

# SAN BERNARDINO VALLEY COLLEGE

## 2002-2003

A PUBLIC COMMUNITY COLLEGE IN CALIFORNIA  
A COLLEGE OF THE SAN BERNARDINO COMMUNITY COLLEGE DISTRICT



<b>PART I</b>	THE COLLEGE
<b>PART II</b>	DEGREE, CERTIFICATE, AND TRANSFER INFORMATION
<b>PART III</b>	ANNOUNCEMENT OF COURSES
<b>PART IV</b>	ADMINISTRATION AND FACULTY

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701 South Mount Vernon Avenue • San Bernardino, CA 92410 (909) 384-4400

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*SBVC is an affirmative action institution. All courses and programs are provided for all residents regardless of race, color, sex or handicap.*

*SBCCD y sus dos planteles, SBVC y Crafton Hills College proveen oportunidades iguales en cuanto a admisión, ayuda financiera a los estudiantes, infraestructura de apoyo estudiantil y actividades y empleo sin discriminar a causa de raza, color religión, sexo, edad, o incapacidad física o nacionalidad. Cada curso que recibe renumeración del estado es de matrícula abierta a toda persona que haya sido admitida a la universidad y que cumpla con los requisitos del curso. Para información adicional llame a George Fleming, (909)384-8975.*

*This publication is available in alternate formats (Braille, large print, e-text) for qualified persons with disabilities. Call (909) 384-4443, for information.*

Dear San Bernardino Valley College Student,

Welcome to another academic year at San Bernardino Valley College. You are going to be a part of many changes at your college this year. The campus will be starting major construction to improve the seismic safety of our buildings. This project started over the summer and will continue for several years. Every effort will be taken to minimize the impact of this construction on the institutional programs and services on campus.

Your College provides a broad range of educational programs to meet your needs for transfer or career development. Instruction is provided by a caring committed faculty and staff that have your success as their top priority. You can be assured that the quality of our educational programs will meet your needs.

The faculty staff and administration seek a commitment from you that you will apply yourself to scholarly pursuit. Resources are available to you to provide assistance when necessary. You need to apply yourself and use the resources available. You will be successful in reaching your goal if you apply yourself and work with the faculty and staff where you need help.

Participating fully in college activities can enhance your College experience. Become a part of student government; enjoy the many clubs, and other enriching experiences that are available to you. This is your college experience, make the most of it. The faculty, staff and administration will be there for you during the experience and will applaud your success.



A handwritten signature in cursive script that reads "Donald F. Averill".

Dr. Donald F. Averill, Chancellor





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## CALENDAR FOR THE 2002-2003 ACADEMIC YEAR

### FALL SEMESTER 2002

August 19	First Day of Fall Semester Instruction
September 2	Labor Day – Holiday
October 1	Deadline - Last Day to apply for Fall, 2002 graduation
November 11	Veteran's Day – Holiday
November 28-30	Thanksgiving Recess
December 12	Last Day of Instruction Day and Evening
December 13, 16-19 and 21	Final Examinations
December 25 – January 12	Winter Recess

### SPRING SEMESTER 2003

January 13	First Day of Spring Semester Instruction
January 20	Martin Luther King Day – Holiday
February 14	Lincoln's Birthday – Holiday
February 17	Washington's Birthday – Holiday
March 1	Deadline - Last Day to apply for Spring, 2003 graduation
March 17-22	Spring Recess
May 14	Last Day of Instruction Day and Evening
May 15-21	Final Examinations
May 23	Commencement

### SUMMER SESSION 2003

Start dates will be available during the Spring 2003 semester.

Check the Fall, Spring or Summer *Schedule of Classes* for specific dates in that semester, such as the period of registration and the last day to withdraw.



## PART I - THE COLLEGE

### GENERAL INFORMATION

#### The College

San Bernardino Valley College is a comprehensive community college that serves the residents of the Inland Empire. The college is one of 108 locally governed California community colleges, and as such, is regulated by the California Education Code and is subject to the decisions of the California Legislature and the California Community College Board of Governors. The college is responsible to its local constituency through an elected Board of Trustees, which is the principal policy-making body for the college.

Students of the college are drawn, for the most part, from the local community. In addition, specific programs at the college attract students from throughout the state and world. Students range in age from under 18 to over 80 years, and reflect the ethnic and cultural diversity of the region.

#### Mission Statement

The mission statement describes San Bernardino Valley College's reason for being. The district's Board of Trustees formally adopted this mission on June 13, 2002:

*San Bernardino Valley College is a comprehensive community college dedicated to making lifelong learning opportunities accessible to a diverse student population. The college serves high school graduates and those over eighteen years of age. In addition, the college provides a gateway to higher education and vocational training for non-traditional populations, including: qualified high school students; re-entry adults; immigrants; the educationally or financially challenged; and those who cannot or choose not to attend the main campus.*

*The mission of San Bernardino Valley College is: to prepare students to transfer to four-year colleges and universities; to provide students with the knowledge and skills needed to succeed in business, industry and the professions; to advance the state and region's economic growth and global*

*competitiveness through continuous workforce development; to work in partnership with the local community to improve the quality of life in the Inland Empire; and to prepare students for active participation in a multicultural society. The faculty and staff of San Bernardino Valley College are committed to student success and to teaching and service excellence.*

#### Tenets

The college tenets describe the philosophy and values of San Bernardino Valley College's faculty, staff, and administration:

*We believe:*

- *That a well-educated populace is essential to the general welfare of the community.*
- *That a quality education empowers the student to think critically, to communicate clearly, and to grow personally and professionally.*
- *That an enriched learning environment promotes creativity, self-expression, and the development of problem-solving skills.*
- *That we must provide students with access to the resources, services, and technological tools that will enable them to achieve their educational goals.*
- *That we can measure our success by the degree to which our students become self-sufficient learners and contributing members of society.*
- *That plans and decisions must be based on an informed consideration of what will best serve students and the community.*
- *That we must model our commitment to lifelong learning by maintaining currency in our professions and subject disciplines.*
- *That all levels of the college organization must openly engage in sharing ideas and suggestions to develop innovative ways to improve our programs and services.*
- *That interaction between all members of the college community must be marked by professionalism, intellectual openness, and mutual respect.*
- *That we must hold ourselves and our students to the highest ethical and intellectual standards.*

- *That we must maintain a current, meaningful and challenging curriculum.*
- *That students succeed best when enrolled in classes that meet their interests and match their level of academic preparedness.*
- *That all members of our campus community are entitled to learn and work in an environment that is free from physical, verbal, sexual, and/or emotional threat or harassment.*

## Vision Statement

The vision statement represents the collective sense of the direction the faculty, staff and administration would like to see the college move over the next decade. The district's Board of Trustees adopted the vision statement on June 13, 2002:

*San Bernardino Valley College will become the college of choice for students in the Inland Empire, and will be regarded as the "alma mater" of successful, lifelong learners. We will build our reputation on the quality of our programs and services and on the safety, comfort, and beauty of our campus. We will hold both our students and ourselves to high standards of achievement, and will expect all members of the college community to function as informed, responsible, and active members of society.*

## History

San Bernardino Valley College was established in 1926, and originally served only the San Bernardino and Colton Unified School Districts. The population served has now expanded to include communities throughout the Inland Empire. Over the years, the original four-building campus has grown to one of eighteen major buildings grouped conveniently around a central quadrangle and mall, giving easy access to the numerous special purpose classrooms, lecture halls, laboratories, studios, shops and practice rooms. A faculty of 16 has grown to a teaching staff of more than 180 full-time and 400 hourly faculty, and a student body of 140 has grown to one of over 13,000. San Bernardino Valley College is proud of its long tradition of service to our community, and the faculty and staff are gratified to know they have played an important part in improving the lives of so many.

## Length of Programs

San Bernardino Valley College offers associate degrees and a wide variety of certificate programs.

