

**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.*

**JAPANESE (JAPAN)**

**JAPAN 1 (CAN JAPN 2)**

5.0 units

**Elementary Japanese**

5.0 hours lecture, 1.0 hour laboratory
Grading: letter grade or credit/no credit
Essentials of modern spoken and written Japanese for the beginner. Fundamentals of grammar, basic vocabulary, structural patterns, useful phrases and both Kana writing practices (Hiragana, Katakana). Not recommended for native speakers of Japanese or students who have completed two years of high school Japanese with a grade of B or better.
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**JAPAN 1A**

3.0 units

**Elementary Japanese 1A**

3.0 hours lecture
Grading: letter grade or credit/no credit
Courses of Instruction

The first half of JAPAN1. Essentials of the modern spoken and written Japanese for the beginner. Fundamentals of grammar, basic vocabulary, structural patterns, useful phrases and Kana writing practices (Hiragana). Not recommended for native speakers of Japanese or students who have completed two years of high school Japanese with a grade of B or better. This course in combination with JAPAN1B is equivalent to JAPAN1.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

JAPAN 1B 2.0 units
Elementary Japanese 1B
2.0 hours lecture, 1.0 hour laboratory
Prerequisite: JAPAN 1A
Grading: letter grade or credit/no credit

The second half of JAPAN1. Essentials of the modern spoken and written Japanese for the beginner. Fundamentals of grammar, basic vocabulary, structural patterns, useful phrases and both Kana writing practices (Hiragana, Katakana). Not recommended for native speakers of Japanese or students who have completed two years of high school Japanese with a grade of B or better. This course in combination with JAPAN1B is equivalent to JAPAN1.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

JAPAN 2 (CAN JAPN 4) 5.0 units
Elementary Japanese
5.0 hours lecture, 1.0 hour laboratory
Prerequisite: JAPAN 1 or JAPAN 1A and 1B or recent completion of two years of High School Japanese.
Grading: letter grade or credit/no credit

Continuation of JAPAN1. Emphasizes listening, speaking, reading and writing with the correct use of Japanese. Includes Kanji, as well as Hiragana and Katakana. Not recommended for native speakers of Japanese.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

JOURNALISM (JOURN)

JOURN 1A 3.0 units
Introduction to Desktop Publication
2.0 hours lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit

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 units
Introduction to Desktop Publication
2.0 hours lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit

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 units
Introduction to Public Relations
3.0 hours lecture
Grading: letter grade

The course includes instruction in fundamentals of publicity and public relations for community groups and business organizations. Students learn sources, techniques, and outlets to gain publicity. Students practice planning and preparing various types of publicity programs and press releases.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

JOURN 6AD 3.0 units
Working on the Magazine
2.0 hours lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit

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 units
Introduction to Mass Communication
3.0 hours lecture
Grading: letter grade

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 units
Beginning Newswriting and Reporting
3.0 hours lecture
Prerequisite: Eligibility for ENGL 1.
Grading: letter grade

Students will gain experience gathering, writing and editing of news stories using computers.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

JOURN 25 3.0 units
Free-Lance Writing
3.0 hours lecture
Grading: letter grade or credit/no credit

Training in the writing and marketing of newspaper and magazine feature stories.

Transfer Status: Transferable to CSU, see counselor for limitations.

JOURN 35AD 3.0 units
Photojournalism
2.0 hours lecture, 3.0 hours laboratory
Grading: letter grade

Instruction in basic and advanced photojournalism techniques. Practical experience in newspaper photography. Not open to students registered in or with credit in PHOT 35AD.

Transfer Status: Transferable to CSU, see counselor for limitations.

JOURN 71AD 2.0 units
Work Experience, Journalism
1.0 hour lecture, 4.2 hours laboratory
Corequisite: Enrollment in at least seven units including this course.
Courses of Instruction

LEARNING AND ACADEMIC RESOURCES (LEARN)

LEARN 11 2.0 units
Learning and Academic Strategies
2.0 hours lecture
Grading: credit/no credit
This is a comprehensive learning and academic strategies course designed to assist students in developing an understanding of learning theories and academic principles, concepts, and strategies, along with their direct and practical application, with the goal of achieving or maximizing academic success. Course topics will 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. These topics will be presented as theories and principles with an emphasis on the practical and appropriate application of key academic strategies. This course also provides small group interaction and individualized instruction to develop a support system and a mentor experience with the instructor. Further, Learn 11 emphasizes individual approaches to learning through diagnosis of student learning strengths and weaknesses and the development of an effective system of study for each.
Transfer Status: Transferable to CSU, see counselor for limitations.

LEARN 11A 2.0 units
Learning and Academic Strategies
3.0 hours lecture
Grading: credit/no credit
This is a comprehensive learning and academic strategies course designed to assist students in developing an understanding of learning theories and academic principles, concepts, and strategies, along with their direct and practical application, with the goal of achieving or maximizing academic success. Course topics will 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. These topics will be presented as theories and principles with an emphasis on the practical and appropriate application of key academic strategies. This course also provides small group interaction and individualized instruction to develop a support system and a mentor experience with the instructor. Further, Learn 11A emphasizes individual approaches to learning through diagnosis of student learning strengths and weaknesses and the development of an effective system of study for each.
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.

LEARN 610 0.0 unit
Basic Study Skills Laboratory
3.0 hours laboratory
Grading: LBCC Non-Graded Course
An individualized, open-entry lab course in the Learning Center. A variety of basic learning and study skills, such as test-taking, time management and note-taking, are covered.

LEARN 617 0.0 unit
Educational Technology Skills for College
1.0 hour laboratory
Grading: LBCC Non-Graded Course
A course designed to provide students with individual and group tutoring in specific subject areas to improve academic performance. Tutoring appointments will be scheduled on a weekly basis for the entire semester or for as long as the student desires assistance.

LEARN 650 0.0 unit
Supervised Tutoring
1.0 hour laboratory
Corequisite: Concurrent enrollment in an LBCC course.
Grading: LBCC Non-Graded Course
Through computer-assisted and individualized instruction in a laboratory environment, this course is designed to increase student knowledge of educational technology resources on campus, improve student use of educational technology for the successful completion of technology based course assignments, and improve student confidence in utilizing educational technology.

LEARN 810AD 0.5 unit
Learning Skills
0.3 hour lecture, 0.7 hour laboratory
Grading: credit/no credit
An open-entry Learning Center course providing individualized and small group instruction in basic learning and study skills, including time management, note-taking, memory techniques, textbook study and test-taking.

LEARN 811 1.0 unit
Introduction to Study Skills
1.0 hour lecture
Grading: credit/no credit
This is an introductory learning strategies and techniques course designed to assist students in understanding basic study skills and information along with their direct and practical application in preparation for college-level coursework. The goal is for students to enhance their academic effectiveness. Course topics will include: college expectations, time management, memory and concentration, study reading, listening and note-taking, and test-taking.

LEARN 815 0.5 unit
Introduction to Tutoring
0.5 hour lecture
Grading: credit/no credit
This course prepares students in learning theories and tutoring methods so that they may be successful student tutors. This course is designed for students who have been hired as LBCC peer tutors.

LIB 2 1.0 unit
Web Databases
1.0 hour lecture
Grading: letter grade or 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. This course will be beneficial for students who wish to develop vital information technology skills for both academic and professional purposes.

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.

LIB 201 3.0 units
Introduction to Cataloging
3.0 hours lecture
Grading: letter grade or credit/no credit
Library 201 is designed to teach students the valuable skills necessary to become qualified technicians. Topics will include: cataloging principles and procedures including descriptive and subject cataloging, classification systems, Machine Readable Cataloging (MARC) formats, bibliographic utilities, authority and bibliographic verification and control.

LIB 202 3.0 units
Introduction to Access Services
3.0 hours lecture
Grading: letter grade or credit/no credit
Library 202 is designed to teach students the valuable skills necessary to become qualified technicians. This course focuses on the major functions of library public and access services and topics will include: circulation management, collection maintenance, supervision of staff, confidentiality, intra and interlibrary loan, reserve collections, copyright laws, statistical design and compilation.
Courses of Instruction

**LIB 203 3.0 units**
Introduction to Acquisitions
3.0 hours lecture
Grading: letter grade or credit/no credit
Library 203 is designed to teach students the valuable skills required to become qualified library technicians. This course introduces students to widely used print, non-print, and online sources in a variety of settings, and develops question-negotiation skills and search strategies. The topics will include the information needs of library users and the students will be empowered to function competently in the Information Age.

**LIB 204 3.0 units**
Introduction to Reference Services
3.0 hours lecture
Grading: letter grade or credit/no credit
Library 204 is designed to teach students the valuable skills necessary to become qualified technicians. This course introduces students 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 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 213 1.0 unit**
Web Government Resources
1.0 hour lecture
Grading: letter grade
This is a hands-on introductory course, which acquaints students with government-related resources available on the Internet. This course is beneficial to students enrolled in Political Science, Administration of Justice, and Human Services programs, as well as liberal arts students and members of the general community.

**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
Prerequisite: MACHT 50A
Machine tool layout and job procedures, measuring instruments, cutting tools, materials, engine lathe, milling machine and drilling are discussed.
Transfer Status: Transferable to CSU, see counselor for limitations.

**MACHT 50B 3.0 units**
Machine Tool Operation and Practices
2.0 hours lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
Prerequisite: MACHT 50A
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 CSU, see counselor for limitations.

**MACHT 201 9.0 units**
Machine Shop 1
4.0 hours lecture, 15.0 hours laboratory
Grading: letter grade or credit/no credit
This entry level machining course covers safety practices required in the modern manufacturing industry. This course includes semi-precision layout, semi-precision /precision measurement, tools and equipment, basic projects on the drill press and engine lathe. This course includes related math and blueprint reading.

**MACHT 202 9.0 units**
Machine Shop 2
4.0 hours lecture, 15.0 hours laboratory
Grading: letter grade or credit/no credit
Prerequisite: MACHT 201
This intermediate level machine course covers safety practices, precision measuring tools and equipment, intermediate projects on the drill press, engine lathe, milling machine and surface grinders. This course includes basic heat treating, related math and blueprint reading.

**MACHT 203 9.0 units**
Machine Shop 3
4.0 hours lecture, 15.0 hours laboratory
Grading: letter grade or credit/no credit
Prerequisite: MACHT 202
This advanced conventional machining course covers safety practices, advanced projects on the lathe, vertical milling machine, horizontal milling machine, surface and cylindrical grinding, related math and blueprint reading. It includes mathematical computations for taper cutting and gear cutting.

**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
This course emphasizes the operation, setup and shop floor programming of Computer Numerical Control, milling and turning centers. The course provides a thorough understanding of all steps involved in writing M & G Code for Manual programs for CNC machine tools. Topics cover all the basics of a CNC system, including its components, functions and suitability and 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 microcomputers. 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
Prerequisite: MACHT 202 or MACHT 50B or one year documented previous manual machining.
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
Introduction to Management is the entry level management course designed to introduce the traditional management tasks of planning, organizing, influencing and controlling. Course topics will include important issues such as innovation, technology, diversity, quality, ethics and the global environment.
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 theory and practical applications of Human Resource management: planning, recruiting, selecting, training and evaluating. Course topics will include important issues such as staffing & development, compensation & benefits, safety & health, labor-management relations, ethics and legal requirements.
Transfer Status: Transferable to CSU, see counselor for limitations.
MGMT 58 3.0 units
Leadership and Supervision
3.0 hours lecture
Grading: letter grade
This course is designed for the first-line manager to develop necessary skills for success in a diverse workplace. Focus will be on human behavior issues such as ethics, motivation, communication, group dynamics and leadership development. Organizational issues will include quality, productivity and performance.
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
This course provides a comprehensive view of Organizational Behavior from 3 primary levels of analysis: individual behavior, group behavior and the organizational system. Of equal importance is the influence of globalization, diversity, ethics/social responsibility and technology on the organization.
Transfer Status: Transferable to CSU, see counselor for limitations.

MGMT 80 3.0 units
Small Business Entrepreneurship
3.0 hours lecture
Grading: letter grade
This course is designed to help develop an understanding of the entrepreneurial elements of starting a small business with an eventful focus on the traditional management skills necessary to extend the life of the startup. Major emphasis is placed on 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 41H 3.0 units
Honors Advertising
3.0 hours lecture
Grading: letter grade or credit/no credit
This is an Honors course. 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
This course will introduce the various elements essential for effective retail management: accounting, finance, management, information technology, and marketing. The focus will be on both traditional as well as online retailing, providing students with strategies for effective planning and execution.
Transfer Status: Transferable to CSU, see counselor for limitations.

MKTG 47 3.0 units
Essentials of Marketing
3.0 hours lecture
Grading: letter grade
This course will analyze the importance of the Marketing concept throughout the organization. Students will develop the skills necessary to plan,
Courses of Instruction

organize and implement a marketing strategy for a product or service. These skills are useful for both entry and mid-level marketing positions.

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 (CAN MATH 4) 3.0 units
Mathematics for Elementary Teaching I
3.0 hours lecture, 1.0 hour laboratory
Prerequisite: MATH 130, 130B, 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
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, 130B, 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: MATH 130, 130B or one year high school intermediate algebra with a grade of B or better as reflected by the second semester grade or qualification through the math assessment process.
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: MATH 130, 130B or high school intermediate algebra with a grade of B or better as reflected by the second semester grade, or qualification through the math assessment process, 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 (CAN MATH 8) 3.0 units
Trigonometry
3.0 hours lecture
Prerequisite: MATH 130, 130B, 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 CSU, see counselor for limitations.
MATH 45 (CAN MATH 10) 4.0 units
College Algebra
4.0 hours lecture
Prerequisite: MATH 130, 130B or one year high school intermediate algebra with a grade of B or better as reflected by the second semester grade or qualification through the math assessment process.
Grading: letter grade
This course covers advanced algebra topics, including linear, quadratic, polynomial, exponential and logarithmic functions; graphs of functions; inverse functions; systems of equations and inequalities; the Binomial Theorem; and conics. A graphing utility is required for this course. Students preparing for MATH 60 should take MATH 50 instead. This course is 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) 5.0 units
Precalculus Math
5.0 hours lecture
Prerequisite: MATH 40
Grading: letter grade
This course serves as a preparation for calculus. The topics covered include a review of algebra, polynomial, rational, exponential, logarithmic and trigonometric functions, applications of trigonometry including complex numbers and vectors, systems of equations and inequalities including matrices, 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
This is a one semester course in discrete math, intended for computer science related disciplines. The topics covered include logic, truth tables, set theory, techniques of proofs, recursive definitions, combinatorics, probability, and statistics.
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 Eqns 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
Courses of Instruction

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**  
First Course in Algebra  
3.0 units  
3.0 hours lecture, 1.0 hour laboratory  
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  
This is the first of a two-semester sequence of the first course in algebra. Topics include solving linear equations and inequalities in one variable, graphing linear equations and inequalities in two variables, solving systems of linear equations, and simplifying polynomial and exponential expressions. Application problems are solved throughout the course. Group activities are incorporated within the lab portion of the course. The math requirement for an Associate of Arts degree is not satisfied by MATH 110A alone. A student may receive credit for either MATH 110 or 110A and 110B.

**MATH 110B**  
First Course in Algebra  
3.0 units  
3.0 hours lecture, 1.0 hour laboratory  
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  
This is the second of a two-semester sequence of the first course in algebra. Topics include factoring, simplifying rational and radical expressions, solving rational and radical equations, and solving quadratic equations. Application problems are solved throughout the course. Group activities are incorporated within the lab portion of the course. A student may receive credit for either MATH 110 or 110A and 110B.

**MATH 120**  
Geometry  
3.0 units  
3.0 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.  
Grading: letter grade or credit/no credit  
This is a traditional Euclidean geometry course covering such topics as deductive reasoning, basic postulates and theorems, congruency, similarity, constructions, area, and volume.

**MATH 130**  
Intermediate Algebra  
4.0 units  
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  
This course continues the study of algebra in preparation for transfer level courses. Topics include 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 130A**  
Intermediate Algebra  
3.0 units  
4.0 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  
This is the first of a two-semester sequence of intermediate algebra. This course continues the study of algebra in preparation for transfer level courses. Topics include solving linear equations and inequalities; graphing functions and inequalities; solving systems of equations and inequalities; factoring; and solving rational equations. Application problems are solved throughout the course. A student may receive credit for either Math 130 or 130A and 130B.

**MATH 130B**  
Intermediate Algebra  
3.0 units  
4.0 hours lecture  
Prerequisite: MATH 130A  
Grading: letter grade or credit/no credit  
This is the second of a two-semester sequence of intermediate algebra. This course continues the study of algebra in preparation for transfer level courses. Topics include radicals and complex numbers; quadratic functions; exponential and logarithmic functions; and conic sections. Application problems are solved throughout the course. A student may receive credit for either Math 130 or 130A and 130B.

**MATH 650**  
Math Learning Center  
0.0 unit  
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  
3.0 units  
4.0 hours lecture  
Grading: credit/no credit  
The topics covered in this course include operations on whole numbers, fractions, and decimals; ratios and proportions; and percent problems. Application problems are solved throughout the course. This course is not applicable for degree credit.

**MATH 815**  
Preparation for Algebra  
3.0 units  
4.0 hours lecture  
Grading: credit/no credit
The topics covered in this course include the order of operations, operations with integers, the solution of linear equations, an introduction to graphing, operations with polynomials, and an introduction to the properties of exponential expressions. Applications of algebraic concepts are included throughout the course. This course is not applicable for degree credit.

**MATH 880** 4.0 units
Review of Basic Algebra
5.0 hours lecture
Recommended Preparation: A previous course in algebra.
Grading: credit/no credit
A review of elementary algebra designed as preparation for intermediate algebra.

**MEDICAL ASSISTING (MA)**

**MA 270** 3.0 units
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** 3.0 units
Health Care Clinical Procedures
2.0 hours lecture, 3.0 hours laboratory
Prerequisite: MA 270 and health evaluation.
Grading: letter grade
This is the second course of three courses designed for prospective clinical medical assistants. This course develops the skills required to assist the physician with instruction in the advanced level of psychosocial skills, surgical asepsis, assisting with minor surgery, specialty exams, patient positioning, drug administration, injections and basic pharmacology.

**MA 282** 3.0 units
Advanced Health Care Clinical Procedures
2.0 hours lecture, 3.0 hours laboratory
Prerequisite: MA 280
Grading: letter grade
This is the third course of three courses designed for prospective clinical medical assistants. This course will include instruction in the advanced level of psychosocial skills, electrocardiograph techniques, phlebotomy, and in office laboratory skills.

**MA 284A/B** 2.0 units
Medical Assisting Specialized Practicum
6.0 hours laboratory
Prerequisite: MA 270
Recommended Preparation: MA 282
Grading: credit/no credit
This course is designed to give the student work experience in selected health care offices and/or clinics. Students in this course will experience the administrative and/or clinical aspects of Medical Assisting. This course is typically offered for nine weeks.

**MA 286** 4.0 units
Medical Assisting Combined Practicum
12.0 hours laboratory
Grading: credit/no credit
This course is designed to give the student work experience in selected health care offices and/or clinics. Students in this course will experience the administrative as well as the clinical aspects of Medical Assisting.

**MA 288** 1.0 unit
Medical Assisting Practicum Seminar
1.0 hour lecture
Corequisite: MA 284 or 286
Grading: letter grade
This course offers students in the Medical Assisting Program 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.

**MA 290** 3.0 units
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** 1.0 unit
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** 3.0 units
Music Theory 1
3.0 hours lecture, 1.0 hour laboratory
Recommended Preparation: Experience reading and performing music, and/or 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 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.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**MUSIC 2** 3.0 units
Music Theory 2
3.0 hours lecture, 1.0 hour laboratory
Prerequisite: MUSIC 1
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: dominant sevenths, other sevenths, secondary functions, modulation, small forms, mixture, Neapolitans and augmented 6th chords.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.
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<th>Lab Hours</th>
<th>Recommended Preparation</th>
<th>Grading</th>
<th>Transfer Status</th>
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<tr>
<td>MUSIC 3</td>
<td>3.0</td>
<td>Music Theory — Counterpoint</td>
<td>3.0</td>
<td>1.0</td>
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<td>Transferable to UC/CSU, see counselor for limitations.</td>
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<td>Prerequisite: MUSIC 2</td>
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<td>This course covers the counterpoint techniques of the 18th Century, including species counterpoint.</td>
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<td>Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
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<td>MUSIC 4</td>
<td>3.0</td>
<td>Music Theory 3</td>
<td>3.0</td>
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<td>Transferable to UC/CSU, see counselor for limitations.</td>
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<td>Prerequisite: MUSIC 2</td>
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<td>Music Theory 4 is designed for music majors, but is open to non-majors with musical performance experience.</td>
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<td>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.</td>
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<td>Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
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<tr>
<td>MUSIC 5AD</td>
<td>2.0</td>
<td>Musicianship</td>
<td>2.0</td>
<td>1.0</td>
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<td>Transferable to CSU, see counselor for limitations.</td>
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<td>Prerequisite: Music 1; however, Music 5AB itself does not have a corequisite.</td>
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<td>Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
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<tr>
<td>MUSIC 6</td>
<td>3.0</td>
<td>Introduction to Music Theory</td>
<td>3.0</td>
<td>1.0</td>
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<td>Transferable to UC/CSU, see counselor for limitations.</td>
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<td>Prerequisite: MUSIC 31 or 6</td>
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<td>This course is a complete introduction to music fundamentals and basic musicianship. Traditional topics are covered such as notation, meter, scales, intervals, triads, and chords. This class is designed for both music majors and non-music majors.</td>
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<td>Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
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<tr>
<td>MUSIC 7AB</td>
<td>2.0</td>
<td>Elementary Voice</td>
<td>1.0</td>
<td>3.0</td>
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<td>Transferable to UC/CSU, see counselor for limitations.</td>
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<td>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.</td>
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<tr>
<td>MUSIC 8AD</td>
<td>2.0</td>
<td>Advanced Voice</td>
<td>1.0</td>
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<td>Transferable to UC/CSU, see counselor for limitations.</td>
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<td>Recommended Preparation: MUSIC7AB</td>
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<td></td>
<td>Advanced study of vocal production, song interpretation and performance techniques. Repertoire includes English and Italian songs.</td>
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<tr>
<td>MUSIC 9AD</td>
<td>2.0</td>
<td>Musicanship 2</td>
<td>2.0</td>
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<td>Transferable to CSU, see counselor for limitations.</td>
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<td>Prerequisite: Music 1; however, Music 5AB itself does not have a corequisite.</td>
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<td>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.</td>
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<td>MUSIC 10AD</td>
<td>2.0</td>
<td>Music Theory 4</td>
<td>2.0</td>
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<td>Transferable to CSU, see counselor for limitations.</td>
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<td>Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
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<tr>
<td>MUSIC 11AD</td>
<td>1.0</td>
<td>Long Beach City College Viking Chorale</td>
<td>2.0</td>
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<td>Transferable to UC/CSU, see counselor for limitations.</td>
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<td>Recommended Preparation: Prior vocal experience</td>
<td>letter grade or credit/no credit</td>
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<tr>
<td>MUSIC 12AD</td>
<td>1.0</td>
<td>Long Beach City College Viking Singers</td>
<td>2.0</td>
<td>4.0</td>
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<td>Transferable to UC/CSU, see counselor for limitations.</td>
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<td>Recommended Preparation: Prior vocal experience</td>
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<td>MUSIC 13AD</td>
<td>1.0</td>
<td>College Symphony Orchestra</td>
<td>2.0</td>
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<td>Transferable to UC/CSU, see counselor for limitations.</td>
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<td>Recommended Preparation: Prior instrumental experience</td>
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<td>Study of orchestral techniques through reading, rehearsal and performance of standard literature. Participation in performances is required.</td>
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<td>Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
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<td>MUSIC 14AD</td>
<td>1.0</td>
<td>Orchestra</td>
<td>1.0</td>
<td>3.0</td>
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<td>Transferable to UC/CSU, see counselor for limitations.</td>
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<td></td>
<td>Recommended Preparation: MUSIC7AB</td>
<td>letter grade or credit/no credit</td>
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<td>Advanced study of vocal production, song interpretation and performance techniques. Repertoire includes English and Italian songs.</td>
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<td>Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
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</table>

Note: All courses except MUSIC 3, 4, 5AD, 6 and 7AB have corequisites.
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 19AD  1.0 unit
Beginning Instruments
1.0 hour lecture, 3.0 hours laboratory
Recommended Preparation: Prior instrumental experience.
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 styles 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
This course serves as a study and performance of music for chamber ensembles including: brass ensemble, woodwind ensemble, percussion ensemble, string ensemble, guitar ensemble.
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
Recommended Preparation: Prior vocal or instrumental experience.
Grading: letter grade or credit/no credit
Music 30A is a survey of music history and literature from antiquity to 1750, including cultural, intellectual and social influences. This course provides an in-depth look at the development of Western European music.
Offered Fall semester only.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MUSIC 30B  3.0 units
Music History and Literature
3.0 hours lecture, 1.0 hour laboratory
Recommended Preparation: Prior vocal or instrumental experience.
Grading: letter grade or credit/no credit
Music 30B is a survey of music history and literature from 1750 to the present, including cultural, intellectual and social influences. This course provides an in-depth look at the development of Western European music.
Offered Spring semester only.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

MUSIC 31  3.0 units
Music Fundamentals
3.0 hours lecture
Recommended Preparation: Prior vocal or instrumental experience.
Grading: letter grade or credit/no credit
This is an introductory experience to the elements of music. It stresses an understanding of pitch and rhythm and their application to the creative process of personal, music expression and understanding. This course is recommended for elementary credential candidates.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.
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<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
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<tr>
<td>MUSIC 33B</td>
<td>3.0</td>
<td>Intercultural Music</td>
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<td>3.0 hours lecture</td>
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<td>Grading: letter grade or credit/no credit</td>
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<td>A broad approach to musical literature and its place in the cultural development of Western civilization. Designed for non-majors.</td>
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<td>Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
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<tr>
<td>MUSIC 34AD</td>
<td>2.0</td>
<td>Wind Ensemble</td>
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<td>2.0 hours lecture, 5.0 hours laboratory</td>
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<td>Grading: letter grade or credit/no credit</td>
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<td>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.</td>
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<td>Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
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<tr>
<td>MUSIC 35</td>
<td>3.0</td>
<td>Music of Multicultural America</td>
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<td>3.0 hours lecture</td>
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<td>Grading: letter grade or credit/no credit</td>
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<td>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.</td>
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<td>Transfer Status: Transferable to CSU, see counselor for limitations.</td>
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<tr>
<td>MUSIC 38AD</td>
<td>1.0</td>
<td>Professional Advanced Vocal Ensembles</td>
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<td>1.0 hour lecture, 3.0 hours laboratory</td>
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<td></td>
<td>Recommended Preparation: MUSIC 78AD and/or 44AD</td>
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<td>Grading: letter grade or credit/no credit</td>
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<td>For advanced ensemble and solo singers combining the technology of computers, synthesizers and modern recording facilities.</td>
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<td>Transfer Status: Transferable to CU/CSU, see counselor for limitations.</td>
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<tr>
<td>MUSIC 40H</td>
<td>3.0</td>
<td>Honors Appreciation of Music</td>
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<td>3.0 hours lecture, 1.0 hour laboratory</td>
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<td>Prerequisite: Qualification for the Honors Program</td>
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<td>A broad approach to musical literature and its place in the cultural development of Western civilization. Designed for non-majors.</td>
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<td>Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
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<tr>
<td>MUSIC 41AD</td>
<td>1.0</td>
<td>College Chorus</td>
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<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>Recommended Preparation: Prior vocal experience</td>
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<td></td>
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<td>Grading: letter grade or credit/no credit</td>
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<tr>
<td></td>
<td></td>
<td>Study of vocal techniques and music reading through performance of choral music. Participation in a very limited number of performances each semester is required.</td>
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<td>Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
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<tr>
<td>MUSIC 42AD</td>
<td>1.0</td>
<td>Gospel Music</td>
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<tr>
<td></td>
<td></td>
<td>2.0 hours lecture, 3.0 hours laboratory</td>
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<td>Grading: letter grade</td>
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<td>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.</td>
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<td>Transfer Status: Transferable to CU/CSU, see counselor for limitations.</td>
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<tr>
<td>MUSIC 43A</td>
<td>1.0</td>
<td>College Symphonic Band</td>
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<td></td>
<td></td>
<td>2.0 hours lecture, 4.0 hours laboratory</td>
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<td></td>
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<td>Recommended Preparation: Prior instrumental experience</td>
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<td></td>
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<td>Grading: letter grade or credit/no credit</td>
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<tr>
<td></td>
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<td>A performance organization dedicated to the production of a wide variety of musical literature and an association with professional soloists.</td>
</tr>
</tbody>
</table>
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
The Wind Symphony is 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. The instrumentation of the wind ensemble includes woodwinds, brass, and percussion. The ensemble will traditionally have two concerts a semester as well as go on a tour in the spring. Other concert opportunities may also arise. 
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
This course provides students an opportunity to experience a professional recording situation, such as click-tracks, overdubbing and the study of microphone capabilities for live recording sessions. As well as learning recording techniques, students will perform at Long Beach City College athletic and academic events.
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
The Viking Show Band will 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 Long Beach 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.

**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
Music 52AD is a continuation of the technical skills and studies, sight reading, and piano literature of Music 51B, covering the intermediate to advanced levels, and exploring the interpretation of various musical styles from Baroque to Modern.
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
Recommended Preparation: Prior successful orchestral experience.
Study and performance of the orchestral repertoire 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 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 repertoire 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
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 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,
Courses of Instruction

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.
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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
<th>Hours</th>
<th>Prerequisites</th>
<th>Grading</th>
<th>Course Description</th>
<th>Transfer Status</th>
</tr>
</thead>
</table>
| MUSIC 71AD  | 2.0   | Introduction to Music Technology                 | 1.0   |                | 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   | Com Improvisation/Arranging/Scoring               | 1.0   |                | letter grade or credit/no credit | Recommended Preparation: Prior vocal experience.  
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   | Commercial Solo Voice                             | 1.0   | MUSIC7AB       | 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 75A   | 1.0   | The Music Business                                | 3.0   |                | 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   | The Music Business                                | 3.0   |                | 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   | Recording Techniques Lab                         | 3.0   |                | letter grade or credit/no credit | Students will be involved in advanced individualized study and group projects in multi-tracking studio techniques and both live and recorded location audio.  
*Transfer Status: Transferable to CSU, see counselor for limitations.* |
| MUSIC 77AD  | 1.0   | Studio Performance Techniques                     | 1.0   |                | letter grade or credit/no credit | This course is a study of instrumental performance techniques in a recording studio environment through rehearsal and performance of instrumental jazz literature.  
*Transfer Status: Transferable to CSU, see counselor for limitations.* |
| MUSIC 78AD  | 1.0   | Studio Singers                                    | 2.0   |                | letter grade or credit/no credit | Recommended Preparation: Prior vocal experience  
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 80AD  | 1.0   | “City” Jazz Big Band                              | 1.0   |                | letter grade or credit/no credit | Recommended Preparation: Prior vocal experience  
This course is the study of big band techniques through reading, rehearsal and performance of standard literature.  
*Transfer Status: Transferable to CSU, see counselor for limitations.* |
| MUSIC 81AD  | 2.0   | Commercial Keyboard                               | 1.0   | MUSIC94        | letter grade or credit/no credit | Grading: letter grade or credit/no credit  
This course is designed to give students a practical approach to music on piano keyboard instruments, and at the same time, provide avenues for the improvement of keyboard skills such as music styles, harmony, improvisation and reading.  
*Transfer Status: Transferable to CSU, see counselor for limitations.* |
| MUSIC 82AD  | 2.0   | Sound Reinforcement                               | 2.0   |                | letter grade or credit/no credit | Recommended Preparation: MUSIC 94  
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   | Film/Video Music/Scoring                          | 1.0   |                | 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.* |
Courses of Instruction

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 songwriters 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 Commercial Small Jazz Group is a music ensemble (either vocal or instrumental) formed to study and perform both classic and standard jazz repertoire.
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
This course 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 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 as used in commercial/contemporary music. Includes the study of common chord structures, Circle of Fifths, chord progressions, standard song forms, lead sheets and song analysis. Designed to accommodate students with and without a music background.
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
Music 91AD entails the 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 UC/CSU, see counselor for limitations.