The amount of time it will take a student to complete an associate degree will depend on whether he/she is attending full-time or part-time, on the student's level of preparation, and on the number of prerequisite courses he/she is required to take. Typically, a student attending full-time with few prerequisite requirements could complete an associate degree in two years. Students attending part-time could take as long as four or five years.

The amount of time it will take to complete a certificate program will depend on whether the student is attending full-time or part-time, the number of units required for the certificate, the rotation of courses over a one- or two-year sequence, and the number of prerequisite courses the student is required to take. A very limited number of certificate programs can be completed in one semester. The majority will take one or two years if the student attends full-time. Consult with the vocational advisor for your program. A list of advisors is found in the *Schedule of Classes*.

## Accreditation

San Bernardino Valley College is fully accredited by the Western Association of Schools and Colleges, an institutional accrediting body recognized by the Commission on Recognition of Post Secondary Accreditation and the U.S. Department of Education. In addition, the college is accredited by the National League for Nursing and the California State Board of Registered Nursing.





## ADMISSION REGULATIONS

Admission to San Bernardino Valley College is governed by the laws of the State of California and by supplementary regulations established by the San Bernardino Community College District Board of Trustees. Every course, whether offered on the main campus or at a satellite location, is fully open to any person who is eligible for admission to San Bernardino Valley College and who meets any prerequisites as have been established in accordance with Title V of the California Administrative Code.

### Admission Requirements

The following groups are eligible for admission to San Bernardino Valley College:

- Any individual, age 18 or above, who can reasonably profit from instruction.
- Any individual who has graduated from high school or who has been awarded a California Certificate of Proficiency or who has successfully completed the GED.

In accordance with Board Policy 6020, any pupil enrolled in grades K-12 from a public school district may apply for admission to a District college upon submitting evidence that the Board of Trustees of the public school district has granted such approval. A parent or guardian of a pupil who is not enrolled in a public school district may petition the college president for such admission. The college president or designee shall review and act upon all applications.

Three categories of students currently in high school or below age 18 may be admitted to San Bernardino Valley College. All must complete an admission application and participate in the matriculation process of Assessment/Orientation/Advisement before registering for classes.

#### High School Juniors and Seniors enrolling in Transfer Level Courses (courses numbered 100+200)

- Must have a high school GPA of 3.0 or better as verified by an official transcript. An appeals process will be available to students with GPA between 2.7 and 3.0, in which provisional admission will be granted based on a letter of recommendation from a teacher currently teaching the student in an academic course.

- Must submit an application for admission to the College.
- Must submit **Special Student Attendance Approval** form signed by parent/guardian and high school principal or designee.
- Must register in transfer level courses.
- Courses cannot duplicate course currently available in their school.

#### High School Vocational Education Students, Grades 9-12

- Must have high school GPA of 2.0 or better as verified by an official transcript.
- Must submit an application for admission to the college.
- Must submit **Special Student Attendance Approval** form signed by parent/guardian and high school principal or designee.
- Must register in Vocational Education courses only.

#### Below Grade Eleven Students

- Parents must petition in writing to the Vice President of Student Services.
- The public school district of residence must grant approval in writing.
- Student must have proof of a 3.0 GPA or better as verified by transcript (except for students enrolling in Vocational Education courses, see above).
- Must submit **Special Student Attendance Approval** form.
- Must register in transfer level courses only (courses numbered 100+200)

Students from other colleges may be admitted with advanced standing upon presentation of official transcripts.

### Residence Requirements

Residence determination must be made each semester for non-resident tuition purposes. The college application and, if necessary, other evidence furnished by the student are used in making residence determination.

Any adult who is physically present in the state while, at the same time, intending to make California his/her permanent home, may establish legal residence. The resident determination date is that day immediately preceding the opening day of instruction for each semester or term. Steps must be taken at least one year prior to the residence determination date to establish the intent to make California one's permanent home with concurrent relinquishment of the prior legal residence. Some indications of intention to establish and maintain California residence include, but are not limited to:

- Payment of California state income tax as a resident.
- Registering to vote and voting in California.
- Possessing California motor vehicle license plates.
- Possessing a valid California driver's license.
- Maintaining a permanent military address or home of record in California while in the armed services.
- Establishing and maintaining active California bank accounts.
- Being a petitioner for a divorce in California.

In general, an unmarried minor (a person under 18 years of age) derives legal residence from the parent or parents with whom he/she lives.

The student who is within the state for educational purposes only does not gain the status of resident regardless of the length of his/her stay in California.

Exceptions to the residence requirements are as follows:

1. Persons below the age of 19 whose parents were residents of California but who left the state while the student who remained was still a minor. When the minor reaches 18, the exception continues for one year to enable the student to qualify as a resident student.
2. Persons below the age of 19 who have been present in California for more than a year before the residence determination date and who have been entirely self-supporting for that period of time.
3. Persons below the age of 19 who have lived with and have been under the continuous direct care and control of an adult, not a parent, for the two years immediately preceding the residence determination date. Said adult must have been a California resident for the most recent year.
4. A student who is a member of the armed forces of the United States stationed in this state on active military duty shall be entitled to resident classification for one year from the time the member reports for duty in California.
5. A student who is a natural or adopted child, stepchild or spouse and who is a dependent of a member of the armed forces of the United States stationed in this state on active duty shall be entitled to resident classification for one year from the time the member reports for duty in California. This military exception does not require any intent on the part of the military member or dependent to become a resident of California. If, however, after the one year has elapsed the member or dependent has not satisfied California residence requirements, he/she will not be entitled to resident classification until the intent requirements have been fulfilled for the one-year period.
6. A student who is a full-time employee of a public institution of higher learning, or whose parent or spouse is a full-time employee, will be entitled to resident classification until he/she has resided in the state the minimum time necessary to become a resident.

Any student may make a written appeal to the Dean, Campus Gateway Division within 30 calendar days of notification of a final decision by the college regarding classification.

### Out-of-State Students

Out-of-state applicants are admitted to the college on the same basis as California residents except that they are required to pay non-resident tuition fees in addition to other fees required by the college. After a student has been present in California for one year and has manifested clear intent to become a California resident, he/she may apply for reclassification as a California resident.

### International Students

San Bernardino Valley College is approved by the Immigration and Naturalization Service to admit non-immigrant international students who are taking lower division work for transfer to four-year institutions or who are taking course work to complete a two-year occupational major. San Bernardino Valley College requires the full completion of each of the following items:

- An application for admission accompanied by a non-refundable processing fee of \$25.
- A minimum score of 450 on the Test of English as a Foreign Language (TOEFL), paper-based or 133 on the computer-based TOEFL.
- Official transcripts of high school and college records, accompanied by a notarized translation if the original is not in English.
- A bank statement and a verification of funds or affidavit of support, sufficient to cover all expenses while in this country.
- A recent photograph, passport size.
- F1 students must purchase International Health Insurance in Administration, Room 111.

When all requirements have been met, the student will be mailed a letter of acceptance, along with an I-20 (certificate of eligibility) form. Transfer students must submit a copy of the I-20 form from the previous school attended, along with an Intent to Transfer form obtained in Administration, Room 111.

In order to be considered for admission, all application items must be submitted (by May 1 for the fall semester and November 1 for the spring semester) to the International Student Counselor, Counseling Center, Administration, Room 111.

Prior to registering for classes, the international student must also be prepared to present to the International Student Counselor the results of a chest x-ray or a negative tuberculosis skin test taken in the United States (The skin test may be taken in the campus Health Center for a nominal fee). F-1 students must be enrolled in 12 units per semester, per I.N.S. regulations.