MUSIC 92AD  1.0 unit
Applied Vocal & Instrumental Music
10.0 hour laboratory
Recommended Preparation: Prior vocal or instrumental experience.
Grading: letter grade or credit/no credit
This course is designed for, but not limited to, music majors to gain experience in music performance for the purpose of transferring to a university music program. It is strongly recommended that students have instruction on either a keyboard instrument, voice, guitar or any standard instrument of the band or orchestra. The course includes performance of representative music 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 93AD  2.0 units
Record Production (Using MIDI)
1.0 hour lecture, 5.0 hours laboratory
Grading: letter grade or credit/no credit
This course provides a hands-on approach into the production of records, tape and CD’s utilizing computer technology and MIDI based musical devices.
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
This course serves as a hands-on instruction for beginners in the use of multi-track recording systems, emphasizing critical listening skills and the development of 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  
This is an intermediate level recording theory and production class. Topics include hands-on instruction in the applications of a multitrack studio, use of out-board gear, signal flow, trouble-shooting, and session etiquette, with an emphasis on micing 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 micing 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 98AD  2.0 units
**Synthe./Drum Mach/Sequencer Programming**
1.0 hour lecture, 4.0 hours laboratory  
Grading: letter grade or credit/no credit  
This course provides a hands-on approach to the programming of synthesizers, drum machines, and sequencers in a Macintosh based studio setting.  
*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.

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### NURSING ASSISTANT (NA)

#### NA 205AD  0.5 unit
**Nurse Assistant Practice Lab**
1.5 hours laboratory  
Grading: credit/no credit  
This course provides self-paced individualized instruction in basic nursing skills within a campus laboratory setting. Students will practice various fundamental skills taught in the nursing assistant program.

#### NA 215  4.5 units
**Nursing Assistant**
4.5 hours lecture  
Recommended Preparation: READ 883  
Grading: letter grade  
This beginning nursing course is designed to develop an understanding of basic nursing theory. Upon successful completion of this course and the accompanying laboratory course, the student qualifies for testing to be certified as a nurse assistant by the State of California.

#### NA 215L  2.5 units
**Nursing Assistant Laboratory**
7.5 hours laboratory  
Corequisite: NA 215  
Grading: credit/no credit  
This beginning nursing laboratory course includes both campus lab sessions and clinical practice in a long term care facility. This course must be taken concurrently with NA215. Compliance with all clinical agency health and safety policies is required the first week of the course.

#### NA 216  1.5 units
**Home Health Aide**
1.5 hours lecture  
Prerequisite: NA 215 and NA 215L or current California CNA certificate  
Grading: letter grade  
This course provides the theory required by the California State Department of Health Services for a Certified Nursing Assistant to become a Certified Home Health Aide.

#### NA 216L  0.5 unit
**Home Health Aide Laboratory**
1.5 hours laboratory  
Corequisite: NA 216  
Grading: credit/no credit  
This course provides the clinical practice required by the California State Department of Health Services for a Certified Nursing Assistant to become a Certified Home Health Aide. Compliance with all clinical agency health and safety policies is required the first week of the course.

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### NURSING, ASSOCIATE DEGREE

#### NURSING - RN (ADN)

#### ADN 11A  2.5 units
**Introduction to Nursing**
2.5 hours lecture
Courses of Instruction

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
The course is an introduction to the basic concepts of the Self-Care Theory of Nursing by Dorothea Orem. 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. Also included are the fundamental concepts upon which subsequent courses in the nursing program are built. Transfer Status: Transferable to CSU, see counselor for limitations.

ADN 11AL
Introduction to Nursing Lab
1.5 units
4.5 hours laboratory
Prerequisite: ENGL 1, 105 or ESL 34 and BIO 60, 60L, and CDECE 47. 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
The course includes on-campus lab practice and application of the course content in clinical nursing situations. This lab course aligns with the course content presented in ADN 11A. Transfer Status: Transferable to CSU, see counselor for limitations.

ADN 11B
Health Deviations 1
2.5 units
2.5 hours lecture
Prerequisite: ADN 11A and ADN 11AL.
Corequisite: BIO 62.
Grading: letter grade or credit/no credit
This course is an introduction to deviations in health of the adult client. It emphasizes the health deviation self-care requisites of intake of air, intake of water, balance of activity and rest. Collaborative problems are added to previously learned information about the nursing process; as well as medication administration, oral and injected. Transfer Status: Transferable to CSU, see counselor for limitations.

ADN 11BL
Health Deviations 1 Lab
1.5 units
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
This course includes on-campus lab practice and application of the course content in clinical nursing situations. Skill activities include oral and injected drug administration, respiratory, abdominal and lower leg assessment and related skills. Transfer Status: Transferable to CSU, see counselor for limitations.

ADN 12A
Health Deviations 2
2.5 units
2.5 hours lecture
Prerequisite: ADN 11B and 11BL, BIO 62.
Corequisite: BIO 61.
Grading: letter grade or credit/no credit
This course is the second medical-surgical nursing course in the program. The effects and results of specific pathological conditions and treatment modalities upon the surgical patient will be studied. Emphasis is placed on the nursing care needs of middle adulthood. Must be enrolled in this course before attempting to enroll in ADN 12AL.
Transfer Status: Transferable to CSU, see counselor for limitations.

ADN 12AL
Health Deviations 2: Lab
1.5 units
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
This laboratory course includes both on-campus laboratory practice and application of course content in the live nursing situation. Skill activities include intravenous therapy, medical and surgical aseptic practices and selected physical assessments. Transfer Status: Transferable to CSU, see counselor for limitations.

ADN 12B
Health Deviations 3
2.5 units
2.5 hours lecture
Prerequisite: ADN 12A, 12AL and BIO 62.
Corequisite: BIO 61.
Grading: letter grade or credit/no credit
This course continues to explore the demands for increased care necessitated by deviations in the health of the adult. The content 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. Must be enrolled in this course before attempting to enroll in ADN 12BL.
Transfer Status: Transferable to CSU, see counselor for limitations.

ADN 12BL
Health Deviations 3: Lab
1.5 units
4.5 hours laboratory
Prerequisite: ADN 12A, 12AL, and BIO 62.
Corequisite: BIO 61 and ADN 12B.
Grading: letter grade or credit/no credit
This lab course includes both 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
Intermediate Nursing Skills Laboratory
0.5 unit
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,
courses of instruction

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
This course is designed to prepare advanced placement licensed vocational nursing students for second level nursing content. The major foci are Orem's Self-Care Theory of Nursing and the application of the nursing process as a second level practitioner.
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
This course emphasizes Orem's theory of developmental self-care requisites, health deviations and universal self-care requisites as it relates to women and newborns. The content involves the study of gynecological problems, deviations from normal pregnancy, care during prenatal, intrapartal, and postpartal periods, of normal and high risk pregnancy. In addition the assessment and care of the normal newborn is 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
This course applies the course content in a live nursing situation. It includes on-campus/clinical lab practice and testing of required skills in perinatal units, newborn nursery, GYN, and community setting.
Transfer Status: Transferable to CSU, see counselor for limitations.

ADN 21B 2.5 units
Mental Health
2.5 hours lecture
Prerequisite: ADN 12B, 12BL or 20A and BIO 62.
Grading: letter grade or credit/no credit
This course is a study of Theory of nursing by Orem as it relates to mental health and/or mental illness in the client with acute/chronic debilitating diseases. Emphasis is placed on communication skills which is the focus of the course.
Transfer Status: Transferable to CSU, see counselor for limitations.

ADN 21BL 3.0 units
Mental Health Lab
9.0 hours laboratory
Prerequisite: ADN 12B and 12BL or 20A. BIO 62.
Compliance with all clinical agency health and safety policies is required the first day of the course.
Corequisite: ADN 21B
Grading: letter grade or credit/no credit
This laboratory course includes both on and off campus labs that provide an opportunity to practice and apply theory content in simulated and live nursing situations. The primary emphasis is placed on the application of theory and communication skills in both the psychiatric and medical-surgical acute care settings. Skill activity includes, IV venipuncture, group participations and varies communication techniques.
Transfer Status: Transferable to CSU, see counselor for limitations.

ADN 22A 2.5 units
Adv Nursing I Critical Care Life Span
2.5 hours lecture
Prerequisite: ADN 21A and 21AL or 321A and 21B, 21BL.
Grading: letter grade or credit/no credit
This course emphasizes Orem's theory of developmental self-care requisites, health deviations, and universal self-care requisites as it relates to critically ill adults and ill children. The content involves the study of critical illness in adults and illness in children.
Transfer Status: Transferable to CSU, see counselor for limitations.

ADN 22AL 3.0 units
Adv Nursing I-Critical Care Life Span Lab
9.0 hours laboratory
Prerequisite: ADN 21A and 21AL or 321A and 21B, 21BL.
Compliance with all clinical agency health and safety policies is required the first day of the course.
Corequisite: ADN 22A
Grading: letter grade or credit/no credit
The activities for this laboratory course include on-campus practice and application, in acute care hospitals and outpatient settings, of course content in intensive care and pediatrics. The course emphasizes the educative/supportive role of the nurse.
Transfer Status: Transferable to CSU, see counselor for limitations.

ADN 22B 2.5 units
Advanced Nursing II Role Transition
2.5 hours lecture
Prerequisite: ADN 22A and 22AL or 322A.
Grading: letter grade or credit/no credit
This course provides the opportunity to integrate all previously learned theories and skills. Advanced geriatric content and leadership theory is utilized in a primary or team nursing setting on various hospital shifts, in ambulatory care and in the home health setting. The major emphasis is placed on the role transition from student to graduate nurse.
Transfer Status: Transferable to CSU, see counselor for limitations.

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
The laboratory course provides the opportunity to integrate all previously learned theories and skills in the clinical setting. It incorporates advanced geriatric content and leadership theory in a primary or team
Courses of Instruction

nursing setting on various hospital shifts and in the home health setting. The major emphasis is on 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
This course is designed for students to study the trends and issues which affect current nursing practice. The 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 203AD  0.5 unit
Nursing Skills Adjunct Laboratory
1.5 hours laboratory
Grading: credit/no credit
This laboratory course allows self-paced, individualized instruction in advanced medical-surgical, critical care and pediatric nursing skills with supervised practice to improve performance. It builds on skills practiced in ADN 202AD. This course is 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
This course allows self-paced, individualized instruction in advanced medical-surgical, critical care and pediatric nursing skills with supervised practice to improve performance. It builds on skills practiced in ADN 202AD. This course is 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 200AD  0.5 unit
Nursing Skills Adjunct Laboratory
1.5 hours laboratory
Grading: credit/no credit
This course allows self-paced, individualized instruction in basic bedside nursing skills and advanced nursing skills, with supervised practice to improve performance and is 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
This course allows self-paced, individualized instruction in first semester basic bedside nursing skills with supervised practice to improve performance.

ADN 202AD  0.5 unit
Nursing Skills Adjunct Laboratory
1.5 hours laboratory
Grading: credit/no credit
This course allows self-paced, individualized instruction in second semester medical and surgical nursing skills with supervised practice to improve performance. This course builds on skills practiced in ADN 201AD.
ADN 225 3.0 units
Nursing Applications of Pharmacology
3.0 hours lecture
Recommended Preparation: READ 82 and MATH 110 or 110B or high school algebra.
Grading: letter grade
This course is designed to develop knowledge of advanced obstetrics nursing requirement for the thirty-unit option only. The major focus is nursing care of the adult client in the gynecological surgical units and high-risk obstetrical units, including care of the high-risk infant. It emphasizes the educative supportive role of the nurse.

ADN 321A 1.5 units
Women's Health & Advanced Obstetrics
1.5 hours lecture
Prerequisite: ADN 20A, BIO 62.
Corequisite: ADN 31A
Grading: letter grade or credit/no credit
This course is designed to fulfill the women's health and advanced obstetrics nursing requirement for the thirty-unit option only. The major focus is nursing care of the patient in the critical care setting. This course will emphasize the educative/supportive role of the nurse.

ADN 321AL 1.5 units
Women's Health & Adv Obstetrics Lab
5.0 hours laboratory
Prerequisite: ADN 20A, BIO 62 and health evaluation, malpractice insurance, and CPR certification for health care providers.
Corequisite: ADN 31A and 321A
Grading: letter grade or credit/no credit
This course applies the course content in a live nursing situation. It includes on-campus/clinical lab practice and testing of required skills in perinatal units, newborn nursery, GYN, and community setting.

ADN 322A 1.5 units
Advanced Nursing I-Adult Critical Care
1.5 hours lecture
Prerequisite: ADN 21A and 21AL or 21B, 21BL.
Corequisite: ADN 31B
Grading: letter grade or credit/no credit
This course is designed to fulfill the advanced medical/surgical nursing requirements for the 30-unit option student. The major focus of the course is nursing care of the adult patient in the critical care setting. It emphasizes the educative/supportive role of the nurse.

ADN 322AL 1.5 units
Adv Nursing I-Adult Critical Care Lab
5.0 hours laboratory
Prerequisite: ADN 21A and 21AL or 21B, 21BL, health evaluation, malpractice insurance, and CPR certificate for health care providers.
Corequisite: ADN 31B and 322A
Grading: letter grade or credit/no credit
This course is designed to fulfill the advanced medical/surgical nursing requirements for the 30-unit option only. The major focus is nursing care of the adult patient in the critical care setting. This course will emphasize the educative/ supportive role of the nurse.

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 advanced 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
Courses of Instruction

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, VOCATIONAL NURSING (VN)**

**VN 220**

**Transition to Vocational Nursing**

3.0 units

3.0 hours lecture

Recommended Preparation: Qualification through the Reading assessment process or READ 82.

Grading: letter grade

This course prepares Certified Nurse Assistants for success in the vocational nursing program. The content includes the development of critical thinking and problem solving skills, effective communication skills, and other concepts basic to the practice of nursing.

**VN 220L**

**Transition to Vocational Nursing Lab**

1.0 unit

3.0 hours laboratory

Corequisite: VN 220

Recommended Preparation: NA 215 & 215L

Grading: credit/no credit

This course provides instructor guided practice in the campus nursing labs for the concepts presented in VN220. Other content includes preparation to meet the health and safety policies of local clinical agencies, principles and practice in learning methods, and nursing terminology and documentation.

**VN 225**

**Nursing Applications of Pharmacology**

3.0 units

3.0 hours lecture

Recommended Preparation: READ 82 and MATH 110 or MATH 110B or high school algebra.

Grading: letter grade

An introductory course into the study of drugs, principles of medication administration, and dosage calculation. Classification of drugs according to body systems is used. General principles of drug actions both therapeutic and undesirable, and nursing responsibilites are emphasized. A strong foundation in math skills is required for dosage calculations. This course meets content requirements for the Board of Vocational Nursing. Not open for credit to students who have completed ADN 225 or ADN 425.

**VN 230**

**Common Health Deviations 1**

3.5 units

3.5 hours lecture

Prerequisite: VN 220, VN 225, and BIO 60.

Grading: letter grade

This course is designed to assist vocational nursing students with self-development and with acquisition of behaviors needed to provide a helping relationship with their patients. Topics include principles of personality development, psychosocial development, pharmacobology, common mental health deviations, and major psychiatric illnesses.

**VN 230L**

**Common Health Deviations 1 Lab**

3.0 units

9.0 hours laboratory

Corequisite: VN 230

Grading: credit/no credit

This course provides opportunity for nursing students to practice the concepts learned in VN230 in a hospital setting. The campus lab content includes basic data collection and preparation of nursing care plan, nursing documentation, oxygen therapy, urinary catheterization and medication administration. Compliance with all clinical agency policies is required the first day of the course.

**VN 231AD**

**Nursing Skills Practice Lab I**

0.5 unit

1.5 hours laboratory

Grading: credit/no credit

This course provides teacher supervised, self-paced, and individualized instruction and practice in the campus nursing labs to improve performance of nursing skills. This course is normally taken in the first part of the vocational nursing program.

**VN 235**

**Common Health Deviations 2**

3.5 units

3.5 hours lecture

Prerequisite: VN 230

Grading: letter grade

This course provides the theoretical basis for the provision of nursing care for patients before and after surgical procedures. The nursing concepts of the nursing process and Orem’s self care theory are continued and pain management, body image disturbances, and nutritional support are added. Other topics include pathophysiology and nursing care for patients with health deviations that include the musculoskeletal system, gastrointestinal system, immune system, and genitourinary system.

**VN 235L**

**Common Health Deviations 2 Lab**

3.0 units

9.0 hours laboratory

Corequisite: VN 235

Grading: credit/no credit

This course provides opportunity for nursing students to practice the concepts, including perioperative nursing care, learned in VN235. The clinical setting is usually postoperative nursing care units. Topics presented in the campus nursing lab includes skill required for care of surgical patients. Compliance with all clinical agency policies is required the first day of the course.

**VN 240**

**Mental Health Nursing**

3.0 units

3.0 hours lecture

Grading: letter grade

This course is normally taken in the first part of the course.

**VN 245**

**Maternal-Infant Nursing**

1.5 units

1.5 hours lecture

Prerequisite: VN 235 and VN 235L

Grading: letter grade
This course provides instruction in the normal developmental phases of the child-bearing family and the most common related problems. Orem’s self-care theory and the nursing process are continued in the study of prenatal, perinatal, and postpartum nursing care.

**VN 245L**  
Maternal-Infant Nursing Lab  
6.0 hours laboratory  
Corequisite: VN 245  
Grading: credit/no credit  
This course provides opportunity for nursing students to provide prenatal, perinatal, and postnatal nursing care in both hospital and ambulatory care facilities. Campus lab content includes data collection and routine care of the postpartum mother and her newborn. Compliance with all clinical agency policies is required the first day of this course.

**VN 250**  
Nursing Care of Children  
1.5 hours lecture  
Prerequisite: VN 235 and VN 235L  
Grading: letter grade  
This course provides instruction in the growth and development of normal children along with the most common health problems of childhood and adolescence. Orem’s self-care theory and the nursing process are applied to the study of health promotion and disease prevention for children and adolescents.

**VN 250P**  
Nursing Care of Children Practicum  
3.0 hours laboratory  
Corequisite: VN 250  
Grading: credit/no credit  
This course provides opportunity for nursing student to provide nursing care for child-rearing families in ambulatory care clinics. Campus lab content includes application of the principles of growth and development. Compliance with all clinical agency health and safety policies is required the first day of the course.

**VN 255**  
Common Health Deviations 3  
3.5 hours lecture  
Prerequisite: VN 235 and 235L  
Grading: letter grade  
This course is the third medical surgical nursing course in the program. Orem’s theory of self-care and the nursing process is continued in the study of the nursing concepts of fluid and electrolytes. Pathophysiology and nursing care of the following health deviations are studied: female reproductive system; biliary, liver, and pancreas; coronary artery; integumentary including burns; renal function; complications of diabetes; and selected endocrine organs.

**VN 255L**  
Common Health Deviations 3 Lab  
9.0 hours laboratory  
Corequisite: VN 255  
Grading: credit/no credit  
This course provides opportunity for nursing students to become more proficient in the nursing care of patients with medical surgical problems. Students practice with staff vocational and registered nurses to develop beginning competency in the role of the vocational nurse in acute care facilities. Compliance with all clinical agency health and safety policies is required the first day of the course.

**VN 260**  
Roles and Responsibilities 1  
1.0 hour lecture  
Prerequisite: VN 240  
Grading: letter grade  
This course is designed to assist the vocational nursing student in the transition to the responsibilities of the graduate vocational nurse. Topics include the ethical, legal, regulatory, and policy issues that control the practice of vocational nursing in California. Opportunity is provided for career planning, including job application skills.

**VN 265**  
Nursing Care of the Chronically Ill  
2.5 hours lecture  
Prerequisite: VN 255 and VN 255L  
Grading: letter grade  
This is normally the last clinical course of the vocational nursing program. Orem’s theory of self-care and the nursing process is continued. Adult health deviations commonly requiring chronic health care are studied. Other topics include leadership and supervisory roles of vocational nurses in long term and ambulatory care.

**VN 265L**  
Leadership in Long Term Care  
2.0 units  
6.0 hours laboratory  
Corequisite: VN 265  
Grading: credit/no credit  
This course provides opportunity for students to apply nursing theory regarding chronic illness to the care of adults in long term care facilities. Students also practice vocational nurse leadership and supervisory roles in these facilities. Compliance with all clinical agency health and safety policies is required the first day of the course.

**VN 266AD**  
Nursing Skills Practice Lab II  
0.5 unit  
1.5 hours laboratory  
Corequisite: VN 265  
Grading: credit/no credit  
This course provides self-paced and individualized instruction and practice in a campus nursing laboratory setting. Students are encouraged to attend and practice nursing skills, and prepare for post-graduate nursing. This course is offered in the last semester of the vocational nursing program.

**VN 270**  
Roles and Responsibilities 2  
1.0 hour lecture  
Prerequisite: VN 265  
Grading: letter grade
This course is designed to prepare the vocational nursing student for transition to the graduate vocational nurse role. Other content includes information about higher education programs in nursing and the process of application to the Board of Vocational Nursing to take the NCLEX-PN licensing exam.

**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: Transferrable 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: Transferrable 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, logic, value, history and metaphysics.

Transfer Status: Transferrable 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: Transferrable 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: Transferrable to UC/CSU, see counselor for limitations.
### Courses of Instruction

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 UC/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
This is a comprehensive course in color photography introducing practical problems involved in color printing and processing of transparencies and negatives. The student will explore color theory, film, paper, analysis of negatives, filtration and exposure. The course includes professional critique of the student’s work. A major emphasis is placed on developing the student’s ability to critique their own 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
**Photojournalism**
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
Courses of Instruction

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**  
**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**  
**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  
This is comprehensive occupational course for the advanced student of photography. Emphasis is on view camera use, including perspective control, distortion control and metering methods.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**PHOT 41AD**  
**Professional Photographic Portfolio**  
2.0 hours lecture, 6.0 hours laboratory  
Prerequisite: One semester of PHOT 31AB  
Grading: letter grade or credit/no credit  
This course is a comprehensive occupational course for the advanced student of photography. The emphasis of this course is on developing a professional photographic portfolio.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**PHOT 42AD**  
**Experimental Photography Laboratory**  
2.0 hours lecture, 6.0 hours laboratory  
Prerequisite: PHOT 31AB or ART 81  
Grading: letter grade or credit/no credit  
This course is 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. The course emphasizes practical experimental solutions to conceptual visual design problems in commercial photography.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**PHOT 43AD**  
**Digital Photography**  
2.0 hours lecture, 4.0 hours laboratory  
Recommended Preparation: PHOT 31AB or PHOT 32AD or ART 41  
Grading: letter grade or credit/no credit  
This is a comprehensive course designed to train students in the application of electronic media and its use in manipulating and creating photographic images. The course 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**  
**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 281AD**  
**Fundamentals of Photography Laboratory**  
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.*

**PHOT 73AD**  
**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 291AD**  
**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.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**PHOT 291AD**  
**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 photo and wish to improve their skills. Emphasizes practical applications in roll and sheet film processing, enlarging and mounting of finished prints.  
*Transfer Status: Transferable to CSU, see counselor for limitations.*

**PHOT 681**  
**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.

**PHYSICAL EDUCATION, ADAPTED (PEA)**

**PEA 1AD** 1.0 unit

**PE for the Physically Limited**
3.0 hours laboratory
Grading: letter grade
This course is designed to produce a program of individual and group exercises and activities that develop motor patterns and perceptual-motor skills, endurance, strength and self-awareness. All activities will be adapted to the interests, capabilities and limitations of each student.

*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**PEA 608** 0.0 unit

**Physical Educ for Physically Limited**
4.0 hours laboratory
Grading: LBCC Non-Graded Course
A program of developmental activities, games, sports and rhythms suited to the interests, capabilities and limitations of students with disabilities who may not safely or successfully engage in unrestricted activities of the general physical education program. The program will be predicated upon medical findings and working with medical supervision, guidance and advice.

**PHYSICAL EDUCATION, GENERAL (PEG)**

**PEG 9AD** 0.5 unit

**Badminton**
2.0 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 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.*

**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.*

**PEG 20AD** 1.0 unit

**Bowling**
3.0 hours laboratory
Grading: letter grade
Instruction in the rules, techniques and strategies of bowling.

*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**PEG 31AD** 0.5 unit

**Golf**
2.0 hours laboratory
Grading: letter grade
Instruction in the rules, techniques and strategies of golf.

*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**PEG 32AD** 1.0 unit

**Golf**
3.0 hours laboratory
Grading: letter grade
Instruction in the rules, techniques and strategies of golf.

*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

**PEG 55AD** 4.0 units

**Lifeguard/Water Safety Training**
3.0 hours lecture, 3.0 hours laboratory
Recommended Preparation: Advanced swimming ability
Grading: letter grade
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.

*Transfer Status: Transferable to UC/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>Transfer Status</th>
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</table>
| PEG 58AD   | 1.0   | Intramural Activities            | 0.5 lecture, 1.5 hours laboratory | letter grade | Designed to allow all students the opportunity to engage in a variety of competitive sports and activities in an intramural environment.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.* |
| PEG 59AD   | 0.5   | Racquetball                       | 2.0 hours laboratory | letter grade | Instruction in the rules, techniques and strategies of racquetball.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.* |
| PEG 60AD   | 1.0   | Racquetball                       | 3.0 hours laboratory | letter grade | Instruction in the rules, techniques and strategies of racquetball.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.* |
| PEG 65AD   | 0.5   | Self-Defense                      | 2.0 hours laboratory | letter grade | Techniques and practical applications of self-defense skills, psychological defenses and assertiveness training.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.* |
| PEG 66AD   | 1.0   | Self-Defense                      | 3.0 hours laboratory | letter grade | Techniques and practical applications of self-defense skills, psychological defenses and assertiveness training.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.* |
| PEG 69AD   | 0.5   | Soccer                            | 2.0 hours laboratory | letter grade | Instruction in the rules, techniques and strategies of soccer.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.* |
| PEG 70AD   | 1.0   | Soccer                            | 3.0 hours laboratory | letter grade | Instruction in the rules, techniques and strategies of soccer.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.* |
| PEG 73AD   | 0.5   | Softball                          | 2.0 hours laboratory | letter grade | Instruction in the rules, techniques and strategies of softball.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.* |
| PEG 74AD   | 1.0   | Softball                          | 3.0 hours laboratory | letter grade | Instruction in the rules, techniques and strategies of softball.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.* |
| PEG 75AD   | 0.5   | Swimming                          | 2.0 hours laboratory | letter grade | Instruction in the techniques of the basic aquatic strokes.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.* |
| PEG 76AD   | 1.0   | Swimming                          | 3.0 hours laboratory | letter grade | Instruction in the techniques of the basic aquatic strokes.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.* |
| PEG 83AD   | 0.5   | Tennis                            | 2.0 hours laboratory | 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   | Tennis                            | 3.0 hours laboratory | 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   | Touch Football                    | 2.0 hours laboratory | 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   | Touch Football                    | 3.0 hours laboratory | 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   | Track & Field                     | 2.0 hours laboratory | letter grade |  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.* |
Courses of Instruction

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
This course is designed to provide instruction of the basic fundamentals of volleyball including setting, passing, hitting, and team play.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

PEG 90AD 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 UC/CSU, see counselor for limitations.

PEG 98AD 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, OUTDOOR STUDIES (PEOS)

PEOS 5AD 1.0 unit
Backpacking
4.0 hours laboratory
Grading: letter grade
This is a course in wilderness travel and living with three to nine 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 UC/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 included. Focuses on individualized and group goals, including but not limited to demonstration of skill levels and measurement of increase in strength. Safe and sane approaches to exercise and diet and the effects of alcohol and drugs will be stressed.
Transfer Status: Transferable to CSU, see counselor for limitations.

PEPF 3AD 0.5 unit
Water Aerobics and Training
2.0 hours laboratory
Grading: letter grade
An aerobic physical fitness program employing water resisting exercises without the need of swimming skills.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

PEPF 4AD 1.0 unit
Water Aerobics and Training
3.0 hours laboratory
Grading: letter grade
An aerobic physical fitness program employing water resisting exercises without the need of swimming skills.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

PEPF 5AD 0.5 unit
Dance Aerobics
2.0 hours laboratory
Grading: letter grade
Perform exercise and dance routines to music to enhance flexibility while emphasizing development of strength and endurance.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Title</th>
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<tbody>
<tr>
<td>PEPF 6AD</td>
<td>1.0</td>
<td>PEPF 6AD 1.0 unit Dunk Aerobics</td>
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<td></td>
<td></td>
<td>3.0 hours laboratory</td>
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<td>Grading: letter grade</td>
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<td>Perform exercise and dance routines to music to enhance</td>
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<td>flexibility while emphasizing the developing of strength</td>
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<td>and endurance.</td>
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<td>for limitations.*</td>
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<tr>
<td>PEPF 7AD</td>
<td>2.0</td>
<td>PEPF 7AD 2.0 units Techniques of Aerobic Instruction</td>
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<tr>
<td></td>
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<td>1.0 hour lecture, 3.0 hours laboratory</td>
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<td></td>
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<td>Grading: letter grade</td>
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<td></td>
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<td>For aerobic instructors or other interested persons</td>
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<td></td>
<td>exploring fundamental methods and techniques for</td>
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<td></td>
<td>successfully conducting aerobic or anaerobic exercise</td>
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<td>classes. Includes lectures, as well as lab requirements in</td>
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<td>practice application sessions.</td>
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<tr>
<td>PEPF 8AD</td>
<td>2.5</td>
<td>PEPF 8AD 2.5 units Aerobic Circuit Training</td>
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<td></td>
<td></td>
<td>1.0 hour lecture, 5.0 hours laboratory</td>
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<td>Grading: letter grade</td>
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<td></td>
<td></td>
<td>Cardiovascular and strength fitness training in a circuit</td>
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<td>setting. Ideal for normal, healthy people. Complete body</td>
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<td>conditioning.</td>
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<tr>
<td>PEPF 10</td>
<td>1.0</td>
<td>PEPF 10 1.0 unit Stretch &amp; Relaxation</td>
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<td></td>
<td></td>
<td>3.0 hours laboratory</td>
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<td>Grading: letter grade</td>
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<td>This course emphasizes the development of flexibility in</td>
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<td>muscles and joints to prevent injury and to improve body</td>
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<td>alignment and posture. Relaxation and stretching techniques</td>
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<td>will be used to improve general fitness.</td>
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<td>for limitations.*</td>
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<tr>
<td>PEPF 21AD</td>
<td>0.5</td>
<td>PEPF 21AD 0.5 unit Physical Fitness</td>
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<td>2.0 hours laboratory</td>
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<td>Grading: letter grade</td>
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<td></td>
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<td>A physical fitness program of jogging, running,</td>
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<td>conditioning and circuit training exercises.</td>
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<td>for limitations.*</td>
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<tr>
<td>PEPF 22AD</td>
<td>1.5</td>
<td>PEPF 22AD 1.5 units Physical Fitness</td>
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<td></td>
<td>5.0 hours laboratory</td>
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<td>Grading: letter grade</td>
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<td>A physical fitness program of jogging, running,</td>
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<td>conditioning and circuit training exercises.</td>
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<td>for limitations.*</td>
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<tr>
<td>PEPF 41AD</td>
<td>0.5</td>
<td>PEPF 41AD 0.5 unit Swimming Fitness</td>
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<td></td>
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<td>2.0 hours laboratory</td>
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<td>Grading: letter grade</td>
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<td>Swim fitness is part of a physical fitness program. This</td>
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<td>course consists of swimming related circuit training</td>
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<td>exercises.</td>
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<td>for limitations.*</td>
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<tr>
<td>PEPF 42AD</td>
<td>1.0</td>
<td>PEPF 42AD 1.0 unit Swimming Fitness</td>
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<td>3.0 hours laboratory</td>
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<td>Grading: letter grade</td>
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<td>Swim fitness is part of the physical fitness program. The</td>
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<td>for limitations.*</td>
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<tr>
<td>PEPF 47AD</td>
<td>0.5</td>
<td>PEPF 47AD 0.5 unit Swim Fitness/Polo</td>
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<td>2.0 hours laboratory</td>
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<td>Grading: letter grade</td>
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<td>An advanced fitness program combining the development of</td>
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<td>water polo and swimming skills.</td>
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<td>for limitations.*</td>
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<tr>
<td>PEPF 48AD</td>
<td>1.0</td>
<td>PEPF 48AD 1.0 unit Swim Fitness/Polo</td>
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<td>3.0 hours laboratory</td>
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<td>Grading: letter grade</td>
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<td>water polo and swimming skills.</td>
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<tr>
<td>PEPF 53AD</td>
<td>0.5</td>
<td>PEPF 53AD 0.5 unit Weight Training</td>
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<td></td>
<td></td>
<td>2.0 hours laboratory</td>
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<td>Grading: letter grade</td>
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<td>Weight training classes are designed to present a variety</td>
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<td>of lifting techniques. Students will use these techniques</td>
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<td>and their understanding of basic anatomy to reach their</td>
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<td>weight lifting goals.</td>
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<tr>
<td>PEPF 54AD</td>
<td>1.0</td>
<td>PEPF 54AD 1.0 unit Weight Training</td>
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<td>3.0 hours laboratory</td>
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<td>Grading: letter grade</td>
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<td>for limitations.*</td>
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<tr>
<td>PEPF 70A</td>
<td>1.0</td>
<td>PEPF 70A 1.0 unit Physical Fitness for Aviators</td>
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<td></td>
<td></td>
<td>0.5 hour lecture, 1.5 hours laboratory</td>
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<td></td>
<td></td>
<td>Grading: letter grade</td>
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<td></td>
<td></td>
<td>Covers physical fitness and fit lifestyles for aviators</td>
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<td></td>
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<td>and students preparing for FAA and airline medical exams.</td>
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<td>Emphasizes lecture and exercise to develop and maintain</td>
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<td></td>
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<td>cardiovascular endurance, muscular strength and joint</td>
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<td>mobility. May be taken out of sequence.</td>
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<td>*Transfer Status: Transferable to UC/CSU, see counselor</td>
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<td>for limitations.*</td>
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<tr>
<td>PEPF 70B</td>
<td>1.0</td>
<td>PEPF 70B 1.0 unit Physical Fitness for Aviators</td>
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<td>0.5 hour lecture, 1.5 hours laboratory</td>
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<td>Grading: letter grade</td>
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<td>Covers physical fitness and fit lifestyles for aviators</td>
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<td>and students preparing for FAA and airline medical exams.</td>
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<td>Emphasizes fitness testing and exercise. May be taken out</td>
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<td>of sequence.</td>
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</table>
PHYSICAL EDUCATION,
PROFESSIONAL PREPARATION
(PEPP)

PEPP 1 2.0 units
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, a 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 3.0 units
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 CSU, see counselor for limitations.