### Veterans

San Bernardino Valley College offers courses approved for Veterans Administration benefits under Title 38, Chapters 30, 31, 32, 35, and 106 of the U.S. Code. An enrollment certification will be returned to the Veterans Administration when a veteran or his/her eligible dependent has completed the following:

- Filed a D.D. 214 form and other required documents with the Veterans Affairs Office.
- Filed an official transcript of all previous work taken at other colleges or universities with the Records Office (These records have to be evaluated and appropriate credit granted before the student can be certified for benefits. The applicant's initial certification to the Veterans Administration will reflect the total credit granted).
- Had his/her program approved by a counselor during or prior to registration. The program must be listed in the College Catalog.
- Enrolled in classes for the semester to be certified.

Regular and prompt attendance is expected of all students. Instructors may drop students who incur excessive absences regardless of the reasons for the absences. The effective date of the drop will be recorded on the permanent roll sheet. Grades of W (withdrawal) and NC (no-credit) are interpreted as unsatisfactory progress by the Veterans Administration. Additionally, a complete withdrawal during a term is considered unsatisfactory progress except in extenuating circumstances.

Veterans and their eligible dependents are responsible for notifying the Veterans Administration of any changes in their academic program, in their marital or dependent status, or in their address.



## REGISTRATION

### Registration Procedures

#### 1. *Filing an Application for Admission to the College*

All new and/or returning students must file an application for admission before registering for classes. Applications may be submitted to the Admissions and Registration Office (Administration, Room 106).

#### 2. *Transcripts of Prior Work*

Students should arrange to have official transcripts of all high school and college work sent to the Records Office (Administration, Room 109). These documents are important to have on file for proper counseling / advisement.

#### 3. *Assessment / Orientation / Advisement*

When you submit an application for admission in person, you will be able to choose a date and time for Assessment, Orientation, and Advisement (AOA). New students are **required** to participate in assessment unless specifically exempted from this process.

If you mail your application, or submit it on-line, you must come to the Admissions and Registration Office to receive an appointment card, which is your admission ticket to assessment. To get an appointment for the Ability-to-Benefit (ATB), please go to Financial Aid.

Report at least fifteen minutes early on the assessment date you have chosen. Bring your appointment card with you as well as a picture ID (driver's license or school ID).

**You may be exempt from assessment/orientation/advisement if:**

- You have an associate degree or higher from an accredited college or university; **or**,
- You have earned a score of 3 or higher in Advanced Placement Tests in **both** math and English; **or**,
- You have proof of taking an assessment test at another college within the last three years; **or**,
- You are taking courses for career advancement, to improve job skills, or to maintain certificate or license requirements **and** the courses you are taking do not require either math or English prerequisites; **or**,
- You are taking courses only for personal enrichment **and** are enrolled in 6 or fewer units in courses that do not have a math or English prerequisite **and** you have not completed more than 12 units total at the college.

**You may be exempt from the English assessment if:**

- You received a grade of "C" or better in a prerequisite English course at the college level within the last two years.

**You may be exempt from the Math assessment if:**

- You received a grade of "C" or better in a prerequisite math course at the college level within the last two years.

Here are questions students most often asked about Assessment, Orientation and Advisement:

#### *Why is the assessment required?*

Assessment will place you in proper English, reading, and math courses. During the Orientation/Advisement session following assessment, you will be introduced to the college's services. After your assessment is processed, the counselor will help you select appropriate courses for the semester.

#### *If I don't do well on the assessment, will I still be able to attend San Bernardino Valley College?*

Yes. This is not a pass/fail exam. It is a tool to help you and the counselor make appropriate educational plans for now and the future.

#### *How long will the Assessment, Orientation, and Advisement take?*

Approximately 3 hours.

#### *What if I need accommodations to complete the test?*

If you have a learning or physical disability that requires reasonable accommodation to complete the assessment test, please contact Disabled Student Programs and Services, located in Room 101 in the Campus Center.

#### *Do other colleges require assessment?*

Yes. Every community college in California is required to assess all new students. Most four-year colleges and universities also require an assessment of basic skills.

#### *Does a counselor discuss my assessment scores?*

Yes. Counselors are your best resource to tell you how to interpret placement skills.

#### *If my class has a prerequisite, what do I need to do?*

Take the prerequisite course, or refer to page 13 for other options.

#### 4. *Enrollment in Classes*

The *Schedule of Classes* provides detailed instructions on the procedures involved in registering for classes. Students may register either by telephone or in person, in accordance with the dates identified in the *Schedule of Classes*. **Attending courses without formally enrolling (i.e., auditing) is not permitted.**

Students who have an outstanding financial obligation will not be allowed to register for classes until the obligation is cleared. Examples of obligations falling under this policy include but are not limited to: returned checks, unpaid loans, equipment breakage, unpaid library fines, and registration fees.

The college reserves the right to cancel any class that does not meet the minimum size requirements established by the district. In some cases, cancellation may take place before the first class meeting. Students will automatically be mailed a refund of the enrollment fees for any class cancelled by the college.

## 5. Payment of Fees

Current fees are listed each semester on the payment coupon in the *Schedule of Classes*. All fees are due and payable at the time of registration. In addition to enrollment fees, students can be assessed the following: health fee, accident insurance, Student Representation fee, and Student Center fee. Optional fees include those for a parking permit and for the Associated Students (AS) discount card.

Students who are not residents of California are required to pay non-resident tuition. Non-resident tuition is payable at the time of registration.

## 6. Class Attendance

Students who are not in attendance at the first class meeting are considered "no-shows." Instructors may choose to drop no-shows in order to give their seats to non-registered students seeking admission.

## 7. Late Registration

Applicants who do not enroll during the registration period may enroll in classes during the first two weeks of the full-term fall and spring semesters, using the "Change of Program" process described below. However, an instructor may refuse to admit a late registrant when the work missed cannot reasonably be made up, when the class is full, or when normal progress in the course would be impossible or unsafe.

## 8. Change of Program

Registered students may change their programs during a designated period at the beginning of each semester. Once the telephone registration period has passed (or the first day of classes lasting less than 17 weeks), a *Request for Change of Program (Add/Drop)* form is needed to change a schedule. These forms are available through the Admissions and Registration Office (Administration 106). Students should request a computer printout whenever they make a schedule change. If a schedule is revised in such a way as to change the total number of units taken, the amount of enrollment fees will also change. When additional fees are required due to a schedule change, fees must be paid: (1) within five working days when the add/drop is completed by telephone; (2) immediately when the add/drop is completed in person.

## 9. Refunds

The amount of a refund for enrollment and service fees will vary in accordance with the following conditions:

- If a class is cancelled, a student will automatically be mailed a refund of enrollment, health, Student Representation fee and Student Center fee. No processing fee will be charged for overpayments or cancelled classes.
- If a student drops a class before the first day of classes, he/she will automatically be mailed a refund of enrollment, health, SBVC Student Representation fee and Student Center fee. There will be a \$10 refund processing fee. Refunds of amounts less than \$15 will not be processed.

- If a student drops a class after the first day of classes but on or before the end of the second week of classes (or 10 percent of the term for classes less than 17 weeks in length), he/she will automatically be mailed a refund of enrollment fees. All other fees are non-refundable as of the first day of class.
- If a student drops a class after the second week of classes (or after the first 10 percent of the term for classes less than 17 weeks in length), he/she is not eligible for a refund.
- If a student is dropped by an instructor, he/she is not eligible for a refund.

It takes approximately six to eight weeks to process a refund check. If a student wishes to apply the refund credit toward registration in another class, he/she must submit the drop and add at the same time.

## Matriculation

Matriculation is a process which is designed to assist students in accomplishing their educational goals. The process brings the college and the student into an agreement for the purpose of realizing the student's educational goal. The primary purpose of matriculation is student success.

The college agrees to provide:

- An admissions application process
- An orientation to the college's programs and services
- An assessment of the student's study skills, English language proficiency, computational skills, goals, career aspirations, academic performance, and need for special services
- Counseling and advisement to develop a student education plan (SEP)
- Follow-up evaluation of each student's progress in achieving an educational goal.