PEPP 7 (CAN REC 2) 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
This course introduces the basic concepts of athletic training, including instruction for prevention, recognition, management and treatment of common injuries in an active population. The skills of basic strapping, bracing, padding and taping for the prevention and support of injuries will be presented and practiced in the laboratory setting.
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
This course is designed to prepare students to teach dance aerobics. The teaching progression for dance aerobics, step aerobics, and cardio kick boxing are topics covered in this course.
Transfer Status: Transferable to CSU, see counselor for limitations.
Courses of Instruction

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 (CAN KINE/PE 8) 3.0 units
First Aid and Safety Education
3.0 hours lecture
Grading: letter grade
This course covers techniques and the principles involved in rendering prompt and intelligent first aid when necessary. It 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
This course covers the rules, strategies and skills necessary to teach and coach soccer. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

PEPP 37 1.0 unit
Volleyball (Men)
0.5 hour lecture, 1.5 hours laboratory
Grading: letter grade
This course provides conditioning and instruction in the rules, techniques and strategies of volleyball. The course is designed for students seeking the ability to prepare instruction and practices 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
Courses of Instruction

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 UC/CSU, see counselor for limitations.

PHYSICAL EDUCATION, INTERCOLLEGIATE ATHLETICS (PEIA)

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.

PEIA 1M1 1.5 units
Baseball (Men)
5.0 hours laboratory
Grading: letter grade
Advanced preparatory instruction for participation in men’s intercollegiate baseball. Designed for tryouts, out-of-season conditioning and training.
Transfer Status: Transferable to CSU, see counselor for limitations.

PEIA 3AD 3.0 units
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.

PEIA 3M1 1.5 units
Basketball (Men)
5.0 hours laboratory
Grading: letter grade
Advanced preparatory instruction for participation in men’s intercollegiate basketball. Designed for tryouts, out-of-season conditioning and training.
Transfer Status: Transferable to CSU, see counselor for limitations.

PEIA 5AD 3.0 units
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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Name</th>
<th>Hours</th>
<th>Recommended Preparation</th>
<th>Grading</th>
<th>Description</th>
<th>Transfer Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEIA 5M1</td>
<td>1.5</td>
<td>Cross Country (Men)</td>
<td>5.0</td>
<td>Advanced preparatory instruction for participation in men’s intercollegiate cross country. Designed for try outs, out-of-season conditioning and training.</td>
<td>letter grade</td>
<td></td>
<td>Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEIA 7AD</td>
<td>3.0</td>
<td>Football (Men)</td>
<td>10.0</td>
<td>Admission limited to tryout</td>
<td>letter grade</td>
<td>A diverse program of intercollegiate athletics for men and women of exceptional ability which fulfills the legal requirement for a physical education activity.</td>
<td>Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEIA 7M1</td>
<td>1.5</td>
<td>Football (Men)</td>
<td>5.0</td>
<td>Advanced preparation for men’s intercollegiate football. Designed for try outs, out-of-season conditioning and training.</td>
<td>letter grade</td>
<td></td>
<td>Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEIA 9AD</td>
<td>3.0</td>
<td>Golf (Men)</td>
<td>10.0</td>
<td>Admission limited to tryout</td>
<td>letter grade</td>
<td>Instruction in the rules, techniques and strategies of golf. Designed for men of exceptional ability who wish to participate in intercollegiate athletics.</td>
<td>Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEIA 9M1</td>
<td>1.5</td>
<td>Golf (Men)</td>
<td>5.0</td>
<td>Advanced preparatory instruction for participation in men’s intercollegiate golf. Designed for try outs, out-of-season conditioning and training.</td>
<td>letter grade</td>
<td></td>
<td>Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEIA 13AD</td>
<td>3.0</td>
<td>Soccer (Men)</td>
<td>10.0</td>
<td>Admission limited to tryout</td>
<td>letter grade</td>
<td>This course offers instruction in the rules, techniques and strategies of soccer. The course is designed for men of exceptional ability who wish to participate in intercollegiate athletics.</td>
<td>Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEIA 13M1</td>
<td>1.5</td>
<td>Soccer (Men)</td>
<td>5.0</td>
<td>Advanced preparatory instruction for participation in men’s intercollegiate track and field. Designed for try outs, out-of-season conditioning and training.</td>
<td>letter grade</td>
<td></td>
<td>Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEIA 15AD</td>
<td>3.0</td>
<td>Swimming (Men)</td>
<td>10.0</td>
<td>Admission limited to tryout</td>
<td>letter grade</td>
<td>A diverse program of intercollegiate athletics for men and women of exceptional ability which fulfills the legal requirement for a physical education activity.</td>
<td>Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEIA 15M1</td>
<td>1.5</td>
<td>Swimming (Men)</td>
<td>5.0</td>
<td>Advanced preparatory instruction for participation in men’s intercollegiate swimming. Designed for try outs, out-of-season conditioning and training.</td>
<td>letter grade</td>
<td></td>
<td>Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEIA 17AD</td>
<td>3.0</td>
<td>Tennis (Men)</td>
<td>10.0</td>
<td>Admission limited to tryout</td>
<td>letter grade</td>
<td>A diverse program of intercollegiate athletics for men and women of exceptional ability which fulfills the legal requirement for a physical education activity.</td>
<td>Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEIA 17M1</td>
<td>1.5</td>
<td>Tennis (Men)</td>
<td>5.0</td>
<td>Admission is limited to tryouts.</td>
<td>letter grade</td>
<td>PEIA17M1 is offered as part of a diverse program of intercollegiate athletics for men and women of exceptional ability which fulfills the legal requirement for a physical education activity.</td>
<td>Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEIA 19AD</td>
<td>3.0</td>
<td>Track &amp; Field (Men)</td>
<td>10.0</td>
<td>Admission limited to tryout</td>
<td>letter grade</td>
<td>A diverse program of intercollegiate athletics for men and women of exceptional ability which fulfills the legal requirement for a physical education activity.</td>
<td>Transferable to UC/CSU, see counselor for limitations.</td>
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<tr>
<td>PEIA 19M1</td>
<td>1.5</td>
<td>Track &amp; Field (Men)</td>
<td>5.0</td>
<td>Advanced preparatory instruction for participation in men’s intercollegiate track and field. Designed for try outs, out-of-season conditioning and training.</td>
<td>letter grade</td>
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<td>Transferable to CSU, see counselor for limitations.</td>
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</tbody>
</table>
### Courses of Instruction

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEIA 21AD</td>
<td>3.0</td>
<td>Volleyball (Men)</td>
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<tr>
<td></td>
<td></td>
<td>10.0 hour laboratory</td>
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<td></td>
<td></td>
<td>Recommended Preparation: Admission limited to tryout</td>
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<td></td>
<td></td>
<td>Grading: letter grade</td>
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<tr>
<td></td>
<td></td>
<td>This course provides conditioning and instruction in the rules, techniques and strategies of volleyball. The course is designed for men of exceptional ability who wish to prepare to participate in intercollegiate athletics. Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEIA 21M1</td>
<td>1.5</td>
<td>Volleyball (Men)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.0 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>Advanced preparatory instruction for participation in men’s intercollegiate volleyball. Designed for tryouts, out-of-season conditioning and training. 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)</td>
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<tr>
<td></td>
<td></td>
<td>10.0 hour laboratory</td>
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<td></td>
<td></td>
<td>Recommended Preparation: Admission limited to tryout</td>
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<td></td>
<td></td>
<td>Grading: letter grade</td>
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<td>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 23M1</td>
<td>1.5</td>
<td>Water Polo (Men)</td>
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<td></td>
<td></td>
<td>5.0 hours laboratory</td>
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<td></td>
<td>Grading: letter grade</td>
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<tr>
<td></td>
<td></td>
<td>This course provides conditioning and instruction in the rules, techniques and strategies of water polo. The course is designed for male student-athletes who wish to prepare to participate with the intercollegiate water polo teams. Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEIA 27AD</td>
<td>3.0</td>
<td>Basketball (Women)</td>
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<td></td>
<td></td>
<td>10.0 hour laboratory</td>
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<td></td>
<td></td>
<td>Recommended Preparation: Admission limited to tryout</td>
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<td></td>
<td>Grading: letter grade</td>
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<td>PEIA 27M1</td>
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<td>Basketball (Women)</td>
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<tr>
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<td></td>
<td>5.0 hours laboratory</td>
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<tr>
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<td></td>
<td>Grading: letter grade</td>
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<tr>
<td></td>
<td></td>
<td>Advanced preparatory instruction for participation in women’s intercollegiate basketball. Designed for tryouts, out-of-season conditioning and training. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEIA 29AD</td>
<td>3.0</td>
<td>Cross Country (Women)</td>
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<td></td>
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<td>10.0 hour laboratory</td>
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<td>Recommended Preparation: Admission limited to tryout</td>
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<td>PEIA 29M1</td>
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<td></td>
<td></td>
<td>5.0 hours laboratory</td>
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<td></td>
<td></td>
<td>Grading: letter grade</td>
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<tr>
<td></td>
<td></td>
<td>Advanced preparatory instruction for participation in women’s intercollegiate cross country. Designed for tryouts, out-of-season conditioning and training. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEIA 31AD</td>
<td>3.0</td>
<td>Golf (Women)</td>
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<td></td>
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<td>10.0 hour laboratory</td>
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<td></td>
<td></td>
<td>Recommended Preparation: Admission limited to tryout</td>
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<td></td>
<td></td>
<td>Grading: letter grade</td>
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<tr>
<td></td>
<td></td>
<td>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>
<tr>
<td>PEIA 31M1</td>
<td>1.5</td>
<td>Golf (Women)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.0 hours laboratory</td>
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<td></td>
<td></td>
<td>Grading: letter grade</td>
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<tr>
<td></td>
<td></td>
<td>Advanced preparatory instruction for participation in women’s intercollegiate golf. Designed for tryouts, out-of-season conditioning and training. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEIA 35AD</td>
<td>3.0</td>
<td>Soccer (Women)</td>
</tr>
<tr>
<td></td>
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<td>10.0 hour laboratory</td>
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<tr>
<td></td>
<td></td>
<td>Recommended Preparation: Admission limited to tryout</td>
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<td>Grading: letter grade</td>
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<tr>
<td></td>
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<td>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.</td>
</tr>
<tr>
<td>PEIA 35M1</td>
<td>1.5</td>
<td>Soccer (Women)</td>
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<tr>
<td></td>
<td></td>
<td>5.0 hours laboratory</td>
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<td></td>
<td></td>
<td>Grading: letter grade</td>
</tr>
<tr>
<td></td>
<td></td>
<td>This course offers instruction in the rules, techniques and strategies of soccer. The course is designed for women of exceptional ability who wish to participate in intercollegiate athletics. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>PEIA 37AD</td>
<td>3.0</td>
<td>Softball (Women)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10.0 hour laboratory</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Recommended Preparation: Admission limited to tryout</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Grading: letter grade</td>
</tr>
</tbody>
</table>
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.

**PEIA 37M1** 1.5 units
Softball (Women)
5.0 hours laboratory
Grading: letter grade
Advanced preparatory instruction for participation in women’s intercollegiate softball. Designed for tryouts, out-of-season conditioning and training.
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 women of exceptional ability which fulfills the legal requirement for 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 women of exceptional ability which fulfills the legal requirement for a physical education activity.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**PEIA 43M1** 1.5 units
Track & Field (Women)
5.0 hours laboratory
Grading: letter grade
Advanced preparatory instruction for participation in women’s intercollegiate track and field. Designed for tryouts, out-of-season conditioning and training.
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 for a physical education activity.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**PEIA 45M1** 1.5 units
Volleyball (Women)
5.0 hours laboratory
Grading: letter grade
This course is designed to provide the instruction and training for intercollegiate competition in women’s volleyball for students of exceptional ability who wish to participate at this level of competition.
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
This course offers instruction in the rules, techniques and strategies of water polo. The course is designed for women of exceptional ability who wish to participate in intercollegiate athletics.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**PEIA 47M1** 1.5 units
Water Polo (Women)
5.0 hours laboratory
Recommended Preparation: Admission limited to tryout.
Grading: letter grade
This course provides conditioning and instruction in the rules, techniques and strategies of water polo. The course is 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 40
Grading: letter grade or credit/no credit
Phys. 2A is an algebra and trigonometry based general physics course for students not majoring in physics or engineering. It covers kinematics, dynamics, work and energy, momentum, rotational motion, properties of
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
Phys. 2B is an algebra and trigonometry based general physics course for students not majoring in physics or engineering. The course covers electric charge, Coulomb's Law, electric field, electric potential, capacitance, electric current, D.C. circuits, magnetism, electromagnetic induction, A.C. circuits, electromagnetic waves, geometric optics, the wave nature of light, the Special Theory of Relativity and introduction to Quantum Theory and models of the atom. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

PHYS 3A (Part of CAN PHYS SEQUENCE B) 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 or credit/no credit
Physics 3A is the first course of a calculus based sequence for majors in physics, chemistry, mathematics, engineering, astronomy and certain other fields. Physics 3A covers kinematics, vectors, dynamics, energy, translational and rotational motion, static fluids, simple harmonic oscillations and mechanical waves. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

PHYS 3B (Part of CAN PHYS SEQUENCE B) 4.0 units
Physics for Sci. & Eng. — E & M
4.0 hours lecture, 2.0 hours laboratory
Prerequisite: PHYS 3A
Grading: letter grade or credit/no credit
Phys. 3B is the second course of a calculus-based sequence for majors in physics, chemistry, mathematics, engineering, astronomy and certain other fields. The course covers electric charge, Coulomb's Law, electric field, Gauss's law, electric potential, capacitance, electric current, D.C. circuits, magnetic fields, electromagnetic induction, A.C. circuits, Maxwell's equations and electromagnetic waves. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

PHYS 3C (Part of CAN PHYS SEQUENCE B) 4.0 units
Physics for Sci. & Eng. — Modern Physics
4.0 hours lecture, 2.0 hours laboratory
Prerequisite: PHYS 3A
Grading: letter grade or credit/no credit
Physics 3C is part of a calculus based sequence for majors in physics, chemistry, mathematics, engineering, astronomy and certain other fields. Physics 3C includes thermodynamics, electromagnetic waves, ray optics, wave optics, special relativity, basic quantum theory, wave mechanics, properties of atoms, nuclear structure and nuclear reactions. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

PHYS 10 4.0 units
Conceptual Physics
4.0 hours lecture, 2.0 hours laboratory
Grading: letter grade or credit/no credit
Covers classical physics (mechanics, electricity, magnetism and light) and modern physics (relativity and quantum mechanics). Emphasizes understanding basic concepts and their application to explain natural phenomena. Both science and non-science students may take course. Extensive use of demonstrations will be made to teach the physics concept. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

PHYSIOLOGY (PHYSI)

PHYSI 1 (CAN BIOL 12) 5.0 units
Human Physiology
4.0 hours lecture, 3.0 hours laboratory
Prerequisite: ANAT 1, 41 or BIO 60
Recommended Preparation: CHEM 2 or one year of high school chemistry.
Grading: letter grade or credit/no credit
Develop a general understanding of the functioning of the human body and gain experience in the use of standard physiology equipment. Designed for pre-nursing, physical education, physical therapy, occupational therapy and life science majors as a background for advanced courses. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

POLITICAL SCIENCE (POLSC)

POLSC 1 (CAN GOVT 2) 3.0 units
Introduction to Government
3.0 hours lecture
Grading: letter grade
An intro to the principles and problems of government and the political process in a diverse society emphasizing the U.S. government and California state and local government. Satisfies the requirement for a course in the U.S. Constitution and the principles of state and local government, required by Title 5 of the California Administrative Code. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

POLSC 1H 3.0 units
Honors Introduction to Government
3.0 hours lecture
Prerequisite: Qualification for the Honors Program
Grading: letter grade
An intro to the principles and problems of government and the political process, emphasizing U.S. government and California state and local government. Satisfies the requirement for a course in the Constitution of the United States and the principles of state and local government, as required by Title 5 of the California Administrative Code. Transfer Status: Transferable to UC/CSU, see counselor for limitations.

POLSC 2 3.0 units
Comparative Government
3.0 hours lecture
Grading: letter grade or credit/no credit
Courses of Instruction

Introduction to the comparative study of governmental institutions and political processes of selected governments of the world. Emphasis is on political and institutional development within countries. The course applies the logic and methods of comparative political analysis. Satisfies one social science requirement for majors in political science, history, sociology, humanities and life sciences at CSULB and UCLA.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

POLSC 3
Issues of American Government
3.0 units
3.0 hours lecture
Grading: letter grade or credit/no credit

Intensive study of current issues involving the basic concepts of American democracy, state-federal relationships, government finance, politics and pressure groups, legislative, executive and judicial powers, civil rights and liberties and international ideological conflict. Highly recommended for political science majors at California State University, Long Beach.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

POLSC 4
World Politics
3.0 units
3.0 hours lecture
Grading: letter grade or credit/no credit

An intro to recent and contemporary international relations, foreign policy-making institutions and the politics of selected foreign states. Satisfies one lower division social science requirement for majors in political science, history, sociology, humanities, physical sciences and life sciences at UCLA.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

POLSC 9
The Constitution, Law and Society
3.0 units
3.0 hours lecture
Grading: letter grade or credit/no credit

A general survey of U.S. Constitutional law and its origins, emphasizing the legal system. The role of law in controversial political and social issues, in particular civil rights and liberties, is examined. Law is analyzed as an integral part of the political process, along with questions of morality.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

POLSC 10
Introduction to Political Science
3.0 units
3.0 hours lecture
Grading: letter grade or credit/no credit

This course introduces basic concepts and approaches in the discipline of political science. Theories of political institutions, systems and subsystems are examined. Methods and approaches of political analysis are developed in the study of classical and modern political problems.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

POLSC 11
Introduction to Political Theory
3.0 units
3.0 hours lecture
Grading: letter grade

This course is an introduction to Western political thought. It examines perennial issues of politics concerning justice, power, and the nature of the state. The course surveys the central political thinkers associated with the ancient, medieval, modern, and postmodern eras of Western political theory.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

PSYCH 1 (CAN PSY 2)
Introduction to Psychology
3.0 units
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
Honors Introduction to Psychology
3.0 units
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 (CAN PSY 8)
Research Methods for Psychology
4.0 units
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 UC/CSU, see counselor for limitations.

**PSYCH 10**
**3.0 units**

**Human Sexuality**
3.0 hours lecture
Grading: letter grade or credit/no credit
An 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, psychos, substance abuse, sexual deviations, 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
The course will address questions such as: What factors influence the development of personality? How can we investigate the nature and cause of personality? How can we apply knowledge of personality theories and research findings to everyday situations? Can we predict behavior on the basis of personality?
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 UC/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 INDRL 41.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**PUBAD 301M1**
**1.0 unit**

**Intro to PUBAD:Leadership Development**
1.3 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, and career opportunities in public services.

**PUBAD 301M2**
**1.0 unit**

**Intro to PUBAD:Executive Development**
1.3 hours lecture
Grading: letter grade or credit/no credit
An intro to the role and functions of the public agency executive.

**PUBAD 304M1**
**0.5 unit**

**Fund of Supervision:Management Train I**
0.5 hour lecture
Grading: letter grade or credit/no credit
Orientation to role of the supervisor, supervisory functions and principles of organization in a public agency.

**PUBAD 304M2**
**1.0 unit**

**Fund of Supervision:Management Train II**
1.0 hour lecture
Grading: letter grade or credit/no credit
Orientation to the role of the supervisor, supervisory functions and principles of organization in a public agency.
PUBAD 304M3 1.0 unit
Fundamentals of Supervision: Mgmt Train
1.3 hours lecture
Grading: letter grade or credit/no credit
Fundamentals of team building and planning for executives.

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.

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.

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.
Courses of Instruction

R_TV 8 3.0 units
Introduction to Media Production
3.0 hours lecture, 1.0 hour laboratory
Grading: letter grade
This course introduces students to the basic principles of production, including operation of equipment and the process of developing a program from the original idea to final editing.
Transfer Status: Transferable to CSU, see counselor for limitations.

R_TV 9 1.0 unit
Basic Camcorder Production Techniques
1.0 hour lecture
Grading: letter grade or credit/no credit
An intro survey of the basic operation of “camcorder” type video tape recorders; also covers production considerations unique to camcorders.
Transfer Status: Transferable to CSU, see counselor for limitations.

R_TV 12 2.0 units
Television Lighting
1.0 hour lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
Students will study the practical application of the theories of television lighting. This course includes the following: 1) using lighting materials and equipment, 2) the aesthetics of light, 3) experimenting with light and color, 4) lighting for effects, 5) lighting for studio production, 6) lighting for field production, 7) lighting for single and multiple cameras.
Transfer Status: Transferable to CSU, see counselor for limitations.

R_TV 13AD 2.0 units
Television Production
1.0 hour lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
This course allows the student the opportunity to participate in the creation and production of television program material. Students will produce, direct and crew a variety of projects, such as news, interviews, commercials, dramas, comedies and instructional programs.
Transfer Status: Transferable to CSU, see counselor for limitations.

R_TV 14AD 2.0 units
Electronic Field Production
2.0 hours lecture, 1.0 hour laboratory
Grading: letter grade or credit/no credit
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.
Transfer Status: Transferable to CSU, see counselor for limitations.

R_TV 15AC 2.0 units
Advanced Television Production
1.0 hour lecture, 3.0 hours laboratory
Recommended Preparation: Audition
Grading: letter grade
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.
Transfer Status: Transferable to CSU, see counselor for limitations.

R_TV 17AD 1.0 unit
Special Projects in Television
1.0 hour lecture, 2.0 hours laboratory
Grading: letter grade
Students will plan and execute their individual projects under the instructor’s guidance. They 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. Production projects may be sports, news, entertainment, or documentaries.
Transfer Status: Transferable to CSU, see counselor for limitations.

R_TV 21 3.0 units
Radio Production
3.0 hours lecture, 1.0 hour laboratory
Grading: letter grade
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.
Transfer Status: Transferable to CSU, see counselor for limitations.

R_TV 25AD 2.0 units
Radio Activity
1.0 hour lecture, 4.0 hours laboratory
Grading: letter grade or credit/no credit
This course provides the opportunity and responsibility to work in a variety of jobs involved in the operation of one of the college’s two internet radio stations. Students will work “on air” and behind the scenes. Hours outside of the class time are arranged in consultation with the instructor.
Transfer Status: Transferable to CSU, see counselor for limitations.

R_TV 30AD 1.5 units
Broadcast Newswriting
1.0 hour lecture, 2.0 hours laboratory
Grading: letter grade
Students will learn to write, re-write and edit stories for radio, TV, or Internet distribution. Students will gain experience in discovering and researching news. Topics covered will include use of sound tracks, visuals, interviews, and the “local angle” or “human interest element.” Some stories may be incorporated into the weekly student TV news show.
Transfer Status: Transferable to CSU, see counselor for limitations.

R_TV 34AD 2.0 units
Music Video Production
2.0 hours lecture, 2.0 hours laboratory
Recommended Preparation: R_TV 14AD
Grading: letter grade or credit/no credit
This course provides an in depth exam of the components necessary to produce a music video, including completion of a camera ready production proposal and a
Courses of Instruction

script of selected projects. Selected projects may be produced.

Transfer Status: Transferable to CSU, see counselor for limitations.

**R_TV 35AD** 2.0 units

**Television Activity**

1.0 hour lecture , 4.0 hours laboratory
Grading: letter grade or credit/no credit

This course provides an opportunity and responsibility to work in a variety of jobs involved in the video taping of various college events and/or projects or student selected projects in the television studio. Projects may be broadcast on the college cable channel and/or used in the student news show.

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

In this course, students will learn various aspects of producing a television newscast. Students will participate in gathering information, writing, editing and producing news, sports, editorials, and weather segments. Students will work as managing editors, operate equipment, and edit video packages.

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

This course provides an overview of the basic elements of broadcast and cablecast management. Topics covered include: advertising and sales techniques, ratings, 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

This course 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 72AD** 3.0 units

**Work Experience: Radio and Television**

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.

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.

**R_TV 216AC** 2.0 units

**Non-Linear Video & Film Editing**

2.0 hours lecture , 2.0 hours laboratory
Recommended Preparation: R_TV 3
Grading: letter grade or credit/no credit

This course explores the process of non-linear video and film editing using Final Cut Pro. This is a “hands-on” course in which students will edit digital video and audio into finished clips or entire shows.

**R_TV 304** 1.0 unit

**Writing & Prod Plan: Getting Started**

1.0 hour lecture
Grading: letter grade

Study of pre-production principles and procedures common to all producers with an emphasis on scripting and other writing skills unique to the radio/television/film industry. Budgeting, casting, legal issues and other production problems are discussed.

**R_TV 315A1** 0.5 unit

**Advanced TV Production (Field Production)**

0.3 hour lecture , 1.0 hour laboratory
Grading: letter grade

Technical aspects of television production in the field. Learn crew techniques, lighting, audio selection, and field problem solving.

**R_TV 315A2** 0.5 unit

**Advanced TV Production (Editing)**

0.3 hour lecture , 1.0 hour laboratory
Grading: letter grade

The study of basic editing technology, terminology and aesthetics, with special attention to successful production strategies.

**R_TV 321** 1.0 unit

**Radio Production: Voice Over**

1.0 hour lecture
Grading: letter grade

Creation and production of radio program material. Included may be such projects as disc jockey shows, news programs, interviews, commercials, and editing. Voice exercises and concepts on voice use will be discussed/demonstrated. Voice character development will be covered.
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 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
This course covers an introduction to mortgage brokering operations, and orients students toward a career in the field. Topics covered include types of loans; loan processing; lending regulations; underwriting; loan submission; quality control; understanding credit information; loan packaging; and loan documents.
Transfer Status: Transferable to CSU, see counselor for limitations.

REAL 85 3.0 units
Real Estate Appraisal
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 90 3.0 units
Tax Aspects of Real Estate Transactions
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 3.0 units
Real Estate Update
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 3.0 units
Escrows and Land Titles
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.

REAL 92B 3.0 units
Escrows and Land Titles
3.0 hours lecture
Prerequisite: REAL 92A
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 will be discussed.
Transfer Status: Transferable to CSU, see counselor for limitations.

REAL 93 3.0 units
Real Estate Investments
3.0 hours lecture
Grading: letter grade
Nature and scope of investments, brokerage, income property operations, taxation, cash flow analysis, measuring returns, financing and investment strategies. Qualifies for 45 hours of continuing education credit.
Transfer Status: Transferable to CSU, see counselor for limitations.

REAL 94 3.0 units
Office Management
3.0 hours lecture
Grading: letter grade
Designed to improve proficiency in serving consumers through real estate office management and organization.
Transfer Status: Transferable to CSU, see counselor for limitations.

REAL 253 3.0 units
Property Management
3.0 hours lecture
Grading: letter grade
Courses of Instruction

This course in an introduction to the basic principles and practices of successful apartment house management.

REAL 271AD 2.0 units
Work Experience-Real Estate
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.

REAL 272AD 3.0 units
Work Experience-Real Estate
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.

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
This course will include instruction on safety practices, radial line surface development, related metal project fabrication, advanced oxy-acetylene welding, an introduction 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
This course will cover the topics of work place safety practices, an introduction to inert gas arc welding, to triangulation surface development, exotic metals fabrication and stainless steel work.

SHMET 204 10.0 units
Sheet Metal 4
6.0 hours lecture, 12.0 hours laboratory
Grading: letter grade or credit/no credit
This course instructs students in the safety practices and advanced live projects in sheet metal while 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
This course is designed for people working in or wishing to enter the fields of air conditioning, refrigeration, heating, ventilating and aircraft or industrial fabrication. This course provides 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 industry standards will be included.

SHMET 220B 5.0 units
Surface Development & Fabrication 2
4.0 hours lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
This course is designed for people working in or wishing to enter the fields of air conditioning, refrigeration, heating, ventilating and aircraft or industrial fabrication. This course will provide comprehensive instruction in sheet metal layout, including radial line and triangulation. Individualized hands-on experience in tool set-up and job shop performance equal to industry standards is provided.

SHMET 220C 5.0 units
Surface Development & Fabrication 3
4.0 hours lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
This course is designed for people working in or wishing to enter the fields of air conditioning, refrigeration, heating, ventilating and aircraft or industrial fabrication. This is 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 industry standards will be provided.

SHMET 220D 5.0 units
Surface Development & Fabrication 4
4.0 hours lecture, 3.0 hours laboratory
Grading: letter grade or credit/no credit
This course is designed for people working in or wishing to enter the fields of air conditioning, refrigeration, heating, ventilating and aircraft or industrial fabrication. This is 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 industry standards is provided.