The student agrees to:

- Express at least a broad educational intent upon admission
- Declare an educational goal by the time the student has completed 15 units
- Attend class
- Work diligently to complete course assignments
- Demonstrate an effort to attain an educational goal
- Meet with a counselor to develop a student educational plan (SEP) that will meet his/her unique needs.

Matriculation goals are partially fulfilled through the ACAD 100 class. Students who intend to graduate from San Bernardino Valley College are required to complete ACAD 100 during the first two semesters in which they are enrolled in 9 or more units.



## ACADEMIC STANDARDS & POLICIES

### Attendance

All students are expected to attend classes regularly. Each instructor will inform students at the beginning of each term exactly what is to be expected regarding attendance in his/her class, and the instructor's decision is final. In the event an absence is unavoidable, students are responsible for notifying instructors.

A student's failure to attend class meeting(s) during the first week of a term may result in the student being dropped from the class. After the first week of classes during any term, an instructor may drop a student from any class in which the student has:

- Violated the instructor's stated attendance requirements;
- Accrued more than two absences per unit; or,
- Attended so irregularly that the instructor feels it is unwise for the student to continue.

Instructors may not drop students after the 14th week of instruction (for full semester classes) or after 75 percent of instruction (for short-term classes).

### Credit Hours (Units)

One credit is awarded for each 16-18 lecture hours of instruction, or for 48-54 laboratory hours, or for appropriate combinations of lecture and laboratory hours. For each one hour of lecture, students are expected to fulfill at least two hours of work outside of class in reading, preparing assignments, or other activities related to the course.

### Classification of Student Load

Students are defined as full-time when enrolled in 12 or more units in either the fall or spring semesters. A part-time student is one who is enrolled in fewer than 12 units in either the fall or spring

semesters. During the summer session, a full-time student is enrolled in 6 or more units and a part-time student is enrolled in fewer than 6 units.

An overload of units requires a counselor's signature for registration. An overload is considered to be anything over 18 units for the fall or spring semesters and anything over 8 units for the summer.

### Grades & Grade Points

The system of grades and grade points at San Bernardino Valley College is as follows:

		Grade Points Per Unit
A	Excellent	4
B	Good	3
C	Satisfactory	2
D	Passing, less than satisfactory	1
F	Failing	0
* CR	Credit	0
** NC	No Credit	0
*** I	Incomplete	—
*** W	Withdrawal	—
*** MW	Military Withdrawal	—
*** IP	In Progress	—
*** RD	Report Delayed	—

\* At least satisfactory; units are not counted in GPA; credit is earned.

\*\* Less than satisfactory; units not counted in GPA; NC units used in calculating units attempted for progress, probation and dismissal.

\*\*\* Non-evaluative symbols; no units or credit earned.

Only instructors may assign grades, and the grades given are final except in cases of mistake, fraud, bad faith, or incompetence. No grade will be changed for any reason or any circumstances after three years from the end of the term in which the grade was assigned.

## Credit / No Credit Grading

Students who wish to be graded in any class on a Credit/No Credit basis must pick up the appropriate form in the Admissions and Registration Office (Administration, Room 106). The paperwork must be filed no later than the end of the first 30 percent of the course. Credit will be granted only when the work is of a quality equivalent to a grade of "C" or better. A maximum of 15 units of credit (CR) courses may apply toward graduation requirements. Credit/No Credit grading is not permitted in a course within a student's major area of study. This rule may be waived for students who complete courses for credit and who later declare a major in that field of study. Once Credit/No Credit has been selected as a grading option, a letter grade (A-F) cannot be issued.

## Incompletes

An incomplete or "I" symbol will be awarded to the student who, in the judgment of the instructor, is unable to complete a course due to a verified emergency. An *Incomplete* form will be filled out by the instructor for each student. This form will cover the conditions for the removal of the "I" and the grade that will be recorded if the work is not completed within one year from the end of the semester in which the "I" was assigned. The student cannot register into the same course until the "I" has been removed.

## Withdrawals

If a student stops attending class, **it is the student's responsibility to officially drop the class.** A student who wishes to withdraw from all college classes should obtain an *Application for Withdrawal* form in the Admissions and Registration Office (Administration, Room 106). A student who wishes to drop one or more classes but continue enrollment in other classes should use the *Request for Change of Program (Add/Drop)* form. In either instance, the completed form should be returned to the Admissions and Registration Office as soon as possible. Prior to the end of the third week (or 30 percent of a term, whichever is sooner), no entry will be made on the student's record for dropping a class. A student who withdraws or is dropped from a course before the end of the 14th week of a semester (or before 75 percent of a short-term class has been completed) will not receive a letter grade. Instead, the letter W (Withdrawal) will be recorded on the student's transcript. This symbol carries no evaluation of the student's work, but is a clerical notation that the student was enrolled in the course and withdrew or dropped without grade or unit credit. However, W's are used in probation and dismissal procedures. Students will receive a letter grade if they continue any course after the 14th week of the semester (or after 75 percent of a short-term class has been completed).

A student activated for military service may receive a military withdrawal (MW) at any time during the semester. Military withdrawals will not factor into progress probation and disqualification. Students who are members of the military (active or reserve) or National Guard should present their military orders to the Records Office in order to have the MW assigned.

## Repeated Courses

Generally, students may take a course only once. There are three exceptions to this general statement:

1. Certain activity-based courses may be repeated when the faculty have determined that students are best able to achieve the objectives of the course through repetition. If a course number includes the notation x2, x3, or x4, then the course may be taken 2, 3, or 4 times. In accordance with Title 5, Section 55763 (b), students may also repeat courses that are necessary to meet a legally mandated training requirement as a condition of continued paid or volunteer employment.
2. Courses in which a D, F, W, or NC were received may be repeated **one** time. The units for which credit is given will count only once toward a degree or certificate. This will apply whether the course was repeated at SBVC or at another accredited college or university.
3. Students who have received a grade of A, B, C or CR and who wish to repeat a course may file a petition to establish that exceptional circumstances exist that would justify such a repetition. If the petition for Academic Exception is approved by the Scholastic Standards Committee, the course may be repeated **one** time. The grades issued for repeating a course under this petition process will not be counted in the computation of the college grade point average, and the units for which credit is given will count only once toward a degree or certificate.

## Final Examinations

Final examinations are given at the close of each semester. Students are required to take scheduled final examinations in order to receive credit. Any student who is purposely absent from an examination at any time during a semester forfeits the right to make up work by re-examination.

## Final Grades and Transcripts

Final grades are accessible via the Internet or through the telephone registration system approximately four weeks after the completion of the semester. To access Valley's *Campus Central* on the Internet, go to: <http://www.my.sbccd.net> or <http://www.my.valleycollege.net> To access grades through the campus telephone system, dial (909) 888-1996. Note: Final grades will not be released if there is a hold or fine on file in the College Business Office.

Requests for transcripts must be made in writing or by filling out the appropriate form in the Records Office (Administration, Room 109). Requests will be filled, providing the student owes no outstanding obligation to the college. The first two transcripts requested are provided at no charge; after two, there is a nominal charge for each request.

## Prerequisites, Corequisites, and Departmental Advisories

When registering for classes, students are required to adhere to enrollment policies that relate to prerequisites, corequisites, and departmental recommendations.

1. A *prerequisite* is a course or skill that must be completed prior to enrolling in the course. Students registered in a class without having completed the prerequisite(s) may be dropped from the class. Prerequisite courses must be completed with a grade of C or higher. Prerequisite courses completed with a grade of D or F indicate unsatisfactory performance in the course and do not satisfy the prerequisite.
2. A *corequisite* is another course that must be taken during the same semester as the course in which the student would like to enroll.
3. A *departmental advisory* is a suggested course that would be helpful for a student to have completed prior to enrolling. A departmental advisory is a suggestion, not a requirement.