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
This course compares and contrasts major civilizations using interdisciplinary teams of faculty drawn from the Humanities and the Social Sciences. These teams study two or more major cultures to determine how these human communities met their basic biological, material, spiritual and intellectual needs, and experienced both continuity and change through time.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

SOCSC 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 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 units
American Pluralism and Identity
3.0 hours lecture
Grading: letter grade or credit/no credit
This course explores the multicultural nature of American society from a Humanities and Social Sciences perspective. The course examines how ethnic groups in America have constructed artistic, literary, musical, philosophical and religious identities based on their traditions and experiences and seeks to understand the United States as a common culture. Using the Social Sciences to compare and contrast the origins, living conditions and experiences of Americas constituent populations, the course analyzes the complexity of the processes effecting the interaction of the American people.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

SOCIOLOGY (SOCIO)

SOCIO 1 (CAN SOC 2) 3.0 units
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 units
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 (CAN SOC 4) 3.0 units
Modern Social Problems
3.0 hours lecture
Prerequisite: SOCIO 1
Grading: letter grade or credit/no credit
The scope of the course will include identification and analysis of contemporary social problems in the U.S., using the theories and methodology of sociology. Among the topics considered are violence, crime, poverty, sexism, racism, social change, addiction, abuse and alienation. The role of social institutions will also be considered.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

SOCIO 11 3.0 units
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 is covered. The course also includes an analysis of migration patterns, stratification, gender, social movements and inter- and intra-group relations. Also an examination of how social, political, economic and historical forces affect contemporary race and ethnic relations will be included.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

SOCIO 12 3.0 units
Crime and Delinquency
3.0 hours lecture
Recommended Preparation: SOCIO 1
Grading: letter grade
This course is an introduction to major types of criminal behavior, characteristics of offenders, factors which contribute to crime and delinquency, the criminal justice process, and the human process of law enforcement, the courts, probation, parole and institutions. The course also includes changes in crime control and treatment processes and the role of society. This course is 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 units
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.
### Courses of Instruction

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SPAN 1 (CAN SPAN 2)</strong></td>
<td>5.0 units</td>
<td>Elementary Spanish</td>
</tr>
<tr>
<td><strong>SPAN 1A (Part of CAN SPAN SEQUENCE A)</strong></td>
<td>3.0 units</td>
<td>Elementary Spanish 1A</td>
</tr>
<tr>
<td><strong>SPAN 1B (Part of CAN SPAN SEQUENCE A)</strong></td>
<td>2.0 units</td>
<td>Elementary Spanish 1B</td>
</tr>
<tr>
<td><strong>SPAN 2 (CAN SPAN 4)</strong></td>
<td>5.0 units</td>
<td>Elementary Spanish</td>
</tr>
<tr>
<td><strong>SPAN 2A (Part of CAN SPAN SEQUENCE A)</strong></td>
<td>3.0 units</td>
<td>Elementary Spanish 2A</td>
</tr>
<tr>
<td><strong>SPAN 2B (Part of CAN SPAN SEQUENCE A)</strong></td>
<td>2.0 units</td>
<td>Elementary Spanish 2B</td>
</tr>
<tr>
<td><strong>SPAN 3 (CAN SPAN 8)</strong></td>
<td>5.0 units</td>
<td>Intermediate Spanish</td>
</tr>
<tr>
<td><strong>SPAN 3H</strong></td>
<td>5.0 units</td>
<td>Honors Intermediate Spanish</td>
</tr>
<tr>
<td><strong>SPAN 4 (CAN SPAN 10)</strong></td>
<td>5.0 units</td>
<td>Intermediate Spanish</td>
</tr>
</tbody>
</table>

**Elementary Spanish**

- **SPAN 1:** 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:** 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 1B:** 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.

**Intermediate Spanish**

- **SPAN 3:** This course continues the review of Spanish grammar, emphasizing more advanced structures. Topics include comparison of verb tenses, expansion of vocabulary, development of reading and speaking ability and improvement of writing skills through the writing process.
  - Transfer Status: Transferable to UC/CSU, see counselor for limitations.

**Honors Intermediate Spanish**

- **SPAN 3H:** 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.

**Intermediate Spanish**

- **SPAN 4:** Prerequisite: SPAN 3 or recent completion of three years of High School Spanish. Grading: letter grade or credit/no credit
  - This course continues the review of Spanish grammar, emphasizing more advanced structures. Topics include comparison of verb tenses, expansion of vocabulary, development of reading and speaking ability and improvement of writing skills through the writing process.
  - Transfer Status: Transferable to UC/CSU, see counselor for limitations.
Courses of Instruction

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 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 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
Spanish 25A is a survey course that explores the relationship between culture and literature. The course will look at literary works of Latino authors from Latin America, Spain and the U.S. and will study the social-historical evolution of cultural norms as portrayed in 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
Spanish 25B is a survey course that explores the historical and cultural evolution of the Spanish-speaking world, beginning with the origins of Spain to contemporary Spain, Latin America and the Hispanic communities in the U.S.
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
Spanish 25C is a course that focuses on the current events of the Spanish-speaking world.
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
Spanish 25D is a literature survey course that studies major literary works from Spain and Latin America. The course will cover basic concepts of literary theory and literary criticism in Spanish.
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
The theory and practice of public speaking is explored through the analysis, construction and delivery of various types of speeches.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

SP 19AD 1.0 unit
Speech Activity: Individual Events
1.0 hour laboratory
Grading: letter grade or credit/no credit
Through interscholastic speech competition, perfect speaking skills, develop critical thinking and gain increased confidence.
Transfer Status: Transferable to CSU, see counselor for limitations.
## Courses of Instruction

### 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 UC/CSU, see counselor for limitations.*

### SP 25 3.0 units
**Elements of Intercultural Communication**
3.0 hours lecture  
Grading: letter grade or credit/no credit  
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.*

### SP 30 (CAN SPCH 10) 3.0 units
**Elements of Group Communication**
3.0 hours lecture  
Grading: letter grade or credit/no credit  
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.*

### SP 31 3.0 units
**Elements of Leadership Communication**
3.0 hours lecture  
Grading: letter grade or credit/no credit  
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.*

### SP 39AD 1.0 unit
**Leadership Laboratory**
3.0 hours laboratory  
Grading: letter grade or credit/no credit  
A practical application of leadership and parliamentary skills. Includes: discussions with leaders, weekly journals summarizing leadership experiences and problems.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

### SP 50 3.0 units
**Elements of Oral Interpretation**
3.0 hours lecture  
Grading: letter grade or credit/no credit  
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.*

### SP 60 (CAN SPCH 6) 3.0 units
**Elements of Argumentation and Debate**
3.0 hours lecture  
Grading: letter grade or credit/no credit  
The fundamentals of research skills and reasoning are explored and applied to the debate of timely issues. An added appreciation for the role of advocacy and reasoning in a free society is examined.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

### SP 69AD 1.0 unit
**Speech Activity: Team Events & Debate**
10.0 hour laboratory  
Grading: letter grade or credit/no credit  
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 UC/CSU, see counselor for limitations.*

### SP 70 3.0 units
**Voice and Articulation**
3.0 hours lecture, 1.0 hour laboratory  
Grading: letter grade or credit/no credit  
Intensive training in articulation, enunciation, projection and related oral skills, based on the physiology, anatomy and assessment of voice production.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*

### SP 99AD 1.0 unit
**Special Projects in Speech**
3.0 hours laboratory  
Recommended Preparation: Experience in a Speech related course/activity  
Grading: letter grade or credit/no credit  
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 UC/CSU, see counselor for limitations.*

### SPEECH LANGUAGE PATHOLOGY ASSISTANT (SLPA)

### SLPA 10 2.0 units
**Intro to Speech Language Pathology Asst**
2.0 hours lecture  
Grading: letter grade  
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, ethnic and linguistic diversity. Includes interdisciplinary and supervisory relationships, public interaction, individual responsibilities and compliance with both governmental and industry regulations.  
*Transfer Status: Transferable to UC/CSU, see counselor for limitations.*
Courses of Instruction

STATISTICS (STAT)

STAT 1  (CAN STAT 2)  3.0 units
Elementary Statistics
3.0 hours lecture
Prerequisite: MATH 130, 130B or one year high school intermediate algebra with a grade of B or better as reflected by the second semester grade or qualification through the math assessment process.
Grading: letter grade
This course will introduce students to the major concepts and tools for collecting and describing data (descriptive statistics), and drawing conclusions from data (inferential statistics).
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

STAT 1H  3.0 units
Honors Elementary Statistics
3.0 hours lecture
Prerequisite: MATH 130, 130B or high school intermediate algebra with a grade of B or better as reflected by the second semester grade, or qualification through the math assessment process, and qualification for the Honors Program.
Grading: letter grade
This course will introduce students to the major concepts and tools for collecting and describing data (descriptive statistics), and drawing conclusions from data (inferential statistics).
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

TECHNOLOGY (TEC)

TEC 60AD  3.0 units
Computer Aided Design and Drafting (CADD)
2.0 hours lecture, 4.0 hours laboratory
Recommended Preparation: ARCHT 60 or 61 or DRAFT 51A
Grading: letter grade
This course will introduce students to the major concepts and tools for collecting and describing data (descriptive statistics), and drawing conclusions from data (inferential statistics).
Transfer Status: Transferable to UC/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
This course is an investigation and development of a character by students 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.

TART 1B  2.0 units
Acting 1—Movement
2.0 hours lecture, 1.0 hour laboratory
Prerequisite: TART 1 (may be taken concurrently)
Corequisite: TART 51AD. You must enroll in the corequisite course before enrolling in this course.
Grading: letter grade or credit/no credit
An introduction 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  2.0 units
Acting 1—Voice
2.0 hours lecture, 1.0 hour laboratory
Prerequisite: TART 1 (may be taken concurrently)
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
Provides a lucid view of the voice as an instrument of human communication and through a series of exercises to free, develop and strengthen that voice so that the actor’s unique sensibilities may be expressed through it.
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
Prerequisite: TART 1 (may be taken concurrently)
Corequisite: TART 51AD. You must enroll in the corequisite course before enrolling in this course.
Grading: letter grade or credit/no credit
This course will introduce students to the major concepts and tools for collecting and describing data (descriptive statistics), and drawing conclusions from data (inferential statistics).
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

TART 2  (CAN DRAM 22)  3.0 units
Acting 2—Technique & Characterization
3.0 hours lecture, 1.0 hour laboratory
Prerequisite: TART 1
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
This course is an investigation and development of a character by students 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.
### Courses of Instruction

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Title</th>
<th>Hours</th>
<th>Corequisites</th>
<th>Prerequisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TART 2A</td>
<td>2.0</td>
<td>Acting 2-The Spoken Text</td>
<td>2.0 lecture, 1.0 laboratory</td>
<td>Corequisite: TART 51AD. You must enroll in the corequisite course before enrolling in this course.</td>
<td>Prerequisite: TART 1C</td>
<td>This course prepares and presents 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.</td>
</tr>
<tr>
<td>TART 2B</td>
<td>2.0</td>
<td>Acting 2-The Spoken Text</td>
<td>2.0 lecture, 1.0 laboratory</td>
<td>Corequisite: TART 51AD. You must enroll in the corequisite course before enrolling in this course.</td>
<td>Prerequisite: TART 1C</td>
<td>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.</td>
</tr>
<tr>
<td>TART 2C</td>
<td>2.0</td>
<td>Acting 2-Movement, Mime and Mask</td>
<td>2.0 lecture, 1.0 laboratory</td>
<td>Corequisite: TART 51AD. You must enroll in the corequisite course before enrolling in this course.</td>
<td>Prerequisite: TART 1B</td>
<td>Advanced application of the theory and principles of stage movement within specialized areas, such as mime, mask characterization and period movement styles are covered in this course which includes class exercises and lectures. Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>TART 2D</td>
<td>2.0</td>
<td>Acting 2-Movement, Mime and Mask</td>
<td>2.0 lecture, 1.0 laboratory</td>
<td>Corequisite: TART 51AD. You must enroll in the corequisite course before enrolling in this course.</td>
<td>Prerequisite: TART 1B</td>
<td>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.</td>
</tr>
<tr>
<td>TART 3A</td>
<td>3.0</td>
<td>Acting 3-Scene Study</td>
<td>3.0 lecture, 1.0 laboratory</td>
<td>Corequisite: TART 51AD. You must enroll in the corequisite course before enrolling in this course.</td>
<td>Recommended Preparation: TART 2 and TART 25</td>
<td>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.</td>
</tr>
<tr>
<td>TART 3B</td>
<td>3.0</td>
<td>Acting 3-Scene Study</td>
<td>3.0 lecture, 1.0 laboratory</td>
<td>Corequisite: TART 51AD. You must enroll in the corequisite course before enrolling in this course.</td>
<td>Prerequisite: TART 3A</td>
<td>While utilizing contemporary and classical scene selections, this course emphasizes international playwrights of the 19th and 20th centuries. The focus is on the development of specific performance skills and acting techniques for the purpose of heightening the intensity of the acting experience for the serious theatre student. Transfer Status: Transferable to UC/CSU, see counselor for limitations.</td>
</tr>
<tr>
<td>TART 4</td>
<td>3.0</td>
<td>Acting Workshop-Style</td>
<td>2.0 lecture, 3.0 laboratory</td>
<td>Corequisite: TART 3A or 3B</td>
<td>Individual study 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.</td>
<td></td>
</tr>
<tr>
<td>TART 12</td>
<td>3.0</td>
<td>Intermediate Acting</td>
<td>3.0 lecture, 1.0 laboratory</td>
<td>Corequisite: TART 1</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>TART 13A</td>
<td>3.0</td>
<td>Advanced Acting</td>
<td>3.0 lecture, 1.0 laboratory</td>
<td>Corequisite: TART 12</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>TART 13B</td>
<td>3.0</td>
<td>Advanced Acting</td>
<td>3.0 lecture, 1.0 laboratory</td>
<td>Corequisite: TART 13A</td>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>
Courses of Instruction

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 25 (CAN DRAM 18) 3.0 units
Introduction to Theatre
3.0 hours lecture
Corequisite: TART 51AD. You must enroll in the corequisite course before enrolling in this course.
Grading: letter grade or credit/no credit
This course provides 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. Topics include 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 3.0 units
Introduction to Dramatic Literature
3.0 hours lecture
Corequisite: TART 51AD. You must enroll in the corequisite course before enrolling in this course.
Grading: letter grade or credit/no credit
This introduction to the dramatic literature of the Western world, including American drama from early beginnings to present day, examines dramatic structures, concepts, styles and themes of a selection of representative plays. The influence of the theatre and dramatic literature as a social and cultural force of change through the ages is also explored.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

TART 32AD 3.0 units
Stage and Screen Writing
3.0 hours lecture
Recommended Preparation: TART 25, FILM 1 or ENGL 26
Grading: letter grade or credit/no credit
This introduction to the dramatic literature of the Western world, including American drama from early beginnings to present day, examines dramatic structures, concepts, styles and themes of a selection of representative plays. The influence of the theatre and dramatic literature as a social and cultural force of change through the ages is also explored.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

TART 39AD 1.0 unit
Theatre Practicum
3.0 hours laboratory
Grading: letter grade or credit/no credit
This course is a hands-on, practical introduction to the function of stage, costume/wardrobe and make-up technicians and their contribution to dramatic productions. This course includes 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, and the function of technical stage personnel in production work.

Transfer Status: Transferable to UC/CSU, see counselor for limitations.

TART 40AD (CAN DRAM 12) 2.0 units
Stage Scenery
2.0 hours lecture, 3.0 hours laboratory
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 theory and application of scenic design. Includes: painting, construction and manipulation of stage scenery.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

TART 42AD 2.0 units
Stage Lighting
2.0 hours lecture, 3.0 hours laboratory
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 2.0 units
Costume Crafts
1.0 hour lecture, 3.0 hours laboratory
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 2.0 units
Costume Design
1.0 hour lecture, 3.0 hours laboratory
Prerequisite: TART 43AD
Corequisite: TART 39AD and 51AD. You must enroll in the corequisite courses before enrolling in this course.
Grading: letter grade or credit/no credit
This course presents techniques and theories of designing costumes for the stage. Topics include 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 3.0 units
Theatre Management
3.0 hours lecture
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.
Courses of Instruction

TART 49AD 1.0 unit
Rehearsal and Performance
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.
Grading: letter grade or credit/no credit
The focus of this course is on the application of acting and technical theatre theories through the preparation of plays for public performances.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

TART 50AD 2.0 units
Major Production Performance
8.0 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 50/1 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 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. 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 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 52AD 2.0 units
Children's Theatre Performance
8.0 hours laboratory
Prerequisite: TART 1
Corequisite: TART 51AD. You must enroll in the corequisite course before enrolling in this course.
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 55 (CAN DRAM 14) 2.0 units
Stage Makeup
2.0 hours lecture, 1.0 hour laboratory
Prerequisite: TART 1
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 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
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

TART 60AD 1.0 unit
Special Projects in Theatre Arts
3.0 hours laboratory
Courses of Instruction

Grading: letter grade or credit/no credit

This course 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.

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
Participation in an organized summer theatre program based on the procedures of the professional repertory theatre. Extensive experience in training, rehearsal and performance. Typically offered in summer only.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

TART 76AD 1.0 unit
Summer Repertory Theatre: Production
7.0 hours laboratory
Grading: letter grade or credit/no credit
This course is a hands-on practical introduction to the function of stage, costume/wardrobe and make-up technicians and their contribution to dramatic productions. Course topics include 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, and the function of technical stage personnel in production work.
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

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: On & off camera behavior, agenting, producing, unions, broadcasting and production trades.

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 examines aspects of show business career self marketing. This course content will explain all avenues of options in a hands-on style. This course will include, but not be limited to: Photographs, websites, professional publications, union programs and guest lecturers.

TART 205 3.0 units
Auditions for: Theatre & Film
3.0 hours lecture, 1.0 hour laboratory
Prerequisite: TART 1
Recommended Preparation: TART 30 or TART 1B or TART 1C
Grading: letter grade or credit/no credit
This course prepares performers for the practical application of the professional auditioning process. Course exercises assist in developing an actors professional manner, concentration and awareness. Selection of material, analyzing the text, presenting the material, preparation of a resume with pictures and the presentation of self for maximum effect are covered in the course. Guest lecturers will be part of the class and a simulated audition will aid in the students learning process.

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 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 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 examines fundamental aspects of television commercials 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 elements of broadcasting.

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 examine further aspects of television commercials 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 elements of broadcasting.

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 examines fundamental aspects of television commercials 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 elements of broadcasting.

TART 210A 1.5 units
Voice-Over Techniques — Beginning
1.0 hour lecture, 2.0 hours laboratory
Prerequisite: TART 1
TART 1C
Grading: letter grade or credit/no credit
This course is an examination of preliminary techniques for commercial and theatrical voice-overs. Course topics will include but not be limited to feature film additional dialogue recording, animation, looping techniques and network promotions.

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Courses of Instruction

TART 210B  1.5 units
Voice-Over Techniques-Advanced
1.0 hour lecture, 2.0 hours laboratory
Prerequisite: TART 210A
Recommended Preparation: TART 1C
Grading: letter grade or credit/no credit
This course will examine the advanced techniques of theatrical and commercial voice-overs. Course topics will include but not be limited to, feature film additional dialogue recording, animation, looping, character and network promotions.

TART 212A  1.5 units
Acting in Film — Beginning
1.0 hour lecture, 2.0 hours laboratory
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.

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.

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 revenues, expenses, payrolls and financial statements.

THRH 25  3.0 units
Hospitality Law
3.0 hours lecture
Grading: letter grade
Creates an awareness of the responsibilities and rights that the law imposes upon and grants to the innkeeper-restaurant and illustrates the consequences caused by failure in these responsibilities. The attitudes of the courts toward the innkeeper-restaurant involved in litigation are also discussed. Not only provides the essential information needed to comply with the law that is applicable to its operation, but also a grounding in preventive tactics to avoid a lawsuit and identify areas of potential trouble.

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.

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.

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.
### Courses of Instruction

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>THRH 30</td>
<td>Hospitality Sales and Marketing</td>
<td>3.0</td>
<td>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.</td>
</tr>
<tr>
<td>THRH 31</td>
<td>Resort Operations</td>
<td>3.0</td>
<td>Complete approach to the operation of resort properties. Beginning with historical development, details are presented in planning, development, financial 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.</td>
</tr>
<tr>
<td>THRH 33</td>
<td>Housekeeping &amp; Security Management</td>
<td>3.0</td>
<td>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.</td>
</tr>
<tr>
<td>THRH 39</td>
<td>Hospitality Industry Computer Systems</td>
<td>3.0</td>
<td>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.</td>
</tr>
<tr>
<td>THRH 40</td>
<td>Hospitality Computer Systems</td>
<td>3.0</td>
<td>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.</td>
</tr>
<tr>
<td>THRH 271AD</td>
<td>Work Experience — Hotel/Restaurant Mgmt 1.0 hour lecture, 1.5 hours laboratory</td>
<td>2.0</td>
<td>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.</td>
</tr>
<tr>
<td>THRH 272AD</td>
<td>Work Experience — Hotel/Restaurant Mgmt 1.0 hour lecture, 1.5 hours laboratory</td>
<td>3.0</td>
<td>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 career for which the student college program is designed.</td>
</tr>
<tr>
<td>THRFB 17</td>
<td>Introduction to Food and Beverage</td>
<td>3.0</td>
<td>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.</td>
</tr>
<tr>
<td>THRFB 18</td>
<td>Introduction to Culinary Preparation</td>
<td>3.0</td>
<td>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.</td>
</tr>
<tr>
<td>THRFB 19</td>
<td>Food/Beverage Purchasing/Plan/Control</td>
<td>3.0</td>
<td>Learn to develop and implement an effective purchasing program, focusing on issues pertaining to supplier relations and selection, negotiation and evaluation. Transfer Status: Transferable to CSU, see counselor for limitations.</td>
</tr>
</tbody>
</table>
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  
Corequisite: THRH 273AD  
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  
This course 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  
The student will 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  
Topics of this course include the 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  
The student will 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  
This course will explore all forms of ground transportation, including rail, motor coach and car rentals. Topic of this course include 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  
Topics of this course include ship and cruise line terminology, applications and selling techniques. The cruise lines ships and their selling destinations are identified, as well as their individual and group booking procedures.

**THRT 220  3.0 units**

**Travel and Tourism Workshop**
3.0 hours lecture  
Grading: letter grade
Courses of Instruction

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
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
This course is a basic introduction to travel industry accounting, focusing on the steps in the accounting cycle. The course emphasizes the understanding of 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
This course provides a basic understanding of airline fares, ticketing, the issuance of air tickets and other accountable documents. Actual case studies in the Travel Industry will be used.

**THRT 234 3.0 units**
Tour Management & Escorting
3.0 hours lecture
Grading: letter grade
This course introduces the roles and expectations of a tour manager and escort. The student will 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 also 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.
Courses of Instruction

THRT 273AD  
Work Experience-Travel Industry  
4.0 units  
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 one work experience directly related to the student’s 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  
Elementary Vietnamese  
5.0 units  
5.0 hours lecture, 1.0 hour laboratory  
Incorporating theories of language acquisition and principles of whole language learning, this course provides an introduction to the Vietnamese language, emphasizing listening, comprehension, conversation, reading and writing skills to develop control of the basic sounds, forms and structure of Vietnamese. Topics for conversation are everyday life situations and issues in the Vietnamese world including a comparison and contrast with other cultures. It is not recommended for native speakers of Vietnamese.  
Grading: letter grade or credit/no credit  
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

VIET 1A  
Elementary Vietnamese  
3.0 units  
3.0 hours lecture  
The course is the first half of VIET 1. Incorporating theories of language acquisition and principles of whole language learning, this course provides an introduction to the Vietnamese language, emphasizing listening, comprehension, conversation, reading and writing skills to develop control of the basic sounds, forms and structure of Vietnamese. Topics for conversation are everyday life situations and issues in the Vietnamese world including a comparison and contrast with other cultures. This course, in combination with VIET 1B, is equivalent to VIET 1. It is not recommended for native speakers.  
Grading: letter grade or credit/no credit  
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

VIET 1B  
2.0 units  
2.0 hours lecture, 1.0 hour laboratory  
Prerequisite: VIET 1A  
The course is the second half of VIET 1. Incorporating theories of language acquisition and principles of whole language learning, this course provides an introduction to the Vietnamese language, emphasizing listening, comprehension, conversation, reading and writing skills to develop control of the basic sounds, forms and structure of Vietnamese. Topics for conversation are everyday life situations and issues in the Vietnamese world including a comparison and contrast with other cultures. This course, in combination with VIET 1A, is equivalent to VIET 1. It is not recommended for native speakers.  
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

WELDING (WELD)

WELD 50  
Welding for Technicians  
3.0 units  
2.0 hours lecture, 4.0 hours laboratory  
Grading: letter grade or credit/no credit  
This course is designed to give the student an overview of beginning arc, gas, and gas tungsten arc welding processes. It is also designed for students who wish to advance their knowledge and skills in welding. Topics include: safety practices, welding machines, and basic metal identification. It also covers correct equipment set up, safety practices and general related information. Good health, manual dexterity and corrected or uncorrected 20/20 vision are necessary to be employable in the welding industry.  
Transfer Status: Transferable to CSU, see counselor for limitations.

WELD 211  
Fundamentals of Welding & Tools of Trade  
9.0 units  
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.  
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

WELD 212  
ARC Welding & Fabrication  
9.0 units  
5.0 hours lecture, 13.3 hours laboratory  
Grading: letter grade or credit/no credit  
This is an introductory course to arc welding fundamentals. Topics include: 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 V-groove butt welds. It also covers correct equipment setup, safety practices and general related information. Good health, manual dexterity and corrected or uncorrected 20/20 vision are necessary to be employable in the welding industry.  
Transfer Status: Transferable to UC/CSU, see counselor for limitations.

WELD 213  
Advanced ARC Welding  
9.0 units  
5.0 hours lecture, 13.3 hours laboratory  
Grading: letter grade or credit/no credit  
This is an advanced course to arc welding fundamentals. This class 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. It also includes correct equipment setup, safety practices, general related information, code specifications, blueprint reading, inspection procedures, and basic welding metallurgy. Good health, manual dexterity and corrected or uncorrected 20/20 vision are necessary to be employable in the welding industry.
### Courses of Instruction

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 214</td>
<td>9.0</td>
<td>Inert Gas Welding (Heliarc, MIG)</td>
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<tr>
<td></td>
<td></td>
<td>5.0 hours lecture, 13.3 hours laboratory</td>
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<td></td>
<td></td>
<td>Grading: letter grade or credit/no credit</td>
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<tr>
<td></td>
<td></td>
<td>This course teaches inert gas welding skills, including GTA (TIG-heliarc) welding of carbon steel, stainless steel, aluminum, and GMAW (MIG) of steel and aluminum and shielded welding. The student will learn the skills necessary for a career as an aerospace industry worker. This class also covers correct equipment setup, safety practices and general related information. Good health, manual dexterity and corrected or uncorrected 20/20 vision is necessary to be employable in the welding industry.</td>
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<tr>
<td>WELD 220</td>
<td>6.0</td>
<td>Structural Arc Welding</td>
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<td></td>
<td></td>
<td>3.0 hours lecture, 9.0 hours laboratory</td>
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<td></td>
<td></td>
<td>Grading: letter grade or credit/no credit</td>
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<tr>
<td></td>
<td></td>
<td>This course is designed to give the student an introduction into structural steel and /or sheet metal welding. It is also designed for students who wish to advance their skills in welding and the use of the AWS D1.1 code book. Topics include: safety practices, welding machines, and basic metal identification. It also covers correct equipment set up and general related information. Good health, manual dexterity and corrected or uncorrected 20/20 vision are necessary to be employable in the welding industry.</td>
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<tr>
<td>WELD 221</td>
<td>4.0</td>
<td>Arc Welding Structural Certification</td>
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<td></td>
<td></td>
<td>2.0 hours lecture, 6.0 hours laboratory</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>This course is designed to prepare students to take the Los Angeles City Certification test in structural steel and /or sheet metal welding. It is also designed for students who wish to advance their knowledge and skills in welding. The course includes safety, electrode identification, welding code applications and basic welding metallurgy, and basic pipe welding techniques.</td>
</tr>
<tr>
<td>WELD 230</td>
<td>4.0</td>
<td>Fundamentals of Inert Gas Weld (Heliarc)</td>
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<td></td>
<td></td>
<td>2.0 hours lecture, 6.0 hours laboratory</td>
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<td></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>This course is designed for those students who are seeking welding skills in the inert gas welding process (G.T.A.W., G.M.A.W.) on aluminum. It is also designed for students who wish to advance their knowledge and skills in aluminum welding. Topics include: safety practices, welding machines, and basic metal identification. It also covers correct equipment set up, and general related information.</td>
</tr>
<tr>
<td>WELD 271AD</td>
<td>2.0</td>
<td>Work Experience-Welding</td>
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<td></td>
<td></td>
<td>1.0 hour lecture, 4.1 hours laboratory</td>
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<td></td>
<td>Corequisite: Enrollment in at least seven units including this course.</td>
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<td>Grading: letter grade or credit/no credit</td>
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<tr>
<td></td>
<td></td>
<td>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.</td>
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<tr>
<td>WELD 272AD</td>
<td>3.0</td>
<td>Work Experience-Welding</td>
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<td></td>
<td></td>
<td>1.0 hour lecture, 8.3 hours laboratory</td>
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<tr>
<td></td>
<td></td>
<td>Corequisite: Enrollment in at least seven units including this course.</td>
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<td></td>
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<td>Grading: letter grade or credit/no credit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>WELD 273AD</td>
<td>4.0</td>
<td>Work Experience-Welding</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.0 hour lecture, 12.5 hours laboratory</td>
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<td></td>
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<td>Corequisite: Enrollment in at least seven units including this course.</td>
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<td>Grading: letter grade or credit/no credit</td>
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<tr>
<td></td>
<td></td>
<td>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.</td>
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<tr>
<td>WELD 400AD</td>
<td>2.0</td>
<td>Welding (General)</td>
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<td>1.0 hour lecture, 3.0 hours laboratory</td>
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<td>Grading: letter grade or credit/no credit</td>
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<td>This course teaches the basic oxygen acetylene, inert gas including GTA (TIG-heliarc), and arc welding processes. The student will learn welding of carbon steel, stainless steel, aluminum, and GMAW (MIG) of steel and aluminum. This class’ instruction also covers correct equipment setup, safety practices and general related information.</td>
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<tr>
<td>WELD 410AD</td>
<td>2.0</td>
<td>Welding (ARC)</td>
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<td>6.0 hours laboratory</td>
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<td>Grading: letter grade or credit/no credit</td>
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<td>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.</td>
</tr>
<tr>
<td>WELD 411AD</td>
<td>1.0</td>
<td>Welding (ARC)</td>
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<td></td>
<td>3.0 hours laboratory</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>Practice arc welding procedures on various types of metal and learn safety practices.</td>
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<tr>
<td>WELD 412AD</td>
<td>3.0</td>
<td>Shielded Metal Arc Welding (ARC)</td>
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<td></td>
<td></td>
<td>9.0 hours laboratory</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>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.</td>
</tr>
<tr>
<td>WELD 413AD</td>
<td>2.0</td>
<td>SMAW Flat/Horiz Groove Welds with Backing</td>
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<td>6.0 hours laboratory</td>
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<td></td>
<td></td>
<td>Grading: letter grade or credit/no credit</td>
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<tr>
<td></td>
<td></td>
<td>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.</td>
</tr>
</tbody>
</table>
Courses of Instruction

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 & O/H 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 416AD 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 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, and cutting. It also covers correct equipment setup and safety practices. Practice arc welding procedures on various types of metal and learn safety practices.

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
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
This course teaches inert gas welding skills, including GTAW (TIG-heliarc) welding of carbon steel, stainless steel, aluminum, and GMAW (MIG) of steel, aluminum and intershield welding (FCAW). The student can learn the skills necessary for a career as an aerospace industry worker. Course instruction also covers correct equipment setup and safety practices.

WELD 481AD 1.0 unit
Gas Tungsten Arc Welding Basic Joints
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 482DA 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 Arc 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/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/open exit program, and it requires the completion of 108 lab hours.