Students may challenge a prerequisite or corequisite on one or more of the following grounds:

- The student can demonstrate he/she has the knowledge or ability to succeed in the course or program despite not having satisfied the prerequisite or corequisite.
- The student will be subject to undue delay in attaining his/her educational goal as outlined in his/her Student Education Plan (SEP) because the prerequisite or corequisite course has not been made reasonably available.
- The prerequisite or corequisite is either unlawfully discriminatory or is being applied in an unlawfully discriminatory manner.
- The prerequisite or corequisite has not been established in accordance with the District's process for establishing prerequisites and corequisites or was established in violation of Title V.

It is the student's responsibility to provide information to support the challenge. The challenge must be filed in the Division Office within the first week of class. The college will process the challenge within five working days. For information on challenging a prerequisite, speak to the Matriculation Coordinator (Administration, Room 101).

## Non-Degree Applicable Courses

Courses numbered in the 900s do not apply toward a degree, and are designed to provide the fundamental skills necessary for successful completion of other college courses. These include precollegiate courses in reading, writing, computation, learning skills, study skills, and English as a second-language. Non-degree applicable courses, including basic skills courses, are indicated in this catalog by numbers from 900 to 999. In accordance with Title 5, Section 55758.5 (b), grades earned in non-degree applicable courses are not included when calculating a student's degree-applicable grade point average.

Students will not receive credit for more than 30 units of basic skills course work taken in the San Bernardino Community College District. Basic skills course work earned in another community college district shall not be counted toward the 30-unit limit. Students enrolled in English as a second-language courses and students identified by the District for learning disabled programs are exempt from this 30-unit limit. Other students may apply for a waiver of the 30-unit limit. Contact a counselor for more information about the waiver process.

## Credit-by-Examination

Students who feel that their knowledge of a subject is equivalent to the content of a course offered by the college may apply for credit-by-examination. To do so, the following conditions must exist:

- The student must submit evidence of extensive background and/or experience in the subject to the instructor of the course.
- The student must have completed twelve (12) or more units at San Bernardino Valley College or be a permanent employee of the San Bernardino Community College District.
- The student must be enrolled in the college during the semester in which he/she takes the examination.
- In accordance with Board Policy 5080, credit by examination for Modern Language courses may be granted only to students who take the next higher language course while attending San Bernardino Valley College, and only with the approval of the Modern Languages Department Head.

An application for credit-by-examination is available from the Records Office (Administration, Room 109). In addition to paying an enrollment fee based on the number of units in the course that is being challenged, there is an additional \$20 processing fee that is applied to all credit-by-examination applications. Once the application has been approved by the administration and the necessary fees have been paid, notice will be sent to the instructor that he/she may administer the examination and submit the grade earned. Grades will be consistent with the grading systems established by the college and will be submitted to the Records Office by the end of the semester in which the examination is completed. The student's transcript will contain a notation that indicates that the credit was earned by examination. Any grades earned through credit by examination will be counted when determining athletic, financial aid and Dean's List eligibility. The units earned will not be counted in determining the twelve (12) semester hours of credit in residence required for graduation from the college (see Associate of Arts Degree graduation requirements on page 31 of this catalog). Financial Aid is not available for credit-by-examination.

## Credit for Military Service

Currently enrolled students who have had a minimum of one year of military service may petition to receive up to 7 semester units of credit for physical education and health education. Petition forms may be obtained in the Records Office (Administration, Room 109) or in the Counseling Center. Credit may also be granted for completion of service schools. Please contact the Counseling Center for details.

## Credit for Advanced Placement

Students who have completed Advanced Placement (AP) examinations of the College Entrance Examination Board with scores of 3, 4, or 5 may receive credit at San Bernardino Valley College as indicated in the table on page 16. A grade of Credit (CR) will be assigned on the transcript. Credit awarded through advanced placement may be used to satisfy graduation requirements toward the Associate Degree, IGETC and CSU General Education-Breadth requirements. The units earned from AP credit will not apply toward financial aid nor can they be used to satisfy the 12-unit residence requirement for graduation. (See Associate Degree graduation requirements on page 31 of this catalog).

## Credit Through the College Level Examination (CLEP) Program

A student must be enrolled at San Bernardino Valley College to receive course credit on the basis of results of the College Level Examination Program (CLEP). Credit will not be granted for courses in which equivalent or more advanced course work has been completed. Consult counselors in the Counseling Center (Administration, Room 111) for details on credit through CLEP. CLEP credits cannot be applied as general education transfer credits.

## Credit for Courses Taken at Other Colleges

Academic credits earned at other regionally accredited institutions are evaluated at the time of a student's initial enrollment at SBVC. It is therefore important that the student request official transcripts from all colleges previously attended. These transcripts should be sent to the Records Office (Administration, Room 109).

All religious courses taken at a denominational college need to be equated with a course at San Bernardino Valley College; otherwise, the religious courses are not allowed.

A student who has taken coursework at institutions of higher learning outside of the United States and who wishes to have that coursework considered toward his/her educational goal at San Bernardino Valley College must have the academic credentials evaluated by a bonafide independent evaluating agency. A list of recommended agencies is available in the Records Office (Administration, Room 109).

## Probation & Disqualification

### **Academic Probation:**

A student will be placed on academic probation when his/her cumulative grade point average in 12 or more units falls below 2.00 in all units attempted which were assigned on the basis of the college grading scale. A student will be informed that he/she is on academic probation both by a notation on his/her grade report and by letter. The letter will list common causes of unsatisfactory progress and will recommend services for improving academic achievement. A student on academic probation will not be allowed to register for additional courses until he/she meets with a

counselor. A student will be released from academic probation when his/her accumulated grade point average reaches 2.00 or higher. In addition, a student may appeal his/her probation status.

### **Progress Probation:**

A student will be placed on progress probation when he/she has completed at least 12 units and has received course completion symbols of W, I and/or NC in 50 percent or more of these units. A student will be informed that he/she is on progress probation both by a notation on his/her grade report and by letter. The letter will list common causes of unsatisfactory progress and will recommend services for improving academic achievement. If the student on progress probation also has a grade point average of less than 2.00, he/she will not be allowed to register for additional courses until he/she meets with a counselor. A student will be released from progress probation status whenever more than 50 percent of all the units he/she has taken at the college have been completed with an assigned letter or CR grade. In addition, a student may appeal his/her probation status.

### **Academic Disqualification:**

A student on academic and/or progress probation shall be dismissed for one semester when one or more of the following conditions exists:

- The student has earned a cumulative grade point average of less than 2.00 in all units attempted in each of the three consecutive semesters. (For purposes of this section, semesters shall be considered consecutive on the basis of the student's enrollment.)
- The student has received course completion symbols of NC, I and/or W in 50 percent or more of the units for which he/she was enrolled in each of three consecutive semesters.
- The student has received a combination of the two patterns listed above in each of three consecutive semesters.

As with probation, a student will be informed of dismissal both by a notation on his/her grade reports and by a letter. A student may appeal his/her disqualification status.

### **Readmission After Disqualification:**

A student may be reinstated one semester after the date of dismissal. Students enrolled following dismissal shall be on probationary status for one semester. If, after this semester, the scholastic achievement of the readmitted student continues at a probationary level, the student may be disqualified for one year.

## Academic Renewal

Students who feel that past substandard grades earned from San Bernardino Valley College or any other accredited college no longer reflect their current level of academic performance may petition the Scholastic Standards Committee to have the grades from any two consecutive semesters eliminated from the computation of their total grade point average. The following conditions will apply:

- The substandard grades must have been earned during no more than two consecutive semesters of attendance at any accredited college.

- The number of units under consideration for these two consecutive semesters may not exceed 30 semester units.
- During the time since the substandard grades were achieved, the student must have attended San Bernardino Valley College or any other accredited college and completed at least two semesters and at least 24 consecutive semester units with a cumulative grade point average of 2.50 or higher.
- Of the units obtained since the substandard grades were achieved, only the last 24 units completed will be used to determine eligibility.
- The student may not petition under these procedures more than one time.