WELD 601 0.0 unit
Basic Vocational Education
1.0 hour laboratory
Grading: LBCC Non-Graded Course
This course offers the student 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. Also a student can use this course to practice for a practical performance test.
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Trustee Area 5
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Trustee Area 3
Douglas Otto.................................. Member
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Roberto Uranga.............................. Member
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Aravinda Tanskul.......................... Student Trustee
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Amit Schitai........... Director of Distance Learning & Instructional Technology
Gail Schwandner............... Director, Community Education & Operations
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Sheneui Sloan.................... Director, Technology Education
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Leticia Suarez............... Dean, Learning Resources, Teaching & Technologies

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Michael V. Tuitasi.................... Dean, Counseling
Student Development & Student Support Services
John Tortarolo............... Director, Human Resources
Linda Umbdenstock........... Administrative Dean, Planning & Development
Mario M. Valente............... Executive Director, Academic Computing & Information Technology
Bobbi Villalobos ............. Dean, School of Language Arts
Felton C. Williams........... Dean, School of Business & Social Sciences
George B. Wright................ Deputy Director, Buildings & Grounds

DEPARTMENT HEADS

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Business Administration............ Frank Iazetta
Computer & Business Info. Sys........ Gerry Jenkins
Computer Applications & Office Tech...... Neil Gailey
History & Political Science........ Wendy Hornsby
Hospitality & Tourism............... Roman Bertein
Public Services...................... Grant Boyer
Social Science...................... Ray Sumner

School of Creative Arts & Applied Sciences
Art/Photography........................ Rodney Tsukashima
Child & Adult Development........ Francine Ragland
Family & Consumer Studies......... Linda Huy
Music & Radio/Television........... Priscilla Remeta
Speech Communications............... Betty Martin
Theatre, Dance & Film............... David Herman

School of Health, Science, & Mathematics
Allied Health........................ James Steele
Life Sciences.......................... Carol Welsh
Mathematics & Engineering......... Kris Mudunuri
Physical Science...................... Joseph Danner
Registered Nursing............... Brenda Harrell
Vocational Nursing................... Mary Cavalier

School of Language Arts
English.............................. David Morse
English as a Second Language...... Baruch Elimelech
Foreign Languages................ Jose R. Nunez

Learning Resources, Teaching & Technologies
Basic Adult Education............... Carolyn Williamson
Centers for Learning Assist. Srvs. Lee Douglas
Library Services.................. Nenita Buenaventura

School of Physical Education & Athletics
Physical Education................ Wilbert Shaw

School of Trades and Industrial Technologies
AC R/ Mechanical.................. Dennis DiGiovanni
Auto Mechanics/Diesel.......... Don Sullivan
Aviation Department............. Daniel Perkins
Construction & Related Trades........ Javier Rivera
Drafting/Architecture............... Adrian Erb
Electricity.......................... J. Scott Fraser
Manufacturing Technologies........ Winford Sartin

Student Services
Counseling, LAC................... Javier Villasenor
Counseling, PCC.................. Lorraine Blouin
AKHAVAN, MEHRZAD
Associate Professor, Biology
B.S., M.A., California State University, Fresno

ALEMAN, MARY G.
Counselor
A.A., Long Beach City College
B.A., M.S., California State University, Los Angeles

ALEXANDER, PATRICIA L.
Professor, Psychology
B.S., M.A., California State University, Long Beach
Ph.D., University of Southern California

ALGER, RHONDA L.
Instructor, Vocational Nursing
BSN, M.S., California State University Dominguez Hills

ALLEN, MARIANNE
Counselor, Financial Aid
B.S., National University, La Jolla
M.A., Loyola Marymount University

ALLEN, NANCY R.
Instructor, Recording Engineer
B.S., Temple University, Philadelphia

AMELOTTE, DIANE M.
Instructor, Reading
B.A., M.Ed., Loyola Marymount University

ANAND, BHAGIRATHI
Instructor, Mathematics & Engineering
B.S., M.S., University of Madras, India

ANDERSON, GARY V.
Instructor, Physical Education
B.S., California State Polytechnic University
M.A., Azusa Pacific University

ANDERSON, KIMBERLY B.
Professor, Center for Learning Assistance Services
A.S., Long Beach City College
B.A., California State University, Long Beach
M.Ed., Azusa Pacific University

ANDUJO, ALICIA
Assistant Professor, Counseling
B.A., Mount St. Mary’s College
M.S., California State University, Long Beach

ARAEIPOUR, MOHAMMAD
Instructor, Mathematics
B.S., M.S., California State University, Long Beach
M.S., California State University, Long Beach

ARIAEIPOUR, MOHAMMAD
Instructor, Mathematics
B.S., M.S., California State University, Long Beach
M.S., California State University, Long Beach

ARIAS, PHYLLIS O.
Associate Professor, Learning & Academic Resources
B.A., University of California, Santa Barbara
M.A.Ed., Claremont Graduate School

ARNAUD, MARICELA
Associate Professor, Registered Nursing
B.S.N., California State University, Long Beach
M.S.N., California State University, Dominguez Hills

ARSLAN, RUSSELL C.
Assistant Professor, Social Science
B.A., San Jose State University
M.A., California State University, Los Angeles

AVILA, MICHAEL A.
Professor, Manufacturing Technologies
A.S., Los Angeles Valley College
Credential Vocational Education, Life
B.V.E., California State University, Long Beach

BARCLAY, KIM T.
Librarian, Bibliographic Instruction
B.A., University of Paris IV, Sorbonne
M.L.S., California State University, San Jose

BATSTONE, DON M.
Counselor
B.A., Wheaton College, Illinois
M.A., Marquette University, Wisconsin
Ph.D., University of Southern California

BAXTER, VIRGINIA L.
Scholarship Coordinator/Director, LBCC Foundation
Professor, History
B.A., M.A., Occidental College
Ed.D., University of LaVerne

BEAS, SOFIA F.
Academic Counselor
B.S., University of Southern California
M.A., Point Loma Nazarene College, San Diego

BEEBE, FRED J.
Associate Professor, Economics
B.A., M.A., California State University, Los Angeles

BEELER, ANYA KRISTIN
Instructor, Art
B.A., Berea College
M.F.A., University of Arizona

BEITLER, DEBRA A.
Instructor, Registered Nursing
B.A., MSN, California State University, Dominguez Hills

BELL, LINDA B.
Instructor, Mathematics
A.A., Cypress College
B.A., University of California, Irvine
B.A., M.A., California State University, Fullerton

BERTEIN, ROMAIN
Tourism Department Head
Professor, Culinary Arts
A.S., Long Beach City College
B.S., California State University, Long Beach

BESIKOF, RUDOLPH J.
Instructor, English as a Second Language
B.A., M.A., University of Colorado

BLORE, JOANNE T.
Instructor, Reading Instruction
B.A., California State University, Long Beach
M.A., California State University, Fullerton
BLOUIN, LORRAINE L.
Counseling/Student Support Department Head (PCC)
Staff Development Coordinator
A.A., Cerritos College
B.A., California State University, Long Beach
M.A., California State University, Dominguez Hills

BORTIS, TERENTIE
Instructor, Mathematics
B.S., University of Timisoara, Romania
M.B.A., University of Arizona
M.S., California State Polytechnic University, Pomona

BOUWENS, DEBRA A.
Instructor, Child and Adult Development
A.A., Long Beach City College
B.A., California State University, Fullerton
M.A., California State University, Long Beach

BOYER, GRANT G.
Public Services Department Head
Professor, Administration of Justice
A.A., Long Beach City College
B.S., M.S., California State University, Long Beach

BRASHEAR, WAYNE L.
Instructor, Music
B.A., University of California, Los Angeles
M.A., California State University, Long Beach

BRÁZDA, WILLIAM E.
Professor, English as a Second Language
B.A., Dartmouth College
M.A., University of Utah
M.A., California State University, Long Beach
D.A., Centre for Communications Studies, London
Certified T.E.S.L., University of California, Los Angeles

BREECE, LAUREL H.
Instructor, Anthropology
B.A., California State Polytechnic University, Pomona
M.A., Ph.D., University of California, Los Angeles

BRINKMAN, CAROLYN R.
Professor, English
B.A., Wheaton College
M.A., California State University, Long Beach
Ph.D., University of Southern California

BRINTON, STANLEY W.
Professor, Mathematics
A.A., Sacramento City College
B.A., M.A., California State University, Sacramento

BRITTON, DOUGLAS
Instructor, Physical Science
B.S., M.S., Loma Linda University
Ph.D., University of Wyoming

BROOK, DAFNA
Counselor
B.A., University of California, Los Angeles
M.A., Ph.D., California School of Professional Psychology

BRUECKNER, SCOTT H.
Instructor, Learning/Study Skills
B.A., California State University, Long Beach

BUCHO, PATRICIA A.
Instructor, Medical Assisting
A.S., Long Beach City College

BUELNA, ADOLFO
Instructor, English as a Second Language
B.A., California State University, Long Beach
M.A., University of Southern California

BUENAVENTURA, NENITA
Library Department Head
Access Services Librarian
B.A., M.A., National Teachers College, Manila
M.A., University of the Philippines, Quezon City
M.A., San Jose State University

BURTON, E. RAY
Coordinator, Radio/Television
Professor, Speech Comm/Telecommunications
A.A., Long Beach City College
B.A., M.A., California State University, Long Beach

BUTLER, THERESE J.
Professor, Computer Applications & Office Tech
B.S., California State University, Long Beach
M.Ed., Azusa Pacific University

BYNUM, LOU ANNE
Vice President, Economic & Resource Development
B.A., California State University, Long Beach
M.A., University of California, Los Angeles

BYRD, ARTHUR R.
Vice President, Student Support, Planning & Research
B.A., M.A., Ph.D., University of Washington, Seattle

CABALLERO, STEPHEN S.
Instructor, Culinary Arts/Pastry Chef
A.S., East Los Angeles College

CAHILL, FRANCES E.
Professor, English as a Second Language
B.A., Immaculate Heart College, Los Angeles
M.A., California State University, Long Beach
M.A., C.Phil, University of California, Los Angeles
Certified T.E.S.L.

CAHILL, WILLIAM F.
Professor, English as a Second Language
B.A., M.A., San Jose State University
Ph.D., University of California, Los Angeles
Certified T.E.S.L.

CANO, ANITA C.
Professor, Spanish
B.A., Occidental College
M.A., University of California, Los Angeles

CANGNANO, KIRK G.
Instructor, Accounting
B.S., California State Polytechnic University, Pomona
CARBONARO, EUGENE
Professor, Computer Applications & Office Tech
A.A., Long Beach City College
B.S., M.A., California State University, Los Angeles

CARLSON, DALE W.
Instructor, Diesel Technology
A.S., Long Beach City College

CARREIRO, ANTHONY D.
Instructor, Acting/Theater Director
B.A., Cornell University
M.F.A., University of Washington, Seattle

CARROLL, RICHARD D.
Assistant Professor, Speech
A.A., Long Beach City College
B.A., M.A., California State University, Long Beach

CARTER, JAMES CHRISTOPHER
Instructor, Cultural Geography
Study Abroad Program Coordinator
B.A., University of California, Berkeley
M.A., San Diego State University
Ph.D., University of California, Santa Barbara

CAVALIER, MARY L.
Vocational Nursing Department Head
Professor, Vocational Nursing
R.N., Berea College School of Nursing, KY
B.S.N., California State University, Long Beach
M.S.N., University of California, Los Angeles

CHAFFEE, BRUCE W.
Instructor, Mathematics
B.S., Stanford University
M.A., University of California, San Diego

CHANG, SHENG-TAI
Professor, English
B.A., East China Normal University, Shanghai
M.A., University of Calgary, Canada
M.A., Ph.D., University of Southern California

COBB, MELVIN J.
Instructor, Computer Proficiencies for Academic Success
B.A., California State University, Long Beach
M.A., California State University, Dominguez Hills

CROOK, CASEY E.
Instructor, Physical Education
B.S., Briar Cliff College, Sioux City, Iowa
M.A., California State University, Long Beach

CULLY, SUSAN
Instructor, Computer Applications & Office Tech
B.S., California State University, Dominguez Hills
M.A., California State University, Long Beach

DANIEL, MICHEL
Associate Professor, Fine Arts
B.A., M.A., California State University, Long Beach
M.F.A., Claremont Graduate School of Fine Art

DANIELS, KARYN D.
Assistant Professor, Sociology
B.A., University of California, Los Angeles
M.A., Yale University

DANIELS, MERIDE
g Associate Professor, Life Science
B.A., M.A., California State University, Long Beach

DANNER, JOSEPH C.
Physical Science Department Head
Professor, Chemistry/Physics
B.S., Lehigh University
M.A., Ph.D., Brandeis University

DE LA OSSA, RALPH K.
Instructor, Fire Science
A.S., Crafton Hills College, Yucaipa
B.S., M.S., California State University, Long Beach

DEL GAUDIO, JULIAN J.
Professor, History
B.A., M.A., California State University, Northridge
Ph.D., University of California, Irvine

DICKERSON, CANDACE A.
Instructor, Reading Instruction
B.A., M.A., California State University, Fullerton

DI GIOVANNI, DENNIS
Air Conditioning/Mechanical Department Head
Professor, Air Conditioning & Refrigeration
A.S., Long Beach City College
B.A., Union Institute & University

DI COSTANZO, RONALD C.
Professor, English
Honors Program Coordinator
B.A., Florida Atlantic University, Boca Raton
M.A., University of New Hampshire, Durham
Ph.D., State University of New York at Binghamton

DOUGLAS, DONALD K.
Associate Professor, Political Science
B.A., California State University, Fresno
M.A., Ph.D., University of California, Santa Barbara

DOUGLAS, O. LEE, JR.
Center for Learning Assistant Svcs Department Head
Instructor, Learning/Study Skills
B.A., Pepperdine University
M.A., California State University, Dominguez Hills

DOWNEY, JOHN C.
Instructor, Biology
B.S., California State Polytechnic University, San Luis Obispo
M.A., California State University, Fullerton

DU BOIS, TONI M.
Director, Financial Aid
B.A., M.S., California State University, Long Beach

DUROSS, DELIA A.
Assistant Professor, Reading
B.A., M.A., Loyola Marymount University

DUSTMAN, THOMAS E.
Professor, Music
B.A., M.A., Bowling Green State University

EDLUND, JULIANA
Instructor, Interior Design
B.A., California State University, Sacramento
ELIMELECH, BARUCH
English as a Second Language Department Head
Professor, English as a Second Language
B.A., M.A., Ph.D., University of California, Los Angeles

ENEYW, TILAHUN
Professor, Physics
B.S., Haile Selassie University, Addis Ababa
M.A., Western Michigan University, Kalamazoo
Ph.D., Purdue University

ENSTINE, CHRISTINE L.
Instructor, Registered Nursing
B.S.N., California State University, Dominguez Hills
M.S.N., University of Pennsylvania, Philadelphia

EPLEY, JEFFREY A.
Instructor, English, Reading
B.A., M.F.A., California State University, Long Beach

ERB, ADRIAN E.
Architecture/Drafting Department Head
Instructor, Architecture
A.A., Golden West College
B.S., Rhode Island College, Providence

FABISH, JORDAN I.
Instructor, Reading
A.A., Long Beach City College
B.A., California State University, Long Beach
M.S., California State University, Fullerton

FAULKNER WALIA, KAREN P.
Associate Professor, International Business/Marketing
B.A., Trinity University, San Antonio, Texas
MBA, Arizona State University, Tempe
M.I.M., American Graduate School of International Management, Glendale, Arizona

FELLMAN, LEONARD
Professor, Electronics
B.S., California State University, Long Beach
Registered Professional Engineer, State of California

FISHER, PAULA V.
Instructor, Child and Adult Development
B.S., Southern Illinois University, Carbondale
M.S., Northern Illinois University, DeKalb

FLORENCE, GREGG S.
Professor, Speech Communication
A.A., Bakersfield College
B.A., M.A., California State University, Long Beach

FLORENCE, JERI L.
Professor, Counseling
A.A., Long Beach City College
B.A., California State University, Long Beach
M.S., University of LaVerne

FRATTALONE, DAVID G.
Professor, Horticulture
B.S., California State University, Long Beach

FREEMAN, ERAINIA L.
Counselor
B.A., California State University, Long Beach
M.A., Pepperdine University

FREITAS, CLAUDIA A.
Assistant Professor, Life Science
B.S., M.S., California Polytechnic State University, San Luis Obispo

FURMULY, ROYA
Instructor, Mathematics
B.S., M.A., University of California, Los Angeles

FYLPAA, JOHN R.
Dean, School of Physical Education & Athletics
A.A., Long Beach City College
B.S., M.S., California State University, Long Beach
Ed.D., University of LaVerne

GAILEY, W. NEIL
Computer Apps & Office Tech Department Head
Instructor, Computer Applications & Office Tech
B.S., University of Utah, Salt Lake City
M.S., Utah State University, Logan

GALICIA, BLANCA L.
Counselor
A.A., Los Angeles Harbor College
B.A., MA, California State University, Dominguez Hills

GARGANO, ANTHONY C.
Associate Professor, English Composition
A.A., Hudson Valley Community College
B.A., M.A., California State University, Long Beach

GASPAR, FRANK X.
Professor, English
A.A., Long Beach City College
B.A., California State University, Long Beach
M.F.A., University of California, Irvine

GAUDIOT, TERESA D.
Assistant Professor, English as a Second Language
B.A., M.A., California State University, Long Beach

GICUHI, DARLENE
Counselor
B.S., Southern Illinois University
M.S., California State University, Fullerton

GLICK, NICOLE E.
Associate Professor, English Composition
B.A., University of California, Riverside
M.A., California Polytechnic University, San Luis Obispo
Ph.D, University of California, Riverside

GODDARD, LISA A.
Instructor, English composition
B.A., Northern Arizona University
M.A., California Polytechnic University, San Luis Obispo
GOODSON, VICKIE D.
Professor, Diagnostic Medical Imaging Sciences
A.S., Long Beach City College
B.V.E., California State University, Long Beach
M.A., Pepperdine University
Ph.D., California Coast University

GORDON, LYNDA L.
Professor, Biology
B.S., M.A., California State University, Long Beach
D.A., Idaho State University, Pocatello

GOSS, EUGENE R.
Professor, Political Science
B.A., Linfield College
M.A., University of Southern California

GREENSTEIN, WENDY R.
Assistant Professor, English
B.A., Hunter College
M.A., Purdue University;

GRUBER, DONALD E.
Associate Professor, Theatre Arts
B.A., California State University, San Bernardino
M.F.A., California State University, Long Beach

GUILLEN, CHRISTINA M.
Instructor, English
B.A., Pennsylvania State University
M.A., University of Southern California

GUNTHER, DIANE
Instructor, English
B.A., M.A., California State University, Long Beach

GUSTAFSON, LARRY L.
Instructor, Welding
A.A., Cerritos College
A.S., Rio Hondo College

GUTIERREZ, CHARLES G.
Instructor, Music & Radio/Television
A.A., Long Beach City College

HABASH, SAMIRA H.
Instructor, Speech Communication
A.A., El Camino College
B.A., M.A., California State University, Long Beach

HAGEMAN, SHAUNA
Counselor
B.S., M.S., California State University, Fullerton

HALL, PHYLLIS C.
Counselor, Extended Opportunity Program & Service
Professor, Counseling
B.A., Whittier College
M.S., M.S., California State University, Fullerton
Ph.D., United States International University

HAMILTON, BRIAN E.
Director of Bands
B.A., M.M., University of California, Los Angeles

HANCOCK, NIGEL J.
Instructor, Environmental Scientist/Physical Geography
B.A., Ph.D., University of Oxford, England

HANSCH, DAN
Disabled Student Programs & Services Counselor
B.A., University of California, Santa Cruz
M.A., California State University, Northridge

HARRELL, BRENDA D.
Registered Nursing Department Head
Professor, Nursing
B.S.N., Tuskegee Institute
M.S.N., Catholic University of America
Ed.D., Nova University

HARRIS-FARACE, DONA J
Professor, Travel & Tourism
A.A., Coastline Community College
B.A., California State University, Long Beach

HARTFORD, KRISTIN M.
Instructor, Mathematics
B.S., Pennsylvania State University, University Park
M.S., Long Island University at CW Post, Brookville, New York

HATCH, KIM
Instructor, Physical Science
B.A., M.A., California State University, Long Beach

HAUCK, JOHN F.
Instructor, Electrical/Electronics
California Community College Instructor Credential for Life

HAUG, JOAN R.
Associate Professor, Computer Applications & Office Technology
B.B.A., University of Wisconsin, Eau Claire
M.B.A., Pepperdine University

HAYES, ANTHONY R.
Counselor, Extended Opportunity Program & Service
B.A., University of California, Los Angeles
M.S. California State University, Long Beach

HEEB, PATRICK W.
Instructor, Air Conditioning/Heating/Refrigeration
A.A., East Los Angeles College
B.A., California State University, Los Angeles

HENDRICKS, H. CRAIG
Professor, History & Political Science
B.A., California State University, Long Beach
M.A., Ph.D., State University of New York at Stony Brook

HERMAN, DAVID
Theatre, Dance & Film Department Head
Instructor, Acting, Theater Arts
Homerton College, Cambridge, England

HERSH, ROBERT
Instructor, Music & Radio/Television
B.A., Vanderbilt University

HERZEK, FARLEY E.
Dean, School of Trades & Industrial Technologies
B.S., City College of New York, New York
M.A., California State University, Long Beach
HILLMAN, KENNA
Counselor
A.A., Long Beach City College
B.F.A., California State University, Long Beach
M.S., University of La Verne

HINES, DAISY B.
Professor, Registered Nursing
A.A., Los Angeles City College
B.S., M.S., California State University, Los Angeles

HINTON, MARION F.
Librarian
B.A., M.Ed., M.L.S., Wayne State University, Michigan

HOLLENBERG, RACHEL A.
Assistant Professor, Philosophy
B.A., Rutgers University
M.A., Claremont Graduate University

HORNSBY, WENDY N.
History & Political Science Department Head
Assistant Professor, History
B.A., M.A., California State University, Long Beach

HOTRA, TIARE L.
Instructor, Reading Program
B.A., M.Ed., Loyola Marymount University

HUERTA, PHILLIP M.
Counselor
B.A., California State University, Fullerton
M.A., California State University, San Bernadino

HUGUIN, JOHN L.
Assistant Professor, Computer & Business Information Systems
B.S., University of California, Santa Barbara
M.B.A., Loyola Marymount University

HUND, JANET S.
Instructor, Sociology
B.A., Wichita State University
M.A., Arizona State University

HUY, LINDA A.
Family & Consumer Studies Department Head
Professor, Dietetics/Food & Nutrition
B.S., Western Illinois University
M.S., Southern Illinois University
R.D., American Dietetics Association
Ed.D., Nova University

IAZZETTA, FRANK D.
Business Administration Department Head
Professor, Business Administration
B.S., M.S., California State University, San Francisco
Ed.D., Nova University
C.P.A.

IBARRA, RIGOBERTO G.
Professor, Foreign Languages
B.A., M.A., University of California, Los Angeles

IKEI, E. COLIN
Instructor, Computer & Business Information Systems
B.A., Mt. Carmel College (St. Bonaventure University)
B.A., California State University, Los Angeles

INGRASSIA, MAURICIO A.
Coordinator/Instructor, Soccer
A.A., Long Beach City College
B.A., California State University, Fullerton
M.A., Azusa Pacific University

JACKSON, BARBARA A.
Women’s Basketball Coach
Instructor, Physical Education, Law
B.S., California State University, Long Beach
M.A., California State University, Dominguez Hills
J.D., Glendale University College of Law

JACKSON, CHARLOTTE A.
Instructor, Spanish/French
B.A., University of California, Santa Barbara
M.A., California State University, Sacramento

JACOBS, CHRISTINE S.
Professor, Child and Adult Development
A.A., Long Beach City College
B.A., California State University, Long Beach
M.A., United States International University

JACOBS, MICHAEL C.
Professor, Photography
A.S., Long Beach City College
B.A., M.A., California State University, Long Beach

JASO, JERRY R.
Instructor, Physical Education/Assistant Football Coach
B.A., University of California, Los Angeles
M.A., U.S. International University, San Diego

JENKINS, GERRY W.
Computer & Business Information Systems Dept Head
Instructor, Computer & Business Information Systems
B.S., Arizona State University, Tempe

JENNINGS, KATHRYN P.
Instructor, Reading
B.A., M.A., California State University, Long Beach

JENNINGS, RICHARD J.
Professor, English
B.A., University of Miami
M.A., Arizona State University
Ph.D., Ball State University

JOESTING, LINDA A.
Professor, Speech Communications
A.A., Long Beach City College
B.A., M.A., California State University, Long Beach
M.S., University of LaVerne

JOSEPH, CHARLOTTE W.
Professor, Political Science
B.A., University of Southern California
M.A., Georgetown University

JOSEPH, GREGORY A.
Professor, History
B.A., B.S., M.A., California State University, Fullerton
Ph.D., Claremont Graduate School

JUES, PIERRE B.
Instructor, Culinary Arts
A.S., Long Beach City College
KANE, KAREN A.
Instructor, Physical Education
B.A., San Diego State University
M.Ed., Boston College, Chestnut Hill, Massachusetts

KASKA, PATRICE A.
Professor, Basic Adult Education
B.A., University of Northern Colorado
B.A., California State University, Long Beach
M.A., California State University, Los Angeles

KAY, WILLA
Associate Professor, English as a Second Language
B.A., MA., California State University, Long Beach
T.E.S.L. Certificate, University of California, Los Angeles

KEAST, BETTY J.
Professor, Computer & Office Technologies
B.S., California State University, Long Beach
M.A., California State University, Los Angeles

KEHOE, E. JAN
Superintendent-President
B.A., Southwestern University
M.S., Wichita State University
Ph.D., University of Texas, Austin

KILLIAN, THOMAS J.
Professor, Mathematics & Engineering
B.S., M.S., University of Illinois
J.D., Western State University

KIM, JONG H.
Instructor, Mathematics & Engineering
B.S., M.A., University of Southern California
M.A., University of California, Los Angeles

KING, LINDA
Professor, Art
M.A., California State University, Humboldt
M.F.A., University of Iowa, Iowa City, Iowa

KING, SHEREE L.
Associate Professor, Dance
B.A., California State University, Fullerton
M.A., University of California, Los Angeles

KING, STEVEN R.
Professor, Aero-Pilot Training
B.A., California State University, Fresno
Diploma, Moody Bible Institute

KNAPP, PETER J.
Assistant Professor, Music Theory/Music History
A.A., College of Dupage
B.M., Elmhurst College, Elmhurst, Illinois
M.M., M.A., Ph.D., Ohio State University, Columbus

KNIGHTS, PAMELA D.
Instructor, Fashion
B.S., University of Cincinnati

KOLASA, MARY JEAN
Professor, English as a Second Language
B.S., State University College at Buffalo
M.S., State University of New York at Buffalo
M.A., California State University, Long Beach

LAMM, FREDERICK R.
Instructor, Auto Mechanics-Diesel
A.S., Los Angeles Trade Technical College
B.A., M.A., California State University, Long Beach
Ed.D., Nova University

LANG, CHARLINE G.
Coordinator, Child Development Center
A.A., Long Beach City College
B.A., California State University, Long Beach
M.A., California State University, Dominguez Hills

LAWRENCE, MATTHEW C.
Associate Professor, Philosophy
B.A., University of California, Santa Cruz
M.A., Ph.D., University of California, Irvine

LEDUFF, DONNA E.
Assistant Professor, Counseling
A.A., Los Angeles Harbor College
B.A., California State University, Dominguez Hills
M.S., California State University, Long Beach

LEHMAN, DAVID
Associate Professor, History
B.A., Eastern Mennonite College, Harrisonburg, VA
M.A., Ph.D., University of California, Los Angeles

LEHNT, JOHN K.
Professor, Mathematics
B.S., Kansas State Teachers’ College
M.S., Notre Dame

LIPTON, DAVID A.
Associate Professor, English
B.A., M.A., California State University, Northridge

LOUIE, JOHN K.
Instructor, Auto Collision & Repair
A.S., Delta College
License, ASE & I-CAR

LOVE, MAURICE L.
Instructor, Music
B.M., Central State University, Edmond, Oklahoma
M.M.U.S., University of Oklahoma, Norman

LYNCH, MIRIAM V.
Professor, Computer Applications & Office Tech
B.A., M.A., California State University, Los Angeles

Mac CALLUM, MICHAEL J.
EOP&S Counselor
Professor, Psychology
B.A., M.A., California State University, Long Beach

MacKAY, JANNIE L.
Matriculation Coordinator
Professor, Counseling
A.A., Long Beach City College
B.A., University of California, Berkeley
M.S., Ph.D., University of Southern California

MACY, CALVIN W.
Instructor, Automotive Technology
B.A., California State University, Long Beach

MADRIGAL, FRANCISCO
Assistant Professor, Culinary Arts
A.S., El Camino College
**MANSFIELD-JUAREZ, APRIL M.**
Professor, Child and Adult Development  
B.A., M.A., Pacific Oaks College, Pasadena  
Ph.D., Capella University

**MARTIN, BETTY J.**
Speech Communication Department Head  
Instructor, Speech Communication  
M.A., California State University, Long Beach

**MARTINEZ, BARBARA A.**
Director, EOP&S and CARE  
B.A., M.A., California State University, Northridge  
Ph.D., Arizona State University, Tempe

**MATSUI, MARK M.**
Coordinator, Disabled Students Programs/Services  
B.S., San Jose State University,  
M.S., California State University, Los Angeles

**MAXELL, ROBERT C.**
Instructor, Mathematics  
B.S., California State University, Dominguez Hills  
M.S., California State University, Long Beach

**Mc CALL, SHELLIE L.**
Women’s Softball Coach  
Instructor, Physical Education  
B.S., California Polytechnic University, Pomona  
M.A., Azusa Pacific University

**McKean, Patrick J.**
Newspaper Adviser  
Professor, Journalism  
A.A., Ventura Community College  
B.A., University of Southern California  
M.P.A., California State University, Long Beach

**McMullen, Myke**
Instructor, Marketing/Management  
B.S., Woodbury University, Los Angeles  
M.B.A., Pepperdine University

**Melucci, Nancy J.**
Associate Professor, Social Science  
A.B., Bryn Mawr College  
Ph.D., University of Pennsylvania

**Merry, Pauline E.**
Provost, Pacific Coast Campus  
B.S.N., University of Missouri-Columbia  
CREDENTIAL, Health Education, University of California, Los Angeles  
M.S., Ph.D., University of Southern California

**Mieras, Elvia F.**
Professor, Food & Nutrition  
B.S., M.S., M.S.R.D., California State University, LB

**Miller, Dennis O.**
Instructor, ESL Composition Specialist  
B.A., University of Texas, Arlington  
M.A., University of California, Los Angeles

**Miller, Lynne M.**
Dean, Career & Technical Education  
Professor, Family & Consumer Studies  
B.A., M.A., California State University, Long Beach  
J.D., Loyola Law School

**Miller, Marvin H.**
Instructor, Physical Education  
A.A., Long Beach City College  
B.A., California State University, Long Beach  
M.S., United States Sports Academy, Mobile, AL

**Mifaffah, Mehdi**
Instructor, Mathematics  
B.A., M.A., California Polytechnic University, Pomona  
M.A., California State University, Los Angeles

**Misajon, Carolyn F.**
Associated Women Students Advisor  
Associate Professor, Speech Communication  
A.A., Long Beach City College  
B.A., M.A., California State University, Long Beach

**Mitchell, Ann E.**
Assistant Professor, Photography/Art  
B.F.A., Art Center College of Design, Pasadena  
M.F.A., Claremont Graduate University

**MiYashiRO, ROss G.**
Dean, Admissions and Records  
B.A., M.A., California State University, San Bernardino

**MORcHe, DaviD W.**
English Department Head  
Professor, English  
B.A., University of Michigan, Ann Arbor  
M.A., University of Kansas, Lawrence  
M.A., Ph.D., University of Southern California

**Mudunuri, Bala K.**
Mathematics & Engineering Department Head  
Professor, Mathematics & Engineering  
M.S., Indian Institute of Science, India  
M.S., Oklahoma State University, Stillwater  
Ph.D., University of Texas, Arlington

**Murray, Allison G.**
Instructor, English Composition/Generalist  
B.A., M.A., California State University, Long Beach

**Musick, Jennifer L.**
Associate Professor, Health Education  
B.A., University of California, Santa Barbara  
M.P.H., University of California, Los Angeles

**Nasab, Michael A.**
Professor, Mathematics & Engineering  
B.S., California State University, Northridge  
B.A., California State University, Dominguez Hills  
M.S., Northrop University  
M.S., California State University, Los Angeles

**NavLan, Paul E. Jr.**
Professor, Ornamental Horticulture  
A.A., Fullerton College  
B.V.E., California State University, Long Beach

**Nelson, Barbara A.**
Instructor, Nursing Education  
A.A., R.N., Long Beach City College  
B.S., M.S., California State University, Los Angeles
NGO, RATANAMUNY
Instructor, Mathematics
B.S., Harvey Mudd College, Claremont
M.S., Claremont Graduate School

NGUYEN, SIMONE
Instructor, Mathematics
Diploma, Eberhard-Karls-University, Germany
M.A., California State University, Long Beach

NIELSON, PAULA I.
Librarian
B.A., Brigham Young University
M.L., University of Washington

NIGRO, DANIEL T.
Instructor, Biology
B.A., M.S., California State University, Fullerton

NOGLE, JAMES L.
Instructor, Accounting
B.S., California State University, Los Angeles
M.B.A., Azusa Pacific University
CPA, State of California

NOORIGIAN, JULIE A.
Instructor, Child and Adult Development
B.A., California State University, Long Beach
M.S., University of Oregon

NOVOTNY ADRIAN S.
Professor, Anthropology/Sociology
B.A., B.S., Youngstown State University
M.A., California State University, Long Beach
Ph.D., University of Oregon

NUNAG, ANN MARIE N.
Counselor
A.A., Golden West College
B.S., California State University, Fullerton
M.A., California State University, Dominguez Hills

NUÑEZ, JOSE R.
Foreign Language Department Head
Professor, Spanish
M.A., Universidad Autonoma, Madrid, Spain
Ph.D., University of California, Los Angeles
Licenciatura, Universidad Autónoma Madrid, Spain

OAKLEY, ELOY O.
Vice President, Administrative Services
B.A., M.B.A., University of California, Irvine

O'LEARY, ROARKE P.
Counselor/Academic Advisor for Athletes
B.A., University of California, Irvine
M.A., California State University, Fresno

ONG, WOOI CHIN J-SON
Instructor, English
M.A., California State University, Northridge

ORLOVSKI, STANISLAV
Instructor, Drawing and Painting
B.Ed., University of Toronto, Canada
BFA, York University, Toronto, Canada
MFA, University of Southern California

ORR, ELISABETH E.
Assistant Professor, History
B.A., Oberlin College, Ohio
M.A., Indiana University, Bloomington
Ph.D., Indiana University

OSHITA, CHRISTOPHER
Instructor, Aviation Maintenance
B.S., Embry-Riddle Aeronautical University, Prescott

OSTACH, JAMES S.
Professor, Speech
A.A., Long Beach City College
B.A., M.A., California State University, Long Beach

O'TOOLE, SANDRA N.
Instructor, Business Law
B.A., University of Michigan, Ann Arbor
J.D., University of Notre Dame

OUTHWAITE, FRANCES M.
Instructor, Registered Nursing
A.A., Long Beach City College
B.S., California State University, Fullerton
MSN, University of San Diego

PADILLA, YOLANDA C.
Instructor, Counseling
A.A., Pasadena City College
B.A., University of Southern California
M.A., Point Loma Nazarene College

PAGE, RUBEN D.
Counselor
B.A., University of California, Irvine
M.S., California State University, Long Beach

PAU NOVIC, MILA V.
Instructor, Vocational Nursing
A.A., Riverside Community College
BSN, Loma Linda University

PEARSON, VELVET D.
Instructor, English Composition
B.A., University of California, Santa Barbara
M.A., San Diego State University
Ph.D., University of Southern California

PELLEGRINI, LAURA A.
Instructor, Political Science
B.S., California State University, Long Beach
M.A., MPA, University of Southern California
PENA, MAXIMINO
  Instructor, Cabinet Making/Carpentry
  A.A., El Camino Community College
  B.S., California State University, Long Beach

PERKINS, DANIEL D.
  Aviation Department Department Head
  Instructor, Aviation Maintenance
  A.S., West Los Angeles College, Culver City
  B.S., Embry-Riddle Aeronautical University, Prescott

PERROT, MARY E.
  Instructor, Chemistry
  B.S., Massachusetts Institute of Technology
  Ph.D., University of Wisconsin, Madison

PETERS, DARLEEN A.
  Professor, Nursing
  B.S.N., M.S.N., California State University, Los Angeles

PETERSON, DEBRA E.
  Assistant Professor, Counseling
  A.A., Los Angeles Harbor College
  B.A., California State University, Long Beach
  M.A., California State University, Dominguez Hills

PIERCE, KRISTIN
  Instructor, Child and Adult Development
  B.A., M.A., California State University, Long Beach

POKORYN, GRACE K.
  Instructor, Health
  B.S., University of California, Los Angeles
  M.S.W., M.P.H., San Diego State University

POTO, CAROL C.
  Women’s Tennis Coach
  Associate Professor, Physical Education
  B.A., M.A., California State University, Long Beach
  Ph.D., Louisiana State University

POTTER, LAURIE E.
  Instructor, English as a Second Language
  B.A., Marymount Manhattan College
  M.A., California State University, Long Beach

POWELL, RENAE L.
  Professor, Computer & Business Information Systems
  B.S., California State University, Los Angeles
  M.A., California State University, Long Beach

PRINDE, DONNA L.
  Associate Professor, Physical Education
  B.A., M.A., California State University, Long Beach

PROCTOR-CASTILLO, CATHY
  Associate Professor, Child and Adult Development
  A.A., Rio Hondo College
  B.A., M.A., California State University, Los Angeles

QUINN-WEYANT, JANICE M.
  Professor, Theatre Arts, Film
  B.A., California State University, Long Beach
  M.A., University of Southern California

RADLOFF, SUSAN
  Instructor, Vocational Nursing
  A.A., B.A., University of Phoenix

RAFANELLO, DONNA
  Instructor, Child Dev & Parent Education
  B.S., Loyola University, Chicago
  M.Ed., National-Louis University, Wheeling

RAGLAND, FRANCINE L.
  Child Dev & Parent Education Department Head
  Professor, Child Dev & Parent Education
  A.A., East Los Angeles College
  B.A., California State University, Los Angeles
  M.A., California State University, Long Beach

RAMOS, IRMA
  Administrative Dean, Human Resources & Staff Diversity
  B.S., DeVry University, Pomona
  MBA, Keller Graduate School of Management, Pomona

REDMOND, NANCY H.
  Professor, Journalism/English
  B.A., University of Michigan
  M.A., University of California, Los Angeles
  M.A., California State University, Dominguez Hills

REISBIG, LARRY L.
  Men’s Athletic Director
  Coach/Instructor, Physical Education
  B.S., Washington State University
  M.Ed., Azusa Pacific University

REISBIG, MICHAEL R.
  Assistant Football Coach/Intramurals
  B.S., California Polytechnic University, Pomona
  M.A., Azusa Pacific University

REMETA, PRISCILLA C.
  Music, Radio & Television Department Head
  Professor, Music
  B.A., M.A., Occidental College

REYNOLDS, KATHERINE R.
  Counselor
  B.S.N., Boston College
  M.S.N., California State University, Los Angeles
  M.A., Ph.D., United States International University

RICHARDS MAUKE, GISSELLE T.
  Instructor, English as a Second Language
  B.A., University of Southern California
  M.A., California State University, Los Angeles

RIDENOUR, ANALISA
  Instructor, Speech Communication
  A.A., Cypress College
  B.A., M.A., California State University, Long Beach

RIPLEY, DAN A.
  Athletic Coach
  Instructor, Health Education
  A.A., Cypress College
  B.S., California State University, San Jose
  M.S., California State University, Fullerton
RITTMAN, SANDRA K.
Professor, Computer Applications & Office Tech
A.A., Cerritos College
B.A., California State University, San Francisco
M.A., California State University, Los Angeles
Ed.D., Nova University

RIVERA, JAVIER
Construction & Related Trades Department Head
Instructor, Carpentry
A.A., Santa Ana College

ROA, BRADLEY D.
Professor, Cabinetmaking
B.A., Humboldt State University

ROCK, ELLIOTT H.
Professor, Political Science
B.A., M.P.A., San Diego State University
Ph.D., University of Southern California

RODDEN, JENNIFER M.
Instructor, English
A.A., Modesto Junior College
B.A., University of California, Davis
M.A., California State University, Sacramento

RODRIQUEZ, TREVOR
Coordinator, School and College Relations
B.A., MPA, California State University, Long Beach

ROSE, KAREN L.
Assistant Professor, English
B.A., M.A., Ph.D., University of California, LA

ROSENBERG, LADERA.
Professor, Computer & Business Information Systems
B.A., Nazareth College
M.A., California State University, Long Beach

ROTHENBERG, LADERA.
Instructor, Mathematics
B.S., San Diego State University
M.S., California State University, Long Beach

ROSS, MELVIN L.
Instructor, History
B.S., M.A., Purdue University

RUDOLPH, JOAN E.
Professor, Computer & Business Information Systems
B.A., California State University, Long Beach

RUNNINGBEAR, SHANNON Q.
Instructor, English Composition
B.A., University of California, San Diego
M.A., California State University, Dominguez Hills

RYAN, JOHN K.
Instructor, Mathematics
B.S., M.S., California State University, Long Beach

SALMAS, OLYMPIA S.
Professor Computer Applications & Office Tech
A.A., El Camino College
B.S., California State University, Long Beach
M.B.A., Chapman College
M.A., California State University, Los Angeles

SANCHEZ, RODOLFO R.
Instructor, Auto Body
A.A., Cerritos College

SAPIEN, JANICE M.
Professor, English as a Second Language
B.S., Oklahoma Baptist University, Shawnee
M.A., TESL Certificate, California State University, Long Beach

SARTIN, WINFORD E.
Manufacturing Technologies Department Head
Instructor, Welding
A.S., Long Beach City College

SAUCEDO, ELSA
Instructor, Spanish
B.A., M.A., Ph.D., University of California, Irvine

SAVOIE, PAUL J.
Assistant Professor, Political Science
B.A., California State University, Northridge
M.A., University of California, Riverside

SCHAEFER, DEBRA A.
Instructor, Fashion Design/Merchandising
A.A., The Fashion Institute of Design & Merchandising
Thirteen years experience in Fashion/Textile industry

SCOTT, GARY T.
Dean, Creative Arts & Applied Sciences
Professor, Music
B.A., M.A., California State University, Los Angeles
Ed.D., University of California, Los Angeles

SEARS, BRENT A.
Instructor, Architecture
A.A., Long Beach City College
B.A., Southern California Institute of Architecture, Santa Monica

SEARS, CONSTANCE M.
Women’s Athletic Director
Associate Professor, Physical Education
B.A., M.A., California State University, Long Beach

SEITZ, COURTNEY E.
Professor, Astronomy
B.A., M.A., University of California, Los Angeles

SETHURAMAN, RAMCHANDRAN
Librarian
M.A., University of New Brunswick
M.S., University of Illinois, Urbana
Ph.D., University of Florida, Gainesville

SEXTON, SIGRID K.
Instructor, Registered Nursing
B.S.N., M.S.N., California State University, Long Beach

SHANNON, MARGARET F.
Professor, Writing & Reading
B.A., Pomona College
M.A., Ph.D., University of Chicago

SHAW, GEORGE W. JR.
Professor, Music
B.S., Alabama State University
M.A., Wayne State University
Ph.D., University of Oklahoma
<table>
<thead>
<tr>
<th>Name</th>
<th>Position/Department</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHAW, LYNN J.</td>
<td>Instructor, Electronics/Electricity</td>
<td>B.S., University of Minnesota, Minneapolis; M.A., California State University, Long Beach; Ph.D., Claremont Graduate University and San Diego State University</td>
</tr>
<tr>
<td>SHAW, WILBERT</td>
<td>Physical Education Department Head</td>
<td>B.A., Kansas State University; M.A., Pepperdine University</td>
</tr>
<tr>
<td>SHEAFFER, DE WAYNE T.</td>
<td>Associate Professor, Transfer Programs</td>
<td>B.S., California State University, Stanislaus; M.S., California State University, Los Angeles</td>
</tr>
<tr>
<td>SHIHABI, AZZAM M.</td>
<td>Instructor, Mathematics</td>
<td>B.S., Kuwait University; M.S., California State University, Long Beach; M.S., Ph.D., Claremont Graduate University</td>
</tr>
<tr>
<td>SHOLLE, DAVID F.</td>
<td>Professor, Physics</td>
<td>B.S., Case Western Reserve University; M.S., California Institute of Technology</td>
</tr>
<tr>
<td>SINGHAL, MEENA</td>
<td>Assistant Professor, English as a Second Language</td>
<td>B.A., B.Ed., University of Calgary, Canada; M.Ed., McGill University, Montreal, Canada; Ph.D., University of Arizona, Tucson</td>
</tr>
<tr>
<td>SLAUGHTER, GREGORY W.</td>
<td>Instructor, Public Services</td>
<td>B.A., MA, California State University, Dominguez Hills</td>
</tr>
<tr>
<td>SMITH, JOHN G.</td>
<td>Professor, Physical Education</td>
<td>A.A., Los Angeles Valley College; B.A., California State University, Northridge; M.S., University of Illinois, Champaign-Urbana; Ph.D., University of Southern California</td>
</tr>
<tr>
<td>SOLANO, JESUS</td>
<td>Coordinator, Upward Bound</td>
<td>B.A., M.S., University of Pennsylvania, Philadelphia</td>
</tr>
<tr>
<td>SPARKS, PETER</td>
<td>Associate Professor, Alternative Fuels</td>
<td>A.S., Long Beach City College; B.V.E., California State University, Long Beach</td>
</tr>
<tr>
<td>STAHL, CHERYL P.</td>
<td>Professor, Business</td>
<td>A.A., Pasadena City College; B.S., California State University, Long Beach; M.A., California State University, Los Angeles</td>
</tr>
<tr>
<td>STARROS, ANTHONY P.</td>
<td>Instructor, Reading</td>
<td>B.A., M.F.A., California State University, Long Beach</td>
</tr>
<tr>
<td>STEELE, JAMES F.</td>
<td>Allied Health Department Head</td>
<td>B.A., Long Beach City College; B.V.E., M.A., California State University, Long Beach</td>
</tr>
<tr>
<td>STEPAN, ELIZABETH J.</td>
<td>Financial Aid Counselor</td>
<td>B.A., M.Ed., Gonzaga University</td>
</tr>
<tr>
<td>STERRITT, COLEEN P.</td>
<td>Associate Professor, Art/Sculpture</td>
<td>B.F.A., University of Illinois, Champaign-Urbana; M.F.A., Otis Art Institute, Los Angeles</td>
</tr>
<tr>
<td>SUAREZ, LETICIA T.</td>
<td>Dean, Learning Resources, Teaching &amp; Technologies</td>
<td>B.A., M.A., Ph.D., New York University</td>
</tr>
<tr>
<td>SULLIVAN, DONALD B.</td>
<td>Auto Mechanics/Diesel Department Head</td>
<td>B.A., M.A., Ph.D., New York University</td>
</tr>
<tr>
<td>STEELE, JAMES F.</td>
<td>Allied Health Department Head</td>
<td>B.A., Long Beach City College; B.V.E., M.A., California State University, Long Beach</td>
</tr>
<tr>
<td>SUMNER, RAY</td>
<td>Social Science Department Head</td>
<td>B.A., Geography; Ph.D., University of Queensland, Australia; Dip.Tch, Kelvin Grove College, QUT, Australia</td>
</tr>
<tr>
<td>TALASTAS, EVACELIA M.</td>
<td>Professor, Nursing</td>
<td>B.S., St. Luke’s Hospital School of Nursing, Philippines; BSN, MAN, Philippine Women’s University, Manila</td>
</tr>
<tr>
<td>TAN, DANNY S.</td>
<td>Instructor, Automotive Technology</td>
<td>B.S., Columbia State University, Metairies, LA</td>
</tr>
<tr>
<td>THOMAS, MICHELLE L.</td>
<td>Instructor, Computer &amp; Business Information Systems</td>
<td>B.A., California State University, Fullerton; M.A., National University</td>
</tr>
<tr>
<td>THORSEN, JONATHAN A.</td>
<td>Instructor, Allied Health/Health Education</td>
<td>B.A., California State University, Fullerton</td>
</tr>
<tr>
<td>THRIFT, DAVID E.</td>
<td>Assistant Professor, English as a Second Language</td>
<td>B.A., San Francisco State University; M.A., California State University, Fullerton</td>
</tr>
<tr>
<td>TO, THANG Q.</td>
<td>Counselor</td>
<td>B.A., M.S., California State University, Long Beach</td>
</tr>
<tr>
<td>TOLIVER, PATRICIA A.</td>
<td>Professor, Child and Adult Development</td>
<td>B.A., California State University, Los Angeles; M.A., University of Southern California; Ed.D., Pepperdine University</td>
</tr>
<tr>
<td>TOMSON, JANICE H.</td>
<td>Associate Professor, Geology</td>
<td>B.S., University of Illinois, Urbana; M.S., San Jose State University</td>
</tr>
<tr>
<td>Name</td>
<td>Title/Department</td>
<td>Education</td>
</tr>
<tr>
<td>------</td>
<td>-------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| TRAPP, FREDERICK P. | Dean, Institutional Research/Academic Services | B.A., California Western University, San Diego  
M.A., The American University, Washington, D.C.  
M.R.C.P., University of Oklahoma  
M.P.A., Ph.D., University of Southern California |
| TSUKASHIMA, RODNEY B. | Art/Photography Department Head  
Associate Professor, Ceramics | A.A., Los Angeles City College  
B.A., M.A., California State University, Long Beach |
| TUITASI, MICHAEL V. | Dean, Student Support Services  
B.A., M.A., California State University, Long Beach | |
| TURNER, LYDIA | Counselor, Financial Aid  
B.A., California State University, Long Beach  
M.S., National University, Irvine | |
| TYLER, JOANNE E. | Coordinator, Health & Psychological Services  
B.A., University of the State of New York  
M.A., California State University, Dominguez Hills | |
| UKWU, DELE C. | B.A., University of Cincinnati, Cincinnati, Ohio  
M.S., Miami University, Oxford, Ohio  
M.L.S., University of California, Los Angeles | |
| UMBOENSTOCK, LINDA | Administrative Dean, Planning  
B.A., Alverno College, Milwaukee, Wisconsin  
Ph.D., Portland State University | |
| VALENTE, MARIO M. | Exec Director, Academic Computing & Info Tech  
B.A., University of California, Los Angeles  
M.S., California State University, Fullerton | |
| VAN SINDEN, DANNA E. | Instructor, Child and Adult Development  
B.A., M.A., California State University, Long Beach | |
| VASS, GABOR I. | Instructor, Automotive Technology  
M.A., Ministry of Advanced Education, Victoria,  
M.S., Pacific Western University, Los Angeles | |
| VERMA, SURENTRA M. | Professor, Accounting  
B.S., University of Southern California, Los Angeles  
M.A., Point Loma Nazarene University, Pasadena | |
| VILLAGNOR, FRANCISCO J. | Counseling/Student Support Department Head (LAC) | B.A., California State University, Long Beach  
M.B.A., Golden Gate University  
M.S., Carleton University, Ottawa, Canada  
C.P.A., C.F.P., College of Financial Planning, Denver |

**Full-Time Faculty**

**TRAPP, FREDERICK P.**  
Dean, Institutional Research/Academic Services  
B.A., California Western University, San Diego  
M.A., The American University, Washington, D.C.  
M.R.C.P., University of Oklahoma  
M.P.A., Ph.D., University of Southern California

**TSUJI, KENNETH**  
Instructor, Aviation Maintenance  
A.A., Los Angeles Community College

**TSUKASHIMA, RODNEY B.**  
Art/Photography Department Head  
Associate Professor, Ceramics  
A.A., Los Angeles City College  
B.A., M.A., California State University, Long Beach

**TUITASI, MICHAEL V.**  
Dean, Student Support Services  
B.A., M.A., California State University, Long Beach

**TURNER, LYDIA**  
Counselor, Financial Aid  
B.A., California State University, Long Beach  
M.S., National University, Irvine

**TYLER, JOANNE E.**  
Coordinator, Health & Psychological Services  
B.A., University of the State of New York  
M.A., California State University, Dominguez Hills

**UKWU, DELE C.**  
B.A., University of Cincinnati, Cincinnati, Ohio  
M.S., Miami University, Oxford, Ohio  
M.L.S., University of California, Los Angeles

**UMBENSTOCK, LINDA**  
Administrative Dean, Planning  
B.A., Alverno College, Milwaukee, Wisconsin  
Ph.D., Portland State University

**VALENTE, MARIO M.**  
Exec Director, Academic Computing & Info Tech  
B.A., University of California, Los Angeles  
M.S., California State University, Fullerton

**VASS, GABOR I.**  
Instructor, Automotive Technology  
M.A., Ministry of Advanced Education, Victoria,  
M.S., Pacific Western University, Los Angeles

**VERMA, SURENTRA M.**  
Professor, Accounting  
B.S., University of Southern California, Los Angeles  
M.B.A., Golden Gate University  
M.S., Carleton University, Ottawa, Canada  
C.P.A., C.F.P., College of Financial Planning, Denver

**VILLAGNOR, FRANCISCO J.**  
Counseling/Student Support Department Head (LAC)  
B.S., University of Southern California, Los Angeles  
M.A., Point Loma Nazarene University, Pasadena

**VUKOV, BORIS**  
Instructor, Psychology  
B.A., Texas Christian University  
M.A., San Diego State University

**WALLECH, JANET N.**  
Professor, Biological Science  
B.S., California State Polytechnic College, Pomona  
M.A., California State University, Fullerton

**WALLECH, STEVEN**  
Professor, History  
B.A., California State University, Northridge  
M.A., California State University, San Jose  
Ph.D., Claremont Graduate University

**WAN, JAMES X.**  
Professor, Mathematics  
B.S., Nanjing, China  
M.A., Ph.D., University of California, Santa Barbara

**WAN, LAURA L.**  
Instructor, Computer & Business Information Systems  
B.A., East China Normal University, Shanghai  
M.A., Michigan State University, East Lansing  
M.S., California State University, Fullerton

**WASSON, DONALD J.**  
Instructor, Human Services  
B.S., California Polytechnic, San Luis Obispo  
M.A., California State University, Los Angeles

**WEBER, RICHARD T.**  
Instructor, Mathematics  
B.A., California State University, Long Beach  
M.S., University of California, Irvine

**WELLS, PEGGYANN E.**  
Instructor, Registered Nursing  
B.S.N., New York Regents College, Albany  
M.N., University of Phoenix, Arizona

**WELSH, CAROL S.**  
Life Science Department Head  
Professor, Biological Science  
A.A., East Los Angeles College  
B.A., M.A., California State University, Long Beach  
Ed.D., Pepperdine University

**WHEELER, JEFFREY M.**  
Instructor, English, Reading  
B.A., Occidental College  
M.A., Ph.D., University of Southern California

**WHEELER, LAURA S.**  
Instructor, English  
B.A., University of Virginia, Charlottesville  
M.A., Ph.D., University of Southern California

**WHITE, LAWRENCE A.**  
Assistant Professor, Computer Art/Graphic Design  
B.F.A., California College of Arts and Crafts, Oakland  
M.A., California State University, Fullerton

**WHITE, MONICA C.**  
Librarian  
B.S., Georgetown University  
M.L.S., University of Southern California  
M.A., California State University, Long Beach
WIDER, RONALD P.
Associate Professor, Chemistry
B.S., Youngstown State University
Ph.D., University of Southern California

WILLIAMS, FELTON C.
Dean, School of Business & Social Science
A.A., Harbor College
B.A., M.B.A., California State University, Long Beach
Ph.D., Claremont Graduate School

WILLIAMSON, CAROLYN H.
Basic Adult Education Department Head
Assistant Professor, Basic Adult Education
B.A., Purdue University
M.S., California State University, Fullerton

WILSON, MICHAEL H.
Professor, Photography
A.A., A.S., Long Beach City College
B.V.E., California State University, Long Beach

WILSON-CASCARANO, MARGARET A.
Professor, Anatomy/Physiology
B.S., Iowa State University
Ph.D., University of California, Los Angeles

WISENBAKER, JUDITH L.
Professor, Vocational Nursing
B.S.N., D’Youville College, Buffalo, NY
M.A., Brookline College, NY
M.S.N., California State University, Dominguez Hills

WISEWELL, SUE ANN W.
Professor, Computer Applications & Office Tech
B.S., M.A., California State University, Long Beach
M.A., California State University, Los Angeles

WOLLANK, INGRID A.
Professor, Spanish/German
B.A., University of Heidelberg, West Germany
M.A., University of California, Irvine

WOOD, RONDA M.
Professor, Registered Nursing
B.S.N., California State University, Long Beach
M.N., University of California, Los Angeles
Ed.D., University of Southern California

WURTZ, PAUL L.
Instructor, Business Administration
B.S., M.A., Brigham Young University

ZEPEDA, MILDRED
Instructor, Electronics
A.A., Santa Ana College
B.A., B.A., M.A., M.A., California State University, Los Angeles

ZUCKERMAN, JOAN E.
Professor, Life Science
B.S., Ph.D., University of California, Davis

ZUGATES, MICHAEL
Instructor, Mathematics & Engineering
B.S., M.S., California State University, Long Beach
ABLES, DOROTHY E.  
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ADERINTO, ADEYOMBO K.  
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ADESINA CATHERINE M.  
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<td>GERDTS, NANETTE M.</td>
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KRAUSERT, SANDRA
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KREMENETSKI, KONSTANTIN V.
Physical Science

KUPINSKI, DEBBIE
Art

LA MONTIA, MELODY L.
Photography

LAMAR, JANE
Fashion

LAMBROS, THEODORE
Drafting

LAMKINS, JENNIFER
Computer Applications & Office Technology

LANDON, HAROLD F. JR
Theatre, Dance & Film

LANGEVIN, DELORES M.
Mathematics

LANGLOIS, KRISTINA
Speech Communication

LANDOW, ERICA L.
English as a Second Language

LaPORTA, MICHELE
English

LaROSE, PAULA S.
Public Affairs

LAWLER, JEFFREY
History & Political Science

LE, DUC
Mathematics & Engineering

LE, HELEN T.
Social Science

LEARY, CLOVER
Photography

LEE LIN, JIN S.
Physical Science

LEE, BETTY
English

LEE, KENNETH S.
Distributive Education

LECHNER, HAROLD F.
Aviation Department

LEIGH, ROBERT G.
Theater, Dance & Film

LEO, WILLIAM
Public Affairs & Services

LEONGSON, JAIME A.
Mathematics & Engineering

LEVINE, MICHAEL A.
Business Administration

LEY, CHARLES S.
Social Science

LEWIS, EVERETT D.
Theater, Dance & Film

LEWIS, LINDA A.
Dance

LIN, BOYUN A.
Art

LINDER, RONALD E.
Art

LITHERLAND, LARRY P.
Electricity

LITZINGER, PAUL D.
Photography

LO, JOSEPH
Social Science

LOBLINER, ROBERT H.
Chemistry/Mathematics/Physics

LONNER, MARA J.
Art

LOONEY, NORMAN C.
Art

LOUIS, IRIS G.
Spanish

LOW, SANDRA
Art

LUCA, NANCY J.
Music & Radio/TV
Part-Time Faculty

LUCHTMAN, ALANA L.
English as a Second Language

LUEBBERS, MARIE-HELENE
Foreign Language

LUGO, DENISE I.
Art

LUPASH, CORNELIA B.
Physical Science

MACIAS, SUSAN E.
English as a Second Language

MACKOWIAK, JAMES F.
Computer & Business Information Systems

MADSSEN, RODNEY A.
Social Science

MAJOLI, MONICA
Art

MALEVITZ, PAUL J.
English as a Second Language

MALONEY, MICHAEL S.
Physical Education

MALSCHICK, DEBRA F.
Art

MANLOWE, MELINDA A.
Speech

MARCH, JAMES S.
Accounting

MARKSBURY, GARY
History

MARRUJO, LUCIENNE
Physical Education

MARTIN, GREGORY
Music & Radio/Television

MARTIN, PAMELA L.
Vocational Nursing

MARTINDALE, CYNTHIA L.
Public Services

MARTIN, ROBERT B.
Child and Adult Development

MASSIE, SANDRA C.
Theater, Dance & Film

MAURO-ATKINSON, LUANNE
Child and Adult Development

MAY, JAMES P.
Physical Science

MAZUREK, NANCY A.
Child & Adult Development

Mc ANDREWS, ROBERT B.
Cabinet Making/Carpentry

McCRARY, JASON R.
English, Reading

McGILL, JULIE S.
Vocational Nursing

McGRATH, JAMES J.
Social Science

Mc KIBBON, THOMAS D.
Sheet Metal

McLAUGHLIN, ANNA MARIE
English

MC MILLAN, DONALD P.
Accounting

McMILLEN, ROXANNE S.
Computer Applications & Office Technology

MEADE, EVELYN M.
Speech Communication

MEDINA, GLORIA
Foreign Language

MEDINA, JOHN L.
Auto Body

MEIER, PATRICIA A.
Vocational Nursing

MENACHEM, ISRAEL
Mathematics & Engineering

MENARY, JOHN A.
Geography

MENDOZA, JAVIER M.
English, Reading

MERCADANTE, MICHAEL J.
Chemistry

MEYERS, ROBROY
History & Political Science

MICKLER-SEARS, WILMA
Theater, Dance & Film

MIKELAT, MARK R.
Business Administration

MILLER, DANNY G.
Computer & Business Information Systems

MILLER, MARIAN L.
Child and Adult Development

MITZNER, RITA
English

MIYAGAWA, JENNIFER A.
Food & Nutrition

MOCHIZUKI, SHUNSKE S.
Foreign Language

MOGAN, JIMMY
Auto Body

MONAUS, MARIE A.
Computer Applications & Office Technology

MONGE, J. MICHAEL
Social Science

MORRISON, MICHAEL S.
Business Administration

MORTESEN, GREGORY L.
Theatre, Dance, & Film

Moss, Brian C.
Art

MOSS, MYRON
Public Service

MURPHY, JAMES M.
Physical Education

MUSZYNSKI, BETTY A.
Child Development

MURPHY, JAMES M.
History

MUSZYNSKI, BETTY A.
Child Development

MUTT, BRIAN C.
Art

NABULSI, ABEER AKRAM
Foreign Language

NABULSI, AKRAM
Mathematics & Engineering

NAKAMURA, DAVID S.
Welding

NAKAMURA, DAVID S.
Welding

NAKAMURA, DAVID S.
Welding

NEAL, SHIRLEY E.
English as a Second Language

NEBBIA, GERARDO
Social Science

NELSON, GERARDO
Social Science

NEU, HEIDI A.
Basic Adult Education

NEUBAUER, SHARON A.
Social Science

NGO, MINH V.
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NIKOLAOU, URSULA J.
Spanish