If the conditions above are met and if the petition is approved by the Scholastic Standards Committee, the student's grade point average will be recalculated. Nonetheless, any institutional action taken under Academic Renewal will not remove the original courses, units, or grades from the student's permanent record. In accordance with Title V, all work attempted, once entered on the record, must remain legible and reflect the student's complete academic record.

## Open Enrollment Policy

San Bernardino Community College District and its two colleges, San Bernardino Valley College and Crafton Hills College, are committed to non-discrimination. Our goal is to provide equal opportunities for all community members in all areas of the college including admission, student financing, student support facilities and activities, and employment. Federal laws and district policies strictly prohibit all types of discrimination, including sexual harassment and inequities based on race, color, religion, sex, age, marital status, physical disabilities or mental impairments, or sexual orientation. The District's non-discrimination policies are supported by the requirements of Titles VI and VII of the Civil Rights Act of 1964, as amended; Title IX of the education amendments of 1972; the Age Discrimination in Employment Act of 1975; and sections 503 and 504 of the Rehabilitation Act of 1972, as amended, and the Americans with Disabilities Act.

San Bernardino Valley College is further committed to overcoming sex discrimination and sex stereotyping in vocational education programs. In addition, the lack of English language skills will not be a barrier to admission and participation in vocational education programs.

Students, job applicants, and employees may complain of any action that they believe discriminates against them on the above-cited grounds.

For information regarding the college's non-discrimination policy or to file a complaint, contact Charles Whiteside, Vice Chancellor of Human Resources and Employee Relations, District Building, SBCCD, 114 South Del Rosa Drive, San Bernardino, CA 92408. He can also be reached by calling (909) 382-4041.

For information regarding the requirements of Section 503 and 504 of the Rehabilitation Act of 1973 or to file a complaint, contact the Vice President of Student Services, San Bernardino Valley College (Administration Building, Room 201).

## Sexual Harassment Policy

Sexual harassment of students or employees in the academic and work environments violates both federal and state law and district policy, and it will not be tolerated. It also violates law and policy to retaliate against any individuals for filing a complaint of sexual harassment, or for participation in the investigation or resolution of a formal or informal, written or oral complaint of sexual harassment. Unlawful harassment on the basis of sex includes, but is not limited to, classroom conditions, grades, academic standing, scholarships, recommendations, employment opportunities, disciplinary action, or any other aspect of college life within the control of the District. Complaints of sexual harassment may be registered with Charles Whiteside, Vice Chancellor of Human Resources and Employee Relations, District Building, SBCCD, 114 South Del Rosa Drive, San Bernardino, CA 92408. He can also be reached by calling (909) 382-4041.

## Academic Freedom

San Bernardino Valley College is committed to the principle that the free expression of ideas is essential to the effective education of its students and should be limited only by the responsibility to express ideas with fairness and in a manner that respects the differing ideas of others and distinguishes between established fact and theories and one's own opinion.

No special limitations shall be placed upon the study, investigation, presentation, and interpretation of facts and ideas concerning human society, the physical and biological world, and other branches of learning, subject to accepted standards of academic and professional responsibility. Students shall have the opportunity to study controversial issues and divergent views and to arrive at their own conclusions. While students may represent without penalty any opinion in or out of class, they may be required to demonstrate knowledge of views contrary to their own in order to fulfill course requirements.

*(Excerpted from Board Policy 5150; for the full text of Board Policy 5150, ask at the Library Reference Desk to see the Board Policy Manual.)*

## ADVANCED PLACEMENT EXAMINATION SCORES

Advanced Placement Exam with Score of 3,4, or 5	SBVC Units Awarded	SBVC Prerequisite Course	SBVC General Education Graduation Credit	CSU General Education Credit	IGETC Credit
Art: History of Art	3	ART 100 or 102	Category III, 1 course	Category C1	Area 3A
Biology	4	BIOL 100	Category I, 1 course	Category B2	Area 5B
Chemistry	4	CHEM 101	Category I, 1 course	Categories B1 and B3	Area 5A
Economics: Macroeconomics	3	ECON 200	Category II, 1 course	Category D2	Area 4
Economics: Microeconomics	3	ECON 201	Category II, 1 course	Category D2	Area 4
English -Composition & Literature	4	ENGL 101	Competency in English	Category A2 or C2	Area 1A
French Language	5	Score 3=FRENCH 102 Score 4=FRENCH 103 Score 5=FRENCH 104	Category III, 1 course	Category C2	Language
French Literature	5	No equivalent	Category III, 1 course	Category C2	Area 3B
Government and Politics: Comparative	3	No equivalent	Category II, 1 course	Category D8	Area 4
Government and Politics: US	3	POLIT 100	Category II, 1 course	Category D8	Area 4
History: European	3	HIST 161	Category II, 1 course	Category D6	Area 3B
History: US	3	HIST 100 or 101	Category II, 1 course	Category D6	Area 3B
History: World	3	See History Dept.	Category II, 1 course	Category D6	Area 3B
Human Geography	3	No equivalent	Category II, 1 course	Category D5	Area 4
Language & Composition	4	ENGL 101	Competency in English	Category A2	Area 1A
Mathematics - Calculus AB	4	MATH 250	Competency in Math	Category B4	Area 2
Mathematics - Calculus BC	4	MATH 251	Competency in Math	Category B4	Area 2
Music Theory	3	MUSIC 101	Category III, 1 course	Category C1	Area 3A
Physics B	4	PHYSIC 101	Category I, 1 course	Categories B1 and B3	Area 5A
Physics C (Electricity and Magnetism)	3	See Physics Department	Category I, 1 course	Categories B1 and B3	Area 5A
Physics C (Mechanics)	3	See Physics Department	Category I, 1 course	Categories B1 and B3	Area 5A
Psychology	3	PSYCH 100	Category II, 1 course	Category D9	Area 4
Spanish Language	5	Score 3=SPAN 102 Score 4=SPAN 103 Score 5=SPAN 104	Category III, 1 course	Category C2	Language
Spanish Literature	5	No equivalent	Category III, 1 course	Category C2	Area 3B
Statistics	4	MATH 108	Competency in Math	Category B4	Area 2





## STUDENT AWARDS AND HONORS

### Academic Recognition Programs

Recognition for outstanding academic achievement is given in the following ways:

#### *Dean's List:*

Outstanding scholastic achievement by San Bernardino Valley College students is recognized through the *Dean's Honors List*. The *Dean's List* is generated twice in each academic year, once during the fall semester and once during the spring semester. This scholastic recognition is based on GPA earned during the prior semester as opposed to a cumulative GPA. To qualify for the *Dean's List*, students must complete 12 units of college-level courses during the prior semester. (Units earned through credit-by-examination will be counted when determining eligibility.) Courses taken on a "Credit/No Credit" basis and/or courses numbered in the 900s that do not apply toward a degree are not included when evaluating whether a student has met the 12-unit requirement. Qualifying students will be included on the *Dean's List* in the following categories:

- *Highest honors* for students earning GPAs between 3.90 and 4.00.
- *Honors* for students earning GPAs between 3.70 and 3.89.
- *Distinction* for students earning GPAs between 3.50 and 3.69.

#### *Graduating with Honors:*

Students who complete 60 units and who graduate with cumulative GPAs in the above three categories will be honored at graduation with special mention in the graduation program. No more than 15 units of course work graded on a Credit/No Credit basis will be included in this 60-unit requirement.

#### *Alpha Gamma Sigma:*

Students who have a cumulative grade point average of 3.00 or higher may join Alpha Gamma Sigma, the California Community College Honor Scholarship Society. Applications for admission to Alpha Gamma Sigma are available in the Alpha Gamma Sigma

office in Liberal Arts 113 and in the Counseling Center, Administration Room 111.