NORCLIFF, HILARY
Art
NORTON, THOMAS  
Physical Science

NOYES, PATRICK  
Physical Education

NUNEZ, MARIA TERESA C.  
Foreign Language

NUNO, HAYDEE J.  
Registered Nursing

NUSBAUM, LINDA J.  
Music & Radio/Television

OCHOA, JORGE  
Horticulture

O’CONNELL, TINA L.  
Registered Nursing

OH, HAEKWON  
Music & Radio/Television

OLDENBURG, RANI K.  
Life Science

ORTMAYER, PATRICIA  
English, Reading

OSBORN, CAROLYN J.  
Vocational Nursing

OWENS, MICHAEL D.  
Physical Education

PACLEB, ELISA  
Vocational Nursing

PABBORG, KNUD H.  
English as a Second Language

PAGE, TERESA V.  
Social Science

PAIK-SCHOENBERG, JEAN  
English, Reading

PAREDES, LUIS H.  
Spanish

PARikh, JALPA N.  
Social Science

PARKER, SHAWN M.  
Allied Health

PARKER, WILLIAM R.  
Travel & Tourism

PARodi, CLAUDIA  
Foreign Language

PARRAgA, KORI ANNE  
Public Services

PARSCH, TIMOTHY J.  
Music & Radio/Television

PASACHE, EDWIN E.  
Cabinet Making/Carpentry

PASS, JIM  
Sociology

PAYNE, RICK L.  
Sheet Metal

PAYSAN-MODINA, MICHELLE  
Vocational Nursing

PechARICH, JOSEPH C.  
Electricity

PEDRegON, DIANn F.  
Food & Nutrition

Pena, cortney L.  
English, Reading

PeRRy, Stephen  
English

PETKe, Ron  
Radio/Television

PHILLIPS, CHRISTINE L.  
Physical Education

PHILLIPS, KimberLy M.  
Social Science

PIKE, KARI A.  
Speech Communication

PITTS, DENnIS M.  
Computer & Business Information Systems

PITTS, MICHAEL E.  
English as a Second Language

PORTILLO, ROSARIO  
Social Science

POSTON, CLARK  
Business

PRATT, Joyce R.  
English as a Second Language

QUEen-FuENTes, DENISE D.  
Computer Applications & Office Technology

RAE, MIKE  
Physical Education

RAMI, KIRAN  
English as a Second Language

RAMIREZ, FRANK jr.  
Cabinet Making/Carpentry

RAMOS, CARLOS M.  
Social Science

RANGEl, AMY C.  
Registered Nursing

REACH, CARRIE P.  
Child and Adult Development

REDDINGIUS, ELLEN A.  
English as a Second Language

REMETA, ROBERT W.  
Electricity

REnO, ANDREW B.  
Health Technologies

REntERIA, DELIA  
Foreign Language

REYES, TERREL L.  
Physical Education

RICE, JUDITH A.  
Health Education

RICHARD, BRIGITTE B.  
Physical Education

RICHARDSON, JAMES  
Physical Education

RIGGINS, LAWRENCE D.  
Theater, Dance and Film

RIOJAS, VINCENT L.  
English as a Second Language

Rios-Ellis, enRIQUE  
Music & Radio/Television

ROBERTs, KAREN L.  
Art

ROBERTSHAW, THEODORA  
Art

ROBINson, JeANNIE M.  
Physical Education

RODRIguez, Rodney A.  
Reading & Writing Center

ROEMER, CAROL K.  
Art

ROESSLER, Mark F.  
History & Political Science

ROGERS, WELLIngTOn S.  
Physical Education

ROHRBACKER, CARRIE C.  
English, Reading

ROMITO, susAN J.  
English as a Second Language

ROSA, MELANIE  
Theatre, Dance & Film

ROSEn, LARRY L.  
Culinary Arts

ROSILLO, ZOILA M.  
Computer Applications & Office Technology

ROSSMANNEK, FRED H.  
Learning Assistance

RUJANAWECH, GORDON  
English

sABEt, MARK  
Computer & Business Information Systems

sABHA, FAYRuz  
English as a Second Language

sABol, CAROLINE M.  
Mathematics & Engineering

sADIS, IRA  
English as a Second Language
SAIKALI, LINA A.
Diagnostic Medical Imaging

SAINT, SHAILA
Child & Adult Development

SALAZAR, KATHLEEN A.
Child & Adult Development

SALIM, PETER
English as a Second Language

SAMMUT, NOREEN A.
Registered Nursing

SAMSAMY, KAVEH
Social Science

SANBORN, ERROL R.
English, Reading

SANCHEZ, VICTORIA
Photography

SAPRA, LISA M.
English, Reading

SAREEN, SUDEEPA
English as a Second Language

SAVOY, RUSSELL A.
Allied Health

SHACKELFORD, STEPHAN M.
Aviation Pilot Training

SHARMA, DEEPAK
Mathematics & Engineering

SHELKEY, RHONDA A.
Physical Education

SHELLEY, TRUMAN E.
English as a Second Language

SHERNELL-BANKS, DEATRICE.
Sociology

SHERTICK, RITA L.
Registered Nursing

SHISHIM, LESLI S.
English as a Second Language

SIEGEL, JANNEANE R.
Sociology

SILVA, GABRIEL
Social Science

SILVERSTEIN, CAROLE
Fine Art

SIQUEIROS, ADOLFO
Computer Applications & Office Technology

SJOBERG, ERIC
History & Political Science

SKAAR, SUZAN K.
Art & Photography

SMITH, CHARLES D.
English as a Second Language

SMITH, DOUGLAS A.
Foreign Language

SMITH, JAMES
Computer Applications & Office Technology

SMITH, JAMES B.
Public Services

SMITH, LINDA A.
Family & Consumer Studies

SMITH, MELINDA M.
Life Science

SMITH, SEAN
History & Political Science

SMURTHWAITE, LORI F.
English

SONIDO, ELEANOR
Library

SORENSON, BARBARA J.
Theatre, Dance & Film

SORENSON, BERTRUM N.
Public Services

SOVICH, BIANCA J.
Fashion

SPANGLER, PAMELA
Music & Radio/Television

SPRUCE, JESUS
History

STACY, JOHN L.
English, Reading

STEELE, DONETTE A.
Psychology

STEWART, CATHY SUE
Family & Consumer Studies

STEWART, DONNA M.
English

STONE, LYLE D.
Music & R/TV

STRAUSS, ERIC H.
Art

STREETZ, EVA
Registered Nursing

STROMQUIST, ANNIE
Art

STUART, JOHN W.
Social Science

SUH, JUNG SOOK KY
Social Science

SULAHIAN, ROBERT S.
Aviation Pilot Training

SUN, JOSEPH A.
Allied Health

SWENSON, CAROLYN S.
Child & Adult Development

TAKACS, MARCIA
English as a Second Language

TAMIALIS, BARBARA J.
Child & Adult Development

TANOUCHEV, VASSIL
Drafting

TAYLOR, JAMES H.
Business Administration
Part-Time Faculty

TAYLOR, SHELLEY
Floral Design

TEGART-WORSHAM, SHIRLEY
Travel & Tourism

TENNESEN, MARGARET
Art

TERAN, LOUIE A.
Music & Radio/Television

TERAOKA, ADAM Z.
Art

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Electricity

TERRY, LADD J.
Art

TESSIER, HOLLY M.
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TEWELES, WILLIAM
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THARP, LOUIS B. JR.
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Public Affairs/Human Services

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THORNTON, SHANTEL L.
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TIGHE, BARBARA J.
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TILESTON, THOMAS R.
Economics

TIM, RAO TANA C.
Music

TITUS, JODI L.
Social Science

TOTORP, RANDY S.
Physical Education

TRAN, MINH-TAM
Foreign Language

TRAN, TRI C.
Spanish

TRAPP, ELIZABETH B.
Spanish

TRICKETT, DAWN L.
Speech

TROTT, RUBY S.
Computer & Business Information Systems

TRUITT, JAMES D.
Journalism

TUCCARONE, JOSEPH D.
Mathematics

TUCKER, JAZMINE S.
English as a Second Language

TURLO, MATTHEW A.
Electricity

UKPO, THERESA M.
Life Science

VALDIVIA, ANGEL
Social Science

VAN DE MORTEL, DORA A.
Registered Nursing

VAN VOOREN, MARIE
Computer Applications & Office Technology

VELLEKAMP, HENRY
Swimming

VERONE, TERRI L.
Food & Nutrition

VERTULLO, KATHY M.
English, Reading

VIGILANT, KAREN A.
Physical Education

VINCI, SARAH G.
Art

VISser, LISA M.
Vocational Nursing

VIVIAN, SIGRID P.
English as a Second Language

WAECHTER, CAROL N.
Speech

WALCZAK, KATHARINE L.
Center for Learning Assistance

WALKER, STEPHEN L.
Business Administration

WALLECH, MEGUMI
Art

WALSH, RUTHE L.
Food & Nutrition

WAN, THEODORE
English as a Second Language

WANG, JANE SHIH
English as a Second Language

WARD, A. JUDITH
Physical Education

WARKEN, THOMAS C.
English/Matriculation

WARNIMONT, KELLY
Physical Education

WARREN, GREGORY P.
Social Science

WATTs, JOHN T.
Public Affairs & Services

WAWRZYNski, PAUL A.
Health Technologies

WEBB, WILLIAM C.
Physical Education

WEISS, ERIC E.
Cabinet Making/Carpentry

WELLS, MELINDA L.
Child and Adult Development

WELLS, REX C.
Speech

WELLS, SCOTT J.
Social Science

WEST, BARBARA
English/Reading

WETSman, MICHAEL
Aviation Pilot Training

WHITE, CHARLES J.
Theatre

WHITEHEAD, JASON E.
History & Political Science

WHITELOCK, MERRI G.
History

WHITTAKER, DEBRA A.
Social Science

WIEGAND, ROBERT H.
Librarian

WICENCEK, JEROME J.
Public Affairs & Services

WILKINSON, RICHARD A.
History

WILLIAMS, FRANCES M.
Child & Adult Development

WILLIS, JASON D.
Physical Education

WILSON, KIRK E.
Physical Education

WILSON, MICHAEL W.
Art

WILSON, RONNELL A.
Registered Nursing

WILSON, THOMAS J.
Computer & Business Information Systems

WINCHELL, JILL E.
Music & Radio/TV

WIniARski, CATHarINE E.
English Writing/Reading Center

WISwELLI, MARIOLA T.
Computer Applications & Office Technology
WITKIN, LEONARD
Mathematics

WRANIC, ANGELA
Physical Science

WRIGHT, FRIEDA L.
Vocational Nursing

WURTZ, JEFFREY L.
Business Administration

WYATT, ROGER, W.
Basic Adult Education

WYLIE, JAYNE R.
Vocational Nursing

WYNNE, PAUL R.
Art

WYSZPOLSKI, JON J.
Computer Applications & Office Technology

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

YOO, YONG
English as a Second Language

YOUNG, MAX O.
Electricity

YOUNG, STEVEN A.
Theater, Dance & Film

YUNKER, TERESA M.
English

ZAMOYSKA, CELINE C.
English as a Second Language

ZAMPELLI, SHERI O.
Human Services

ZAWOYSKY, JOHN R.
Accounting & Business Management

ZHUANG, RUI RAY
Social Science

ZONKOSKI, JOHN
Music & Radio/Television

ZUKOSKI, MICHAEL J.
Drafting

ZUNIGA, LIZBETH R.
Computer Applications & Office Technology
<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABAIR, RUTH C.</td>
<td>Career Development Technician</td>
</tr>
<tr>
<td>ABE, ROBERT Y.</td>
<td>Computer Operator</td>
</tr>
<tr>
<td>ACOSTA, ADELINO R.</td>
<td>Admissions &amp; Records Tech II</td>
</tr>
<tr>
<td>AGUERO, JOSE E.</td>
<td>Custodian</td>
</tr>
<tr>
<td>AGUERO, LUZ L.</td>
<td>Custodian</td>
</tr>
<tr>
<td>AGUILAR, MAYRA</td>
<td>Multi-Media Equipment Tech</td>
</tr>
<tr>
<td>AGUIRRE, DIANA A.</td>
<td>College Information Assistant</td>
</tr>
<tr>
<td>AJA, MARY E.</td>
<td>Sports Therapist</td>
</tr>
<tr>
<td>ALARCON, PETER</td>
<td>Custodian</td>
</tr>
<tr>
<td>ALBERS, SUSAN K.</td>
<td>Lead Cashier</td>
</tr>
<tr>
<td>ALVARADO, MARTHA J.</td>
<td>Job Development Manager</td>
</tr>
<tr>
<td>ALVAREZ, LISBETH</td>
<td>ESL Office Coordinator</td>
</tr>
<tr>
<td>AMADOR, RUBEN E.</td>
<td>Lead Library Technician</td>
</tr>
<tr>
<td>ARCHILA, FABIOLA</td>
<td>Library Asst/Technician II</td>
</tr>
<tr>
<td>ARJONA, JAVIER</td>
<td>Student Center Facilitator</td>
</tr>
<tr>
<td>ASTON, STEVEN W.</td>
<td>Creative Arts Production Coordinator</td>
</tr>
<tr>
<td>ATKINSON, CARMEL C.</td>
<td>Child Development Associate Specialist</td>
</tr>
<tr>
<td>ATWOOD, KATHIE A.</td>
<td>Secretary</td>
</tr>
<tr>
<td>AVILA, JASON S.</td>
<td>Financial Aid Specialist</td>
</tr>
<tr>
<td>AXUP, PAMELA S.</td>
<td>Sr. Human Resources Analyst</td>
</tr>
<tr>
<td>AZEVEDO, PAULO II.</td>
<td>Grounds Maintenance Worker</td>
</tr>
<tr>
<td>BAILEY, CATHY L.</td>
<td>Child Development Specialist</td>
</tr>
<tr>
<td>BAKER, CINDY J.</td>
<td>Accounting Supervisor</td>
</tr>
<tr>
<td>BAKER, JANE E.</td>
<td>Accounting Technician III</td>
</tr>
<tr>
<td>BAKKEN, SANDRA L.</td>
<td>Instructional Assistant</td>
</tr>
<tr>
<td>BANGS, DIANE C.</td>
<td>Human Resources Specialist</td>
</tr>
<tr>
<td>BARATIE, MYRIAN A.</td>
<td>Records Specialist</td>
</tr>
<tr>
<td>BARNES-GREEN, ADRIENNE</td>
<td>Clerk</td>
</tr>
<tr>
<td>BARNUM, ALBERT D.</td>
<td>Custodian</td>
</tr>
<tr>
<td>BARRY, ANTIONETTE M.</td>
<td>Senior Clerk</td>
</tr>
<tr>
<td>BARTZ, JENNIFER L.</td>
<td>Admin Secretary/Mandated Cost Specialist</td>
</tr>
<tr>
<td>BAUTISTA, JANE M.</td>
<td>Instructional Assistant</td>
</tr>
<tr>
<td>BELL, DAMON A.</td>
<td>Manager, Student Life</td>
</tr>
<tr>
<td>BERGEN, PATRICIA J.</td>
<td>Senior Clerk</td>
</tr>
<tr>
<td>BERRY, JANICE L.</td>
<td>Executive Secretary</td>
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<td>BERRY, MARSHALL</td>
<td>Custodial Supervisor</td>
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<tr>
<td>BIRDWELL, JILL G.</td>
<td>Senior Clerk</td>
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<tr>
<td>BLACK, KATHLEEN M.</td>
<td>Child Development Specialist</td>
</tr>
<tr>
<td>BLINCOE, DANIEL J.</td>
<td>Senior Locksmith</td>
</tr>
<tr>
<td>BLOMBERG, CYNTHIA M.</td>
<td>Nurse</td>
</tr>
<tr>
<td>BOWERS, ALISON</td>
<td>Instructional Assistance Coordinator</td>
</tr>
<tr>
<td>BOWERS, SARAH</td>
<td>Senior Clerk</td>
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<tr>
<td>BOWSER JR, CLYDE C.</td>
<td>Custodian</td>
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<tr>
<td>BOYKIN, TALMADGE</td>
<td>Skilled Maintenance Worker</td>
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<tr>
<td>BOYLE, DEBORAH L.</td>
<td>EOP&amp;S Program Specialist</td>
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<tr>
<td>BRACKMAN, PAMELA A.</td>
<td>Admissions &amp; Records Tech II</td>
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<tr>
<td>BRETON, JOANNE W.</td>
<td>Schedule Specialist</td>
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<tr>
<td>BRinker, ROSEMARY A.</td>
<td>Senior Clerk</td>
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<tr>
<td>BROOKS, CAREY V.</td>
<td>Custodian</td>
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<tr>
<td>BROWN, CYNTHIA J.</td>
<td>Office Assistant</td>
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<td>BROWN, EILEEN T.</td>
<td>Admissions &amp; Records Tech II</td>
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<tr>
<td>BROWN, MICHELE M.</td>
<td>Secretary</td>
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<tr>
<td>BROWN, ROGER K.</td>
<td>Lead Custodian</td>
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<tr>
<td>BROWN, SHIRLEY M.</td>
<td>Intermediate Clerk</td>
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<tr>
<td>BUIHAIN, ALLAN E.</td>
<td>Supplies Clerk, Warehouse</td>
</tr>
<tr>
<td>BUI, CHAU M.</td>
<td>User Support Network Coordinator</td>
</tr>
<tr>
<td>BURTON, SOLEDAD</td>
<td>Accounting Technician I</td>
</tr>
<tr>
<td>BUTCHER, JOHN E.</td>
<td>Grounds Maintenance Worker</td>
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<tr>
<td>CAO, CAMTU</td>
<td>Library Technician II</td>
</tr>
<tr>
<td>CAPONE, NANCY</td>
<td>Buyer</td>
</tr>
<tr>
<td>CARPIO, RAUL</td>
<td>ESL Office Coordinator</td>
</tr>
<tr>
<td>CARR, JOAN M.</td>
<td>Payroll &amp; Benefits Manager</td>
</tr>
<tr>
<td>CARROLL, SEAN W.</td>
<td>Media Technical Specialist</td>
</tr>
<tr>
<td>CARTER, JERI L.</td>
<td>Manager, Student Life</td>
</tr>
<tr>
<td>CASKEY, MARIA E.</td>
<td>Senior Clerk</td>
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<tr>
<td>CHAO, JULIE</td>
<td>Accounting Technician II</td>
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<tr>
<td>CHAO, SEM</td>
<td>Internal Auditor</td>
</tr>
<tr>
<td>CHAVEZ, LARRY</td>
<td>College Center Attendant</td>
</tr>
<tr>
<td>CHESTNUT, CARMEN L.</td>
<td>Distance Learning Program Spec</td>
</tr>
<tr>
<td>CHU, TANG P.</td>
<td>PeopleSoft Programmer Analyst</td>
</tr>
<tr>
<td>CHUKWUDIRE, HURTICINE J.</td>
<td>Senior Clerk</td>
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<td>CLARK, SONYA K.</td>
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<td>CLAY, KAREN E.</td>
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<td>CLEMENTE, NORINA J.</td>
<td>Payroll Technician</td>
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<td>CLEVELAND, SANDRA D.</td>
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CLIFTON, RIDLEY R.
Instructional Aide

COLEMAN, KEVIN D.
Custodian

COMPIAN, JOHNNY
Skilled Maintenance Worker

COMPIAN, LAURA L.
Academic Administrative Secretary

CONDON, SUZANNE M.
Administrative Secretary

COOK, RASHANDA
Child Development Specialist

COSTA, ALTA M.
Secretary

COVARRUBIA, ROBERT A.
HVAC Mechanic

CRAWFORD-DILLARD, ROSLYNN D.
Instructional Aide-Foster Care

CREASEN, PAUL J.
Director of Grants

CROOK, HEATHER L.
Instructional Aide-Foster Care

CRIEZ, JAIMARIE T.
College Information Assistant

CULPEPPER, AARON D.
Custodian

DANG, WILSON K.
PeopleSoft Programmer Analyst

DANIELS, DOUGLAS B.
Science Laboratory Technician

DAVIS III, HOMER R.
Custodian

DAVIS, LONDA S.
EOP&S Support Assistant

DAVIS, PATRICIA M.
Comptroller/Assistant Director, Fiscal Operations

DAVIS, TAMIR L.
Instructional Aide

De la RAMA, CURIE C.
Academic Administrative Secretary

De SANTIAGO, DARIO JR.
Studio Lab Assistant

DIETRICK, PATRICIA W.
Instructional Associate I

DIXON, MARY E.
Instructional Aide

DOMINGUEZ, SEAN R.
Instructional Aide

DORFMAN, ANDRIUS S.
PeopleSoft Database/System Administrator

DORSEY, CHRISTOPHER J.
Human Resources Specialist

DOSS, JOHN L.
Radio/TV Equipment Technician

DOYLE, MARY M.
Custodian

DUCKETT, LISA K.
DSPPS Support Services Assistant

DUNCAN, YVONNE S.
Project Manager

DURAN, SUSANA
Financial Aid Specialist

EACH, KATHRYN S.
Senior Clerk

ECKMAN, JONATHAN E.
Custodian

EKHISIGIAN, ARDA
Associate Director, Financial Aide

ENGEL, ANNE E.
User Support Network Coordinator

ESLAVA, MARGARET E.
Child Development Specialist

ESTACIO, RICHARD R.
Lead Custodian

ESTACIO, RONALD J.
Warehouse Receiving Clerk

FALTADO, EXVIMIN A.
Academic Administrative Secretary

FAN, CICY
Senior Clerk

FEENSTRA, DARREN J.
Vehicle & Small Equip Mech

FENDerson, MARIE E.
Intermediate Clerk

FERNANDEZ, YOLANDA C.
Senior Clerk

FINLEY, BRENDA J.
Instructional Toolroom/ Maintenance Mechanic

FITCHETT, FRANKIE L.
Office Assistant

FLORES, LEAH N.
Accounting Technician II

FLOWERS, JIMMIE R.
Athletic Equipment Assistant

FLOYD, JONATHAN G.
Deputy Director, Facilities

FOOT, HAROLD
Instructional Associate

FORD, VIRGINIA R.
Custodian

FORD-PANEK, EMMA C.
Administrative Contract Tech

FOUNTAIN, DONNA E.
Lead Library Technician

FOWLEKES, ANGELA
Special Program Technician

FRANCE, NEIL A.
Photo Lab Technician

FRANCO, DOLORES
International A&R Technician

FRANKLIN, DEBVIONE
Child Development Assoc Spec

FREIBURGER, STEVEN
Computer Laboratory Technician

GAFFNER, CAROL A.
Reading Assessment Technician

GAGNE, COLLEEN M.
Media Technical Specialist

GALVAN, KAREN
Instructional Aide/Assistant

GARBER, MARK D.
HVAC Mechanic

GARCIA, CLAUDIA N.
Special Program Manager

GARCIA, DEBRA T.
Intermediate Clerk

GARCIA, KELLY A.
Administrative Secretary

GARCIA, PEDRO
Custodian

GARCIA, SYLVARA
Intermediate Clerk

GARNER, CARL M.
DSPPS Adaptive Computing Specialist

GARY, STEPHEN S.
Custodian

GIBBINS, ANITA L.
Manager, Women’s Center

GILLILAND, SHANNON D.
Financial Aid Specialist

GLOVER, CHERYL M.
Curriculum/Schedule Technician

GLOVER, CHRISTOPHER S.
Instructional Associate

GONZALES, GLORIA
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LERCH, VICKI A.
Campus Support Secretary

LIGHTENBERGER, JANA M.
Buyer

LIEBRECHT, CATHERINE T.
Office Assistant

LITTLEJOHN, ROSE
Senior Clerk

LOPEZ, PRISCILLA A.
Project Manager

LORENCE, ELLEN K.
Senior Clerk

LOUIE, DEBRA
Instructional Aide

LOWE, D. DUANE
Director, Fiscal Operations

LOWER, LINDA D.
Administrative Secretary

LUDKA, MARY JO
Child Development Associate Specialist

LUUGA, AUGUST
Systems/Programming Manager

LUUGA, LYNDI G.
Registrar

LY, BOUNRITH
User Support Network Coordinator

LY, THAI K.
Instructional Assistant

LYLES, STEPHANIE L.
Custodian

MacCULLEN, RUTH E.
Associate Registrar

MACINTISH, BLAKE W.
Media Producer

MADERA, ELIZABETH
Administrative Secretary

MAGDALENO, CORINNE
Administrative Secretary

MAHARAJ, PETER
Student Services Technical Manager

MAJOR, ELLA L.
Accounting Technician III

MALAGA, BENIGNO T.
Custodian

MALONEY, MICHAEL S.
Student Athlete Success Coordinator

MAMARIL, MARK
Office Assistant

MARCY, DONALD J.
Stage Technician

MARIOTTA III, MARIO
Stage Technician

MARTIN, MARLIN
Offset Press Operator

MARTINEZ, MELISSA
Child Development Specialist

MARTINEZ, TIMOTHY M.
Custodian

MASESSE, MIKE R.
Carpenter

MASON, RYAN S.
EOP&S Support Assistant

MATHEWS, JESSE W.
Custodian

MATHIS, SANDRA L.
Contracting/Procure Analyst

McBRIDE, REBECCA R.
Interim Director, Facilities Management

McELDOWNEY, MARY L.
Executive Secretary

McFARLAND, JEFFERY D.
Accountant

McGLOTHAN, APRIL
DSPS Technical Assistant

MEAK, SAVOUN
Office Assistant

MEAKER, CHRISTY
Instructional Toolroom Maintenance Mechanic

MEJIA-GAYTAN, GEORGIANA
Human Resources Assistant

MELIN, CONNIE M.
Human Resources Specialist

MELTON, JENNIFER P.
Instructional Associate I

MENDOZA, DAVID C.
Custodian

MENDOZA, GRACIELA D.
Academic Administrative Secretary

MENJIVAR, JUAN F.
Financial Aid Specialist

MERCADANTE, MICHAEL J.
Science Laboratory Technician

MERRILL, VICTOR F.
Plumber

MEYER, JOHN R.
Parking Services Attendant

MEZA, MARSHA
Records Specialist

MILKES, SHARON B.
Admissions & Records Tech II

MILLER, JANICE L.
Office Manager

MILLER, LAURA J.
Accounting Technician II

MILLER, MARGARET A.
Admissions & Records Tech II

MIYAO-MOORE, NANCY Y.
Curriculum/Schedule Technician

MONAUS, MARIE A.
Instructional Assistant I

MONGUOLO, PERLA A.
Records Specialist

MONTGOMERY, GREGG K.
Multi-Media Equipment Tech

MOORE, BRADLEY G.
Intermediate Clerk

MOORE, CHANDRA Y.
Workforce Development Coordinator

MOORE, ROBERT A.
Accounting Technician I

MORALES, BLANCA E.
Clerk

MORALES, DEMETRIA
Intermediate Clerk

MORALES, ELIZABETH
Upward Bound Program Spec

MORALEZ, SALVADOR C.
Grounds Maintenance Worker

MORGAN, BRUCE E.
Electrician

MORGAN, MICHAEL S.
Lead Custodian

MRAYEV, MONIKA
Educational Technologist

NACHRENER, RONALD L.
Office Assistant

NAPOLILLO, ANTHONY W.
Custodian

NEJAD, SHADI
Student Support Project Coordinator

NELSON, CHARLES R.
Grounds Maintenance Worker

NEWMAN, JOANNE
Human Resources Analyst

NGUYEN, CINDI T.
Benefits Technician
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<td>NGUYEN, LISA J.</td>
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<td>NORMAN, DENISE L.</td>
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<td>NYSTROM, ARNE F.</td>
<td>Network Systems Analyst</td>
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<td>NYSTROM, MARCIA L.</td>
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<td>Student Activities Advisor</td>
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<td>OWENS, MICHAEL D.</td>
<td>Sports Therapist</td>
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<td>PACE, TYREE E.</td>
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<td>PARLE, GLORIA M.</td>
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<td>PARSCH, TIMOTHY J.</td>
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<td>PEARCE, SHARON L.</td>
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<td>Director, Superintendent-President's Office</td>
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<tr>
<td>SANTOSCOY, OSCAR</td>
<td>Computer Laboratory Technician</td>
</tr>
<tr>
<td>SATELE, TAUASOSI M.</td>
<td>Admissions &amp; Records Tech II</td>
</tr>
<tr>
<td>SAUMURE, NORMAND F.</td>
<td>Plumber</td>
</tr>
<tr>
<td>SCHICK, 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>Administrative Secretary</td>
</tr>
<tr>
<td>SCHWANDNER, GAIL B.</td>
<td>Director, Community Education &amp; Operations</td>
</tr>
</tbody>
</table>
SCRUGGS, TINA  
Academic Administrative Secretary

SEGOVIANO, HELEN M.  
Human Resources Assistant

SHAHEEN, CYNTHIA A.  
Nurse

SHAYEGH, MEHRDAD  
Computer Laboratory Technician

SHEFFIELD, N. SHAYNE  
Library Technician II

SHERNELL-BANKS, DEATRICE  
EOP&S Program Coordinator

SIMECEK, LINDA G.  
Supplies Clerk

SKILLE, STEVEN D.  
Accounting Technician II

SLATER, WENDY I.  
Academic Administrative Secretary

SLOAN, SHENEE  
Director, Technology Education

SMITH, CYNTHIA M.  
Risk Services Specialist

SNOW, SCOTT H.  
Custodian

SORENSON, BARBARA J.  
College Center Coordinator

SORG, DARON L.  
Costume Technician

SPANN, RHONDA M.  
CalWorks Childcare Res/Ref Specialist

SPARKS, ROBERT W.  
Office Assistant

SPARKS, SHIRLEY J.  
Accounting Technician III

SPENCER-WATKINS, DENISE  
Director, Contracting & Procurement

STEVEK, JASON A.  
Instructional Assistant

STEVEK, MARLIN O.  
Instructional Toolroom Maintenance Mechanic

STEWARD, JOHN N.  
Custodian

STEWARD, LISA A.  
Admissions & Records Tech II

STRICKLAND RUIZ, JOHNNIE  
Senior Clerk

SWEET-KELLY, DEBORAH L.  
Intermediate Clerk

SYBESMA, KAREN K.  
Senior Clerk

TAMIALIS, BARBARA J.  
Child Development Site Supervisor

TAYLOR, MARKESHA  
Child Development Associate Specialist

TERAOKA, ADAM Z.  
Powertools Lab Technician

THEISEN, DAN J.  
Instructional Associate I

THIM, MONICA  
Financial Aid Specialist

THOEURB, TEP  
DSPS Technical Aide

THOITS, MARY  
Manager, Senior Studies

THOMPSON, DANA P.  
HVAC Mechanic

THORPE, MARY L.  
Accountant

THRIFT-VIVEROS, LOURDES  
Child Development Specialist

TILL, DAVID W.  
Painter

TILLMAN, STEVEN  
Buyer

TIM, RAOTANA C.  
Secretary

TIM, SOPHORN  
Data Software Technician

TO, DANIEL C.  
Lead Custodian

TORRES, SANDRA Q.  
Payroll Technician

TORTAROLO, JOHN S.  
Director, Human Resources

TOUCH, MICH T.  
Instructional Aide

TOUCH, SUNLENG  
User Support Network Coordinator

TRAN, CHRISTINE  
Admissions & Records Tech II

TRASK, SUSAN E.  
Grounds Maintenance Worker

TREJO, OSCAR A.  
Electrician

TRUIT, JAMES D.  
Instructional Associate I

TUNSTILL WITHERSPOON, KAYE  
Senior Clerk

TY, VIBOL S.  
Instructional Aide

UYEHARA, DIANE A.  
Instructional Aide--Nutrition

VALLADOLID, NOE  
Instructional Assistant

VASQUEZ, MICHAEL R.  
Instructional Associate I

VAUGHN, DARA E.  
Financial Aid Specialist

VENABLE, TERENCE T.  
Plant Manager

VERDUZCO, SONIA C.  
Career Development Technician

VIRAMONTES, RICHARD  
Custodian

VOECKER, SCOTT H.  
Web/Database Systems Supervisor

VOS, RONALD  
Grounds Maintenance Worker

VU, THOMAS H.  
Offset Press Operator

WADE, CHERRI L.  
Admissions & Records Tech II

WARE, BARBARA A.  
Locker Room Attendant

WATSON, GABRIEL E.  
User Support Network Coordinator

WATTIS, DEBRA J.  
Child Development Specialist

WEBB, LEVI M.  
Custodian

WEBB, WILLIAM C.  
Student Activities Advisor

WHEELER, STEPHEN D.  
Plant Manager

WHITEMAN, DAVID L.  
Custodian

WHITFIELD, MICHELLE E.  
Assistant Director, Workforce Development

WILDER, CAROL J.  
Senior Clerk

WILLIAMS, CHERYL D.  
Custodial Supervisor

WILLIAMS, GARY J.  
Student Resources/Program Specialist
<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
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<tbody>
<tr>
<td>WILLIAMS, GLORIA P.</td>
<td>Deaf Services Specialist</td>
</tr>
<tr>
<td>WILLIAMS, NIKKI D.</td>
<td>Instructional Aide</td>
</tr>
<tr>
<td>WILLIAMS, SAMANTHA L.</td>
<td>Custodian</td>
</tr>
<tr>
<td>WILLIAMSON, LUCINDA</td>
<td>Child Development Specialist</td>
</tr>
<tr>
<td>WILSON, THOMAS J.</td>
<td>CBIS Instructional Lab Support Network Coordinator</td>
</tr>
<tr>
<td>WOLFE, KARON A.</td>
<td>College Articulation Specialist</td>
</tr>
<tr>
<td>WOLFSLAU-BRETT, LINDA S.</td>
<td>Senior Clerk</td>
</tr>
<tr>
<td>WOODWARD, JANNA R.</td>
<td>Senior Clerk</td>
</tr>
<tr>
<td>WRIGHT, GEORGE B.</td>
<td>Deputy Director, Buildings &amp; Grounds</td>
</tr>
<tr>
<td>YARBROUGH, CHARLOTTE A.</td>
<td>Admissions &amp; Records Tech II</td>
</tr>
<tr>
<td>YBARRA JR., ANTONIO</td>
<td>User Support Network Coordinator</td>
</tr>
<tr>
<td>YENTCH, RICHARD D.</td>
<td>Associate Director, Financial Aid</td>
</tr>
<tr>
<td>YOUNG, DAMON R.</td>
<td>Grounds Maintenance Worker</td>
</tr>
<tr>
<td>YURKSITIS, HILDA</td>
<td>Assessment Technician</td>
</tr>
<tr>
<td>ZAMARRIPA, MAGDALENO</td>
<td>Truck Driver</td>
</tr>
<tr>
<td>ZEILINGER, WILLIAM E.</td>
<td>Graphic Design Specialist</td>
</tr>
<tr>
<td>ZORN, KATHY</td>
<td>Mentor Coordinator</td>
</tr>
<tr>
<td>ZORN, LARRY M.</td>
<td>Skilled Maintenance Worker</td>
</tr>
<tr>
<td>ZUBIA, ANGIE M.</td>
<td>Human Resources Assistant</td>
</tr>
<tr>
<td>ZUNIGA, LIZBETH R.</td>
<td>Instructional Assistant</td>
</tr>
</tbody>
</table>
ABBOTT, SUSAN M.
B.A., M.A., California State University, Long Beach