### Honors Program

The mission of the Honors Program is to provide students with a rigorous learning experience that encourages independent and creative thought, to enhance students' critical reading, writing and thinking abilities as tools for achieving further academic success, and to prepare students for transfer to four-year institutions and to remain in the academic honors track.

Students involved in the Honors Program have the opportunity to develop unique links with UCLA, UC Irvine, UC Riverside, Cal Poly Pomona, Pepperdine University, UC Santa Cruz, and Chapman University including:

- Priority admission consideration
- Priority scholarship consideration
- Privileges such as use of the libraries
- Opportunities to attend academic, cultural, and athletic events, campus tours, and the Honors Transfer Day

For admission to the Honors Program, a student must be eligible for ENGL 101. In addition, the student must meet one of the following standards:

1. A GPA of 3.0 or higher in at least 12 units of transfer-level college coursework (courses numbered 100 or above); or,
2. A high school GPA of 3.50 or higher.

Students who complete the Honors Program will receive a special seal on their transcripts and diplomas, a gold tassel for graduation, and an Honors Program medallion. To complete the program, a student admitted to the Honors program must:

1. Complete a minimum of 15 units of honors classes.
2. Complete 4 points (64 hours) of community service.
3. Maintain a GPA of 3.3 in Honors classes.
4. Maintain an overall GPA of 3.0 in all college coursework.

The honors courses range from one to three units. Most courses are accepted by the University of California and California State University systems, and most can be used to satisfy general education requirements. Students who qualify for the Honors Program may register for any of the following honors courses:

ACCT 285  
ART 285  
ECON 285  
ENGL 101H, 285A, 285B, 285C  
GEOG 285  
MATH 285, 286  
MUS 285  
NURS 285  
PHIL 285  
POLIT 285  
PSYCH 285  
SOC 285  
SPAN 285

For a complete course description of any of these, refer to the specific department listing in this catalog.

Students who would like to take a single honors course without fully participating in the Honors Program may enroll after satisfactorily demonstrating skill or aptitude in the discipline covered by that honors course. The prerequisite(s) for each course must be met by the individual student.

Call (909) 384-8972 for additional information.





## SERVICES FOR STUDENTS

### Art Gallery

The campus Art Gallery showcases the work of national, regional, local and student artists in 10 - 16 exhibits each year. The hosted receptions that open each show enable the public to meet the artists and instructors. During some shows, the artists will show slides and discuss their work. During the fall and spring semesters, the Art Gallery is open Monday - Friday, 10 a.m. to 2 p.m. Call (909) 384-8939 for additional information.

### Associated Students

The Associates Students (AS) is the official student governing body that represents all students at San Bernardino Valley College. The primary responsibility for AS is to represent student interests on college, district and statewide committees. In addition, they draft, adopt and supervise the AS budget. Students can become active in AS either by running for office or by applying for the various government positions. Each semester students are invited to purchase an AS discount card that entitles them to many benefits, including a 5 percent bookstore discount, free admission to athletic events, and discounts at local businesses. All students interested in participating in government, student activities, and in the planning and implementation of programs and services for students should visit the AS Office (Campus Center, Room 202) or call (909) 384-8690. The Student Activities Office (SAO) supports and advises the student governing groups. The SAO may be contacted for assistance in Room 203 in the Campus Center or by calling (909) 384-8690.

### Athletics

San Bernardino Valley College is proud of the success of its athletic teams. Men's sports include football, basketball, baseball, track, cross-country, swimming, soccer and tennis. Women's sports include basketball, volleyball, soccer, swimming, softball, tennis, track, and cross-country.

Students interested in competing on an inter-collegiate team should contact the Athletic Director at (909) 384-8638.

Also under the direction of the Athletic Department is the Pep Squad of cheerleaders and yell leaders. Tryouts are held annually in the spring and interested persons should contact the Athletic Director.

### Bookstore

The Bookstore, located on the lower level of the Campus Center, sells textbooks, a wide variety of supplies, sportswear, accessories, snacks and novelty items. Bookstore hours vary throughout the semester. Call (909) 384-4435 for additional information.

### Campus Child Development Center

The campus Child Development Center is a licensed facility designed to meet the developmental needs of children from nine months through five years. To participate, the child must have a parent or parents who are full-time students at SBVC. In addition, parents must attend a parent education class and participate in the Center three hours per week. For further eligibility and enrollment information, call (909) 384-4440.

### Career Center

The Career Center is located on the upper level of the Campus Center, Room 215. The Center houses several important services: off-campus placement (which includes referrals and on-campus interviewing), Federal Work Study, and the Choices CT program (to assist students with career exploration). Students may also do a job search via the Internet using CalJOBS or other websites. A large number of resources to assist students are available on careers, interviewing techniques, resume writing and job market projection. These include computer programs, videos, books, journals and other written materials. Helpful staff will get students started on their career exploration or job search. For additional information, call (909) 384-8674.

## Clubs/Organizations

A variety of clubs/organizations are available for SBVC students. Check with the Student Activities Office or with the Associated Student Office (both located on the main floor of the Campus Center) or call (909) 384-8690 for a complete list of active clubs and organizations.

## Counseling Center

The Counseling Center staff and faculty (Administration Building, Room 111) are available to assist students in making informed decisions about their academic, career and life goals. Counselors help students select the courses they need to meet requirements for general education, certificates, transfer, and graduation. The Counseling Center is open Monday through Thursday from 8:00 a.m. to 7:00 p.m., and on Friday from 8:00 a.m. to 4:00 p.m. Students may be seen on a walk-in basis (first-come, first-served) for 15 minutes, but are encouraged to make an appointment in advance to spend more time with a counselor. A variety of special programs are available through the Counseling Center, including:

- **Transfer services** to assist students who seek to transfer to any four-year college or university.
- **Personal counseling services** to meet the short-term needs of students with personal concerns.
- **Educational and career planning**, including development of a student education plan.
- **International student services** to meet the specialized enrollment and counseling needs of non-immigrant alien students.
- **Social referral services** to inform students of programs and resources both on- and off-campus, including emergency food, shelter, health and other related needs.

To make an appointment or for additional information, please call (909) 384-4404. *Students are encouraged to schedule an appointment with a counselor each semester.*

## Disabled Student Programs and Services

The department of Disabled Student Programs and Services (DSP&S) is designed to meet the individual needs of regularly enrolled, permanently and temporarily disabled students. Upon providing professional verification of a physical, learning, or mental disability, students may obtain a variety of services, including: disability management counseling; test taking accommodations; course materials in Braille, on tape, or in large print formats; the services of sign language interpreters and/or note-takers; tutoring services; and a variety of adapted equipment.

To obtain an accommodation for a disability, a student:

1. Must have a professionally verified disability. Professionals who are qualified to provide verification of a disability include—but are not limited to—physicians, psychologists, learning disabilities specialists, optometrists, and rehabilitation counselors.
2. May consult with a DSP&S faculty or staff member regarding the accommodation request.

3. May inform the instructor of the need for an academic adjustment or auxiliary aid. The student must allow the instructor a reasonable length of time to implement his/her accommodation request and make the necessary adjustments. Either the student or the instructor may choose to consult with a DSP&S faculty/staff member regarding verification or arrangements.

Students who need services related to a disability or who desire further information may either contact DSP&S at (909) 384-4443, or else visit the department directly (Campus Center, Room 101) to make an appointment for intake and advisement.

## Distributed Education

The office of Distributed Education coordinates the televised and computer-delivered courses available to students of San Bernardino Valley College and Crafton Hills College. Televised courses are broadcast on KVCR-TV, channel 24, and generally have five meetings on campus. KVCR is also available on cable systems and DirectTV (possibly on a different channel as selected by the independent provider). Online courses require access to a computer system connected to the Internet, and may have up to three meetings on campus. Fees and academic credits are the same as equivalent on-campus courses. The Distributed Education office is located in the District Publication Center at 631 S. Mount Vernon Ave., San Bernardino (north side of building). The office phone number is (909) 384-4325. The Internet site is <http://learnonline.sbccd.cc.ca.us.us/disted>.