ALBERT, RONALD E.
A.A., College of the Sequoias
B.A., California State University, Long Beach
M.L.S., University of California, Los Angeles

ALEXANDER, LEAMON
A.A., Trade Technical College, Los Angeles

ALEXANDER, MARIAN R.
A.B., M.A., University of Southern California

ALLEN, MYRON S.
B.S., M.E., Tufts College
M.A., Ed.D., University of Southern California

ANDREASEN, GRANT
B.S., Utah State University
M.A., California State University, Long Beach

ARMSTRONG, GEORGE A.
B.S., O.D., Pacific University
M.A., California State University, Long Beach

ATWOOD, WRIGHT M.
B.A., Whittier College
M.A., California State University, Long Beach

BAIRD, THEODORE A.
B.A., University of California, Los Angeles
M.A., California State University, Long Beach

BAIN, ELIZABETH D.
A.A., B.A., University of California, Los Angeles
M.A., Pacific Oaks College

BARKER, GEORGE L.
B.A., University of California, Santa Barbara
M.A., Teachers College, Columbia University

BENSON, RICHARD E.
B.A., University of California, Santa Barbara
M.A., California State University, Long Beach

Benson, ROBERT M.
B.A., M.A., University of Michigan

BIRCH, GEORGE W.
B.A., M.A., University of Florida

BIRNBAUM, ROBERT A.
B.A., M.A., University of Southern California

BIRNBAUM, ROBERT L.
B.A., M.A., University of Southern California

BROWN, MARGARET R.
B.S., Hampton Institute
M.A., California State University, Long Beach

BROWN, MARGIE N.
LAC/USC Medical Center, Diploma
B.S., M.S., California State University, Long Beach

BRUCE, PHILIP L.
B.S., M.S., Massachusetts Institute of Technology

BUCK, JEANNE T.
B.A., New York University
M.S., Boston University

BUNN, F. ALLEN
B.A., M.A., California State University, Long Beach

BURNE, KEVIN G.
B.A., University of California, Los Angeles
M.S., M.A., Ph.D., University of Southern California

BURTON-RUNDLES, DIANE C.
B.A., M.A., California State University, Long Beach

CAESAR, HERBERT M.
B.A., M.A., California State University, Long Beach

CARTER, KENNETH
B.A., M.A., Yale University

CASHMAN, THOMAS J.
B.A., M.A., California State University, Long Beach

CHAFE, PAUL G.
A.A., Orange Coast City College
B.A., M.Ed., Whittier College
Ed.D., University of Southern California

CHAMBERLAIN, JOHN D.
B.A., University of Southern California
M.S., George Washington University

CHATAM, SAMUEL L.
B.S., Bishop College
M.A., California State University, Long Beach

CHOWEN, ALLAN D.
A.A., Long Beach City College
B.S., California State University, Long Beach

COLEMAN, SAMUEL N.
B.S., Knoxville College
M.A., New York University
M.A., California State University,
<table>
<thead>
<tr>
<th>Name</th>
<th>Degree(s)</th>
</tr>
</thead>
</table>
| COMISKEY, PHYLLIS L. | B.A., MacAlester College  
M.A., California State University, Long Beach |
| COMISKEY, THOMAS A.  | B.A., University of California, Los Angeles  
M.A., California State University, Long Beach |
| COOK, HERBERT R.   | B.A., Huntington College  
M.A., University of California, Los Angeles |
| COOPER, JON K.     | B.A., University of California, Berkeley |
| COOPER, LENA J.    | R.N., Mercy Hospital of Nursing, B.S., M.S., California State University, Los Angeles |
| CRAVEN, PAUL R.    | A.A., Long Beach City College  
B.A., M.A., California State University, Long Beach |
| CRAWFORD, HELEN D. | B.S., University of Nebraska  
M.S., University of Southern California |
| CRIGGER, BENNY L.  | B.A., California State University, Long Beach  
M.Ed., Whittier College |
| CUNNINGHAM, CHARLES O. | B.S., M.A., Stanford University |
| CURL, BEVERLY A.   | A.A., Long Beach City College  
B.S., M.P.A. California State University, Long Beach |
| CURTIS, CHARLES M. | A.A., El Camino College  
B.S., M.S., University of Southern California |
| CURTIS, JANET M.   | B.S., California Polytechnic State University, San Luis Obispo  
M.A., Stanford University |
| DAVID, ERIC        | B.V.E., M.A., California State University, Long Beach |
| DAVIS, FREDERICK L. | University of California, Los Angeles |
| DAVIS, MERLE K.    | B.A., M.A., California State University, Long Beach |
| DAVIS, ROBERT G., JR. | B.S., University of Illinois  
M.B.A., University of California, Los Angeles |
| DAWDY, J. RICHARD  | Professor, Mathematics  
B.S., U.S. Naval Academy  
M.A., California State University, Fullerton |
| DE FARRA, ANN H.   | B.A., Pomona College  
M.A., University of California, Los Angeles |
| DESAI, SHASHIKAN R. | B.A., Gujarat University, India  
M.A., (Theatre) University of Southern California  
M.A., (Film) University of Southern California |
| DESMOND, MARYANN C.| B.A., Marymount College  
M.S., University of Notre Dame  
M.S., California State University, Los Angeles  
Ph.D., University of Southern California |
| DEWITT, GEORGE E.  | B.A., M.A., University of Nebraska |
| DIAZ DUQUE, OLGA P.| M.A., Mount St. Mary's College  
Ed.D., University of Havana |
| DIETRICK, DAVID C. | A.A., B.A., San Diego State University  
M.A., University of California, Los Angeles |
| DOUGLAS, MINNIE T. | A.A., Long Beach City College  
B.S., M.S., California State University, Los Angeles  
Ed.D., Pepperdine University |
| DOW, FREDERICK A.  | B.A., University of Denver  
M.S., University of Southern California |
| DRAGE-ALEXANDER, MARTHA | R.N., University of Michigan  
B.S., Wayne State University  
M.A., Columbia University |
| DRAGHI, JOHN P.    | B.A., M.S., University of Southern California |
| DRAGO, ALFRED A.   | B.A., Park College  
M.A., Harvard University |
| EATON, BUDD E.     | University of California, Los Angeles  
B.V.E., California State University, Long Beach |
| ELAM, G. PERRY     | B.A., M.S., California State University, Long Beach |
| ELDRED, GERRY L.   | A.A., Long Beach City College  
B.A., M.A., California State University, Long Beach |
| ELLMANN, NORBERT L.| B.A., Carroll College  
M.S., Marquette University |
| EPPERLY, KERMIT L. | A.A., Long Beach City College  
B.S., University of California, Los Angeles  
M.A., California State University, Long Beach |
| FAIRCILD, RICHARD E.| B.S., M.S., University of Idaho  
Ed.D., University of Southern California |
| FARMER, CALVIN L.  | A.A., Chaminade Junior College, B.S., M.S., Kansas State College  
Ed.D., Nova University |
| FINSTUEN, SANDRA A.| B.A., Occidental College  
M.S., California State University, Fullerton |
| FISCHER, HEINZ    | A.A., Long Beach City College  
B.A., M.A., California State University, Long Beach  
M.S., Institute for Behavioral Science, Basel, Switzerland  
Ph.D., University of Southern California |
| FITZPATRICK, THOMAS E.| M.S., University of Illinois |
| FLANAGAN, PATRICK M. | B.S., California State University, Los Angeles  
M.P.A., University of Southern California |
| FORD, FRANCES M.   | B.A., University of Minnesota |
| FOSTER, WILLIAM L. | A.A., Golden West College  
B.V.E., M.A., California State University, Long Beach |
FRANCUS, STANLEY E.
B.A., California State University, Long Beach
M.A., Ph.D., University of Southern California

FRANKLIN, EDWARD R.
B.S., Indiana State College
M.S., University of Southern California

FRASER, WILLIAM B.
B.A., Michigan State University
M.A., California State University, Long Beach

FUCHS, WILLIAM D.
B.A., University of California, Berkeley

FULLER-NEWQUEST, MARILYN
A.A., Cerritos College
B.A., M.A., California State University, Long Beach

FURU, HOWARD L.
B.A., University of California, Santa Barbara
M.A., California State University, Long Beach

GARRETT, HERBERT E.
B.A., Washburn University
B.S.E., University of Kansas
M.A., California State University, Long Beach

GARRISON, ALICE MARIE
B.A., University of California, Los Angeles
M.L.S., Pratt Institute of Library Science
M.S.E., University of Southern California

GARY, ROBERT D.
B.S., Johnson C. Smith University, Charlotte
M.A., Loyola University

GEACH, WILLARD L.
A.A., Long Beach City College

GENET, GAY V.
B.S., M.S., Brigham Young University, Provo

GENTRY, MARION B.
B.V.E., M.A., California State College, Los Angeles

GEYER, JOHN E.
B.S., University of North Dakota
M.S.L.S., Ed.D., University of Southern California

GILPIN, ALBERT E.
B.A., M.A., Michigan State University

GLEASON, BERNARD A.
B.S., M.S., University of Nebraska
Ed.D., University of Southern California

GOODWIN, FRED
A.S., Long Beach City College

GOULDRUP, LAWRENCE P.
B.A., M.A., Brigham Young University
Ph.D., University of California, Los Angeles

GREGORY, FAYE M.
R.N., B.S., University of Nebraska
M.A., California State University, Long Beach
Ed.D., Nova University

GREGORY, KENNETH E.
B.A., M.A., Whittier College

GREINER, JOHN W.
B.A., M.A., Colgate University
Ph.D., University of Florida

HAGA, THORDIS JOHANNE
B.A., University of California, Berkeley
M.A., University of Southern California

HALL, EDWIN M.
B.E., M.A., University of California, Los Angeles

HALVERSON, NORMAN D.
B.A., California State University, Long Beach

HANSEN, MERRILL W.
University of California, Los Angeles

HART, HENRY W.
B.S., M.S., Northeastern State College

HARVEY, ROBERT L.
B.A., University of California, Los Angeles
M.E., University of Southern California

HATCH, WILLIAM H.
B.S., Southeast Missouri State College
M.E., University of Missouri

HEYWOOD, ALAN B.
A.A., Long Beach City College
B.A., M.A., California State University, Long Beach

HILL, JESSE C.
Eight years’ experience in body and fender work

HOBBICK, CHARLES
A.A., Long Beach City College

HOFFMAN, LAWRENCE R.
A.A., Los Angeles Valley College
B.A., California State University, Los Angeles
M.A., National University, San Diego

HOHEISEL, CHARLES R.
B.S., M.S., University of Michigan

HOLBROOK, NANCY E.
A.S., Cypress Community College
B.S.N., M.S.N., California State University, Long Beach

HOLM, IRMA T.
B.A., University of Redlands
M.A., United States International University

HOOK, ROBERT L.
A.A., Orange Coast College
B.V.E., California State University, Long Beach

HORN, GENEVIEVE T.
R.N., B.S.N., Duquesne University
M.A., California State University, Los Angeles

HORNER, LEE ANNE
B.A., University of St. Thomas
M.A., Indiana University

HOUGH, W. ROGER
B.S., California State University
M.A., West Virginia University

HOWARD, M. WAYNE
B.A., University of Redlands
M.A., San Jose State University

HOWELL, CHARLES D.
A.A., El Camino College
B.V.E., California State University, Long Beach
Ed.D., Nova University

HOWLETT, BETTY L.
B.A., California State University, San Diego
M.A., California State University, Long Beach

HUMES, D. ANN
B.S., University of Illinois, Urbana
M.A., California State University, Fullerton
Ph.D., University of California, San Diego

IMEL, JACK
B.A., Bethany Nazarene College
M.A., Oklahoma University

INSALACO, GEORGE S.
B.S., M.S., University of Arizona
JACKSON, CARL N., JR
 A.A., Long Beach City College
 B.S., University of California
 M.A., California State University, Long Beach

JACOBSEN, V. GARY
 B.A., M.Ed., Whittier College

JERVEY, A. ARDEN
 B.S., Ohio State University
 M.S., University of California, Los Angeles
 Ph.D., University of Michigan

JEWSBURY, WALTER M.
 B.S., M.S., University of Illinois

JOHNSON, J. WILLIAM
 A.A., Long Beach City College
 B.A., M.A., California State University, Long Beach

JOHNSON, LOWELL L.
 B.A., M.A., University of Denver

JOHNSON, MONT L.
 B.A., University of Utah
 M.A., California State University, Long Beach
 Ed.D., University of Southern California

JOHNSON, ROGER R.
 B.A., M.A., California State University, Long Beach

JONES, RICHARD L.
 A.A., B.A., M.A., Ed.D., University of California, Los Angeles

JORDAN, C. RUSSELL JR.
 B.A., California State University, Long Beach
 M.A., Chapman College

JUDD, WILLIAM P.
 A.A., Pasadena City College
 B.A., M.A., University of California, Los Angeles
 Ed.D., Brigham Young University

KALBUS, BARBARA J.
 B.A., Ph.D., University of Wisconsin

KARIGER, ROBERT L.
 B.S., Northwest Missouri State College
 M.S., University of Colorado

KASHIWABARA, JOHN E.
 B.S., University of Illinois
 M.D., University of Illinois, College of Medicine

KEATING, HENRY J.
 B.M.E., M.M., Northwestern University
 Ph.D., University of Southern California

KEILBACH, HERTA M.
 B.S., Mount St. Mary’s College
 M.A., California State University, Long Beach
 M.A., Ph.D., University of Southern California

KENDIG, THOMAS P.
 University of California, Los Angeles

KENYON, ROCHELLE S.
 A.A., Fullerton College
 University of California, Los Angeles
 University of California, Irvine

KEYES, RICHARD D.
 A.A., Highland Park Junior College, Michigan
 B.S., University of Michigan
 M.A., University of California, Berkeley

KEYS, WILLIAM J.
 A.A., Long Beach City College
 B.A., M.A., California State University, Long Beach

KILLOUGH, MARIE M.
 R.N., Queen of Angels School of Nursing, Los Angeles
 B.S., M.A., California State University, Long Beach

KIMBALL, WEBSTER H.
 B.A., Occidental
 M.A., California State University, Long Beach

KING, ROBERT J.
 B.A., Fresno State College
 Diploma, Moody Bible Institute

KINN, MARY A.
 University of California, Los Angeles
 University of California, Irvine

KLEIN, SHIRLEY H.
 B.A., M.A., Arizona State University

KLOPPENBERG, DON W.
 A.A., Fresno City College
 B.A., M.A., California State University, Fresno

KNEISEL, PAUL R.
 B.A., M.A., University of Louisville
 M.S., Indiana University
 Ed.D., University of Southern California

KNIGHT, WILLIAM R.
 B.S., Parks College of Aeronautical Technology, Oklahoma State University

KNOX-POSHKA, MARILYS L.
 B.S., M.A., California State University, Long Beach

KRAMER, RICHARD A.
 B.A., Dartmouth College
 M.A., Northwestern University
 Ph.D., University of Southern California

KROGFOS, ROBERT B.
 B.S., University of North Dakota
 M.S., M.B.A., University of Southern California

KUELBERG, DAN
 A.A., Long Beach City College
 B.V.E., California State University, Long Beach

LACKMAN, ALICIA H.
 B.A., M.A., Washington State University

LANDE, RIVIAN S.
 B.S., Roosevelt University, Chicago
 M.A., California State University, Long Beach

LANDRETH, ORIAN M.
 A.B., Friends University

LANNING, JOE F.
 B.A., Pepperdine College
 M.A., University of California, Los Angeles

LAVOYER, PETER T.
 B.A., M.A., California State University, Fullerton

LEMA, ZEWDE
 A.A., B.A., M.B.A., Northrop University, Los Angeles

LEWIS, HAZEL S.
 B.S., University of Southern California
 M.A.Ed., California State University, Long Beach

LEWIS, ELIZABETH R.
 B.A., George Peabody College
 M.A., Scarritt College
LIGGETT, NANCY W.
A.A., Long Beach City College
B.A., M.A., California State University, Long Beach

LITTLEFIELD, WILLIAM N.
B.A., Pomona College
M.A., Stanford University

LOGAN, EVA T.
B.A., University of Puget Sound
M.A., California State University, Long Beach

LONG, BENNETT A.
B.S., University of Southern California
M.A., California State University, Long Beach

LOPEZ, WILLIAM
A.A., East Los Angeles College
B.A., M.A., California State University, Long Beach

LUBICK, EMIL E.
B.A., University of Montana
M.A., University of Minnesota
Ed.D., University of Southern California

LUHMANN, GILBERT A.
A.A., East Los Angeles College
B.A., California State University, Los Angeles

LUKSTEIN, EDUARD
B.S., California State University, Long Beach
M.B.A., California State University, Dominguez Hills

LUOMA, IRMA
B.S., Indiana State Teachers' College
Ed.M., Harvard University

LUPASH, CORNELIA B.
M.S., California State University, Long Beach

LYNOTT, MARY
B.A., University of Illinois
M.A., Northwestern University

LYON, THOMAS R.
B.S., University of Oregon
M.A., California State University, Long Beach

MALONE, RICHARD F.
B.S., Memphis State College
M.S., University of Wisconsin
Ed.D., University of Southern California

MARLOTTE, GRETCHEN S.
B.A., Occidental College
M.A., Columbia University

MARSHALL, MARY E.
B.S., University of California, Los Angeles
M.S., University of California, Berkeley

MARTINOFF, MICHAEL M.
A.A., Glendale College
B.S., University of Southern California
M.A., Pepperdine University

MASTIN, BETTY H.
A.A., Long Beach City College
B.A., California State University, Long Beach
M.A., University of Southern California

MASTROS, MARVIN
A.A., East Los Angeles College
B.A., M.A., California State University, Los Angeles

MATLIN, NORMA
B.A., M.A., University of California, Berkeley

McCUNE, JOHN T.
B.A., M.A., Chico State University
Ed.D., University of California, Berkeley

McDONALD, SHIRLEY T.
B.A., University of California, Los Angeles
M.A., California State University, Long Beach
Certified T.E.S.L.

MC FARLAND, GLENN W. JR.
B.A., M.A., Pepperdine University

McFERRIN, CHARLES W.
B.S., University of California, Berkeley
M.B.A., California State University, Long Beach

McGRATH, WILLIAM D.
B.S., M.A., University of Washington

MCKEE, H. WILLIAM
A.S., Long Beach City College

McKIBBON, THOMAS D.
B.A., California State University, Long Beach
B.S., Arlington College

McKENNY, ROBERT
A.A., Long Beach City College
M.A., University of California, Los Angeles

METZ, HERMAN E.
Nine years' experience in auto mechanics

MEYER, ELEANOR A.
B.A., M.A., Ph.D., University of California, Los Angeles

MILLS, WILLIAM D.
B.A., California State University, Long Beach

MIRENT, CAROLINE W.
A.A., Long Beach City College
B.V.E., California State University, Long Beach
University of California, Los Angeles
Duke University Nursing School

MITCHELL, DOROTHY B.
B.A., M.S., California State University, Long Beach

MOORHEAD, C. DAVID
B.A., Wheaton College
M.A., Michigan State University

MUESSE, HENRY R.
New Mexico Highlands University

MURPHY, JAMES M.
A.S., Long Beach City College
B.A., M.Ed., M.S., Whittier College

MYERS, ROBERT R.
B.A., University of California, Santa Barbara
M.A., California State University, Long Beach

NAGY, GARY C.
A.A., El Camino College
B.A., University of California, Los Angeles
M.A., California State University, Dominguez Hills
NAPIER, DENNIS A.
B.A., California State University, Long Beach
M.A., California State University, Los Angeles

NARET, SHIRLEY D.
B.S., M.S., California State University, Los Angeles
Ed.D., Nova University

NASHED, YACOUB
B.A., Columbia Union College
M.S., Georgetown University

NITZKOWSKI, KENNETH M.
B.A., University of California, Los Angeles
M.A., California State University, Long Beach

O’HEARN, JOHN F.
B.S., Ball State College
M.B.A., University of Washington

OLLIVER, PERRY S.
B.A., University of California, Los Angeles
M.A., California State University, Long Beach

O’NEILL, BEVERLY L.
A.A., Long Beach City College
B.A., M.A., California State University, Long Beach
Ed.D., University of Southern California

OPDAHL, RICHARD D.
B.A., Harvard University
M.A., California State University, Long Beach

ORGILL, MELVA F.
B.S., University of California, Berkeley
M.A., California State University, Long Beach

ORR, ROBERT G.
B.A., University of California, Los Angeles
M.A., California State University, Long Beach
M.D., San Francisco Theological Seminary

PACE, DENNY F.
B.S., M.S., University of Southern California
Ed.D., Texas A&M University

PANCHO, ZENAIDA C.
B.S.N., Philippine Women’s University, Manila
M.A., New York University

PENDLETON, BILLY L.
B.A., California State University, Long Beach
M.S., University of Southern California

PETEERSON, JOHN E.
B.A., M.A., California State University, Long Beach

PHILIP, HUBERT S.
University of Detroit
B.V.E., California State University, Long Beach

PHIPPS, ROBERT P.
B.S., Northwest Missouri State Teachers College
M.S., California Institute of Technology

PIBEL, DAVID M.
B.S., M.A., Central Missouri State College
M.L.S., University of Washington

PINCKARD, J. HOWARD
B.E., M.E., Arizona State College
Ph.D., California Institute of Technology

PORTER, GERALD L.
B.A., Central Michigan University
M.A., California State University, Los Angeles

PRICHARD, ROBERT P.
B.A., M.A., University of Southern California

PROUST, JOYCELYN A.
B.A., M.A., University of Denver

PUTNAM, GLENN D.
B.A., University of Redlands
M.S.W., University of Southern California
M.A., Webster University, St. Louis

RAMAN, GOPAL
B.A., University of Madras
M.S., University of Massachusetts
M.B.A., Western New England College

RANALL, JANE K.
B.A., University of Nebraska, Lincoln
M.A., California State University, Fullerton

REED, LOUISE
B.S., A.B., University of Colorado
M.B.A., Colorado State College of Education

REINERTSON, ROSELLA O.
B.S., North Dakota State College

RHODES, GARY
A.A., Fullerton Community College
B.S., California State University, Long Beach

RICKARDS, SALLY L.
B.S., Pennsylvania State University
M.S., California State University, Long Beach

RISCHER, CARL E.
B.S., Utah State University
M.A., Ph.D., University of California, Los Angeles

ROBERTS, SHIRLEY M.
A.A., Long Beach City College
B.A., California State University, Long Beach

RODRIGUEZ, RAYMOND
A.A., Long Beach City College
B.A., M.A., California State University, Long Beach
M.A., University of Southern California

ROGERS, CAROL K.
A.A., Lake Erie College for Women
B.A., M.A., California State University, Long Beach
Ph.D., Claremont Graduate School

ROMAN, FRANCES R.
B.A., Brooklyn College, Brooklyn, New York
M.A., University of Michigan, Ann Arbor
M.A., University of Hawaii, Honolulu

ROQUET, ERROLL P.
B.A., Pennsylvania College
B.S., M.S.E., University of Southern California

RULON, CHARLES L.
B.S., M.S., Northwestern University

RUWE, VICTOR W.
Diploma, I.C.S., Building Construction
B.V.E., California State University, Long Beach
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<td>SNOW, VIDA E.</td>
<td>B.S., Southwest Missouri State College M.S.L.S., University of Southern California</td>
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<td>SPEEGLE, LYLE G.</td>
<td>B.A., Immaculate Conception Seminary, Missouri M.A., Phil.M., University of Toronto</td>
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<td>SPIELMANN, PHYLLIS W.</td>
<td>B.S., Cornell University M.A., M.F.C.C., California Family Study Center</td>
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<td>STEINER, ARTHUR F.</td>
<td>B.A., University of California, Santa Barbara M.S., Ed.D., University of Southern California</td>
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<td>STONE, LYLE D.</td>
<td>B.A., California State University, San Diego M.A., San Diego State University D.M.A., University of Missouri, Kansas City</td>
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<td>STREET, JOHN H.</td>
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<td>B.S., M.A., Columbia University, New York M.A., Princeton University</td>
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<td>TALMACHOFF, HELEN M.</td>
<td>R.N., Mercy Hospital School of Nursing, Pittsburgh, PA</td>
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<td>TELLER, ROBERT W.</td>
<td>B.A., Brown University M.A., University of California, Los Angeles</td>
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<td>THARP, LOUIS B. JR.</td>
<td>B.A., Yale University M.A., Ph.D., Claremont Graduate School</td>
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<td>THOMPSON, PATRICIA C.</td>
<td>B.A., University of Denver M.A., California State University, Long Beach</td>
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<td>THOMPSON, WILLIAM A.</td>
<td>B.S., Springfield College M.A., California State University, Long Beach</td>
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<td>TOM, MARILYNN C.</td>
<td>A.A.S., B.A., University of California, Los Angeles Ed.M., Western Washington College of Education</td>
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<td>TOWNSEND, MARILYN G.</td>
<td>B.A., University of Kentucky M.Ed., University of Missouri</td>
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<td>A.A., Long Beach City College B.S., University of California, Los Angeles M.Ed., Teachers College, Columbia University J.D., Western State University</td>
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<td>B.B.A., Loyola University M.A., California State University, Long Beach</td>
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<td>UEJIO, CLIFFORD K.</td>
<td>B.A., University of Hawaii M.A., California State University, Los Angeles M.A., University of California, Los Angeles Ph.D., State University of New York, Buffalo</td>
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<td>VAIL, WILLIAM B.</td>
<td>B.A., Whittier College M.A., Chapman College</td>
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<td>VAN ASTEN, WILLY</td>
<td>A.S., Los Angeles Trade Technical B.V.E., California State University, Long Beach</td>
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Faculty Emeriti

VAN HOOK, ROGER E.
A.A., Long Beach City College
B.A., M.A., California State University, Long Beach

VAN HOOTEN, JOSEPH E.
B.A., M.A., California State University, Long Beach

VELARDE, CELINA P.
B.A., M.A., California State University, Long Beach

VELLEKAMP, HENRY
A.A., Compton College
B.A., University of California, Santa Barbara
M.Ed., Azusa Pacific University

VON GUNTEN, KAYE L.
B.S., University of Wisconsin, Madison
M.S., University of Wisconsin, La Crosse

WADDELL, MALINDA J.
B.S.N., Niagara Falls University, New York
M.N., University of California, Los Angeles

WAECHTER, PAUL E.
B.S., M.A., Ball State University

WALKER, DELBERT A.
B.E., M.A., University of California, Los Angeles

WARNEMUENDE, M. JAMES
A.A., El Camino College
B.A., M.A., California State University, Long Beach
Ph.D., University of Southern California

WARNER, JOANNA B.
A.A., B.S., Ohio University

WATTS, ALBORN
Certified Manufacturing Engineer, University of Illinois
University of California, Los Angeles

WEIR, MARY K.
B.A., M.A., University of California, Berkeley
Ph.D., University of Illinois

WEISS, BERNICE L.
B.A., Wellesley College
M.A., California State University, Long Beach

WEST, LA NOR L.
B.S., M.Ed., University of Illinois
M.A., California State University, Long Beach
Ed.D., University of Southern California

WHEATFILL, EDWARD L.
B.A., Stanford University
M.A., University of California

WHITMORE, FREDERICK E.
A.A., Long Beach City College
B.A., M.A., California State University, Long Beach

WILLIAMS, CAROLYN D.
A.A., Fullerton College
B.A., Whittier College
M.A., California State University, Long Beach

WILLIAMS, HERBERT H
B.A., California State University, Fresno
M.A., University of California, Berkeley

WILLIAMS, MARY B.
B.S., Ball State University
M.A., Chapman College
Ed.S., University of Northern Colorado
Ed.D., University of Southern California

WILLIAMS, OTIS M.
B.S., Langston University
M.A., California State University, Long Beach
Ed.D., University of Southern California

WITSCHER, JOYCE B.
R.N., Michael Reese Hospital School of Nursing
A.B., M.A., California State University, Long Beach

WOLFF, CARL M.
B.S., M.E., Marquette University, R.P.E.
ARNOLD, LYNAE
Finance Clerk
ASB Finance Office

Dexter, Lynn
Information Specialist
Foundation

DRAUT, PAT
Accounts Payable Clerk
ASB Finance Office

DRIGHT, EVELYN
Evening Supervisor
PCC Bookstore

FLOYD, ANNIE
Bank Clerk
ASB Bank - PCC

FUENTES, KRISTY
Athletic Business Specialist

GONZALEZ, BEBE
PCC Bookstore Manager

LOCQUIAO, JOSEPHINE
Jr. Accountant
ASB Finance Office

MARTHA, PAT
Finance Clerk
ASB Finance Office

MCLENDON, ADELE
Accounts Supervisor
ASB Bank

MeCOY, ROCHELLE
Book Department Manager
LAC Bookstore

McMEANS, DENISE
Administrative Facilitator
ASB Enterprises

MORALES, MARTHA
Receiving Supervisor
LAC Bookstore

MOUA, CAESER
Textbook Reservation
Software Asst.
LAC Bookstore

NELSON-RAYBURN, MARIANNE
ASB Accountant
ASB Finance Office

O'DONNELL, SEAN
Assoc. Director of Finance
ASB Finance Office

PUTNAM, SUSIE
AMS Clerk

SALAZAR, TERRY
Floor Supervisor
LAC Bookstore

TITCHENER, CAROL
Customer Service Supervisor,
LAC Bookstore

URIBE, JANE
Merchandise Manager
LAC Bookstore

VIEYRA-SANDGREN, MONICA
Book Coordinator
LAC Bookstore

WALCH, DANA
Assistant Director
Foundation

WAYLAND, MARTHA
Director of Bookstores and
Food Services

WUNDERLICH, CHRISTEL
Evening Cashier Supervisor,
LAC Bookstore

YOUNG, JANICE
AWS Clerk
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