## Extended Opportunity Programs and Services (EOPS) and Cooperative Agencies Resources for Education (CARE)

San Bernardino Community College District recognizes that, as a result of financial need, language differences, and academic difficulties, some students will need special assistance for college success. The EOPS program is a state funded effort that provides special services to full time community college students. Participants must meet financial and educational disadvantage criteria. After eligibility requirements are met, EOPS services include the following: specialized academic, career, and personal counseling, book service, tutoring, priority registration, transfer assistance, and special activities and workshops.

EOPS also offers CARE (Cooperative Agencies Resources for Education) to EOPS students who are single parents on TANF/CalWORKs with children under the age of fourteen. CARE services are in addition to what a student would receive as an EOPS student.

EOPS services are available at San Bernardino Valley College, Campus Center, Room 201 or call (909) 384-4412.

## Food Service/Snack Bar

During the fall and spring semesters, the Campus Snack Bar, located on the main floor of the Campus Center, is open Monday - Thursday, 7:30 a.m. - 8:30 p.m. and Friday 7:30 a.m. - 3:30 p.m. At other hours, food items can be obtained from the vending machines located in the North Dining Room in the Campus Center building as well as at other locations around campus.

During the fall and spring semesters, the college's award-winning Restaurant Management program operates an on-campus restaurant, The Sun Room. The Sun Room is open to faculty, staff and students on Mondays, Wednesdays and Fridays from 11:00 a.m. to 1:30 p.m., and offers a variety of sandwiches, salads and daily specials at a nominal cost.

## Learning Center

The Learning Center (Liberal Arts, Room 206) provides enrolled SBVC students with free access to personal computers, audio and video cassette players, and other multi-media equipment for use in class assignments and self-paced instruction. Students can also access the Internet through the Learning Center's computer laboratory. During the fall and spring semesters, the Learning Center is open Monday - Thursday, 8:00 a.m. - 9:45 p.m. and Friday - Saturday, 8:00 a.m. - 4:45 p.m. Call (909) 384-8804 for additional information.

## Library

The SBVC Library houses a collection of over 100,000 volumes, accessible through an online catalog which displays items in both the SBVC and the Crafton Hills College libraries. The catalog may be accessed through the Internet at <http://lr.valley.sbccd.cc.ca.us/libhome.htm>. There are 305 current print magazine subscriptions and an extensive backfile of magazine volumes. A 16-workstation computer network provides access to thousands of newspapers, magazines, journals, and other materials supporting research. In addition, enrolled students will be given a password—different each semester—enabling them to access the databases from their home computers. One or more copies of most textbooks used at SBVC are available for in-Library use through the "Textbook Bank." Librarians are available to assist students in the use of library resources, to help students find materials for term papers and other research assignments, and to orient classes to the Library and its services. Library cards are free and will be issued upon proof of attendance. During the fall and spring semesters, the Library is open Monday - Thursday, 7:55 a.m. - 10:00 p.m., and Friday - Saturday, 7:55 a.m. - 5:00 p.m. Call (909) 384-8841 for additional information.

## Scholarships and Awards

Scholarships are offered each year to students enrolled at San Bernardino Valley College. The scholarships are funded through businesses, associations and college organizations. Recipients are selected on the basis of academic achievement, character and other criteria including, in some cases, financial need. The Scholarships and Awards Office (Campus Center, Room 203-C)

administers the program in conjunction with the Scholarship and Honors Committee. Students who have completed 12 units at SBVC may apply for scholarships. Call (909) 384-8673 for additional information.

## STAR Program

The STAR Program (Liberal Arts, Room 204-E) provides specialized support to students who qualify (based on citizenship status, need for academic support, income, first-generation college student status, and physical or learning disability). Participants receive tutoring, academic workshops, personal and academic counseling, financial aid counseling and referral, and cultural enrichment activities. Call (909) 384-8605 for additional information.

## Student Health Center

The Student Health Center (Women's Gym, Room 9) is open Monday through Thursday from 8:00 a.m. to 9:00 p.m. and on Friday from 8:00 a.m. to 3:00 p.m. Summer hours and services vary. The Center offers first aid, emergency care, immunizations, and health screening for vision, hearing and blood pressure. Physicians are available for consultation, treatment, and referral. Women's clinic services include pap smear, pregnancy tests, and birth control. Personal counseling by licensed therapists is also available by appointment. There is no charge for office visits. Nominal fees are charged for pharmacy services, lab work, immunizations, and vision and hearing testing. Call (909) 384-4495 for additional information.

A Health and Accident fee paid at the time of registration supports the Health Center. The amount of this fee is posted in the *Schedule of Classes*. In addition to the health fee, International Students attending SBVC on a student visa must purchase a *Student's Accident and Sickness Medical Expense Plan* and provide a negative tuberculin skin test or a chest X-ray. Students are not charged the health fee if they qualify for one of the following exemptions:

- Apprentices attending college under an approved training program.
- Students attending college classes on high school campuses.
- Students enrolled only in community services classes.
- Students who depend exclusively upon prayer for healing in accordance with the teachings of a bonafide religious sect, denomination or organization (documentation required).
- Students who submit evidence that they are financially unable to pay the fees because of low income. This includes recipients of TANF benefits, the supplemental security income / state supplementary program, or a general assistance program. However, for students receiving a government grant, such as PELL Grants, the health fee will be included as part of the financial aid packet.

Those students who have none of their classes on a college campus, or who are registered only for Distributed Education classes, will pay only an accident insurance premium of \$1.50 per term. This insurance includes a \$50 deductible.

## Transfer Center

The Transfer Center (Administration Building, Room 112) is open to students planning to transfer to any four-year college or university. The center operates Monday - Thursday from 8:00 a.m. - 7:00 p.m. and Friday from 8:00 a.m. - 4:30 p.m. The Transfer Center highlights the following services each semester: campus tours, scholarship and financial aid information, various college workshops, community speakers, transfer orientation sessions, credit evaluations, monthly calendar of events, quarterly newsletter, career testing, a library of college catalogs, videos, and CD-ROMs, college applications, articulation agreements, college fairs, and a transfer/honor reception. Transfer materials may be requested from this office, and students may establish an appointment to see a four-year college or university representative. The Center also houses Project ASSIST, a computerized articulation system that provides information on comparable courses between SBVC and the other institutions. Kiosks allow students to access their current class schedule, four-year college web sites, their academic grades, the Internet, their email, and other pertinent transfer information. Call (909) 384-8941 for additional information.

## Tutorial Center

The Tutorial Center (Liberal Arts, Room 206) provides individual and small group tutoring sessions free of cost for enrolled college students. Tutoring is available in biology, chemistry, English, mathematics, psychology, Spanish, and a growing number of other subjects. Call (909) 384-8566 for additional information.

Self-paced computer-based courses in math, reading and ESL are also available. Call extension (909) 384-8566 for additional information.

## Veteran's Services

Veteran's Services (Administration Building, Room 109) provides assistance with paperwork and academic support to any veteran. For additional information, call (909) 384-8948.

## Workforce Development Office

CalWORKs is the welfare reform initiative that began in January 1998. As a result of this legislation, SBVC students who are on public assistance must now meet new school attendance and work requirements. Students on public assistance can seek support and guidance through the Workforce Development Office (Campus Center, Room 103-B) to assure that they are successful in their education and work-related activities while they remain in the CalWorks program. Services are available to assist with childcare, work-study, community service, job placement and educational goal attainment. For additional information, contact the Workforce Development Office at (909) 384-8670.

## Web Home Page / Internet Information

The college home page on the World Wide Web can be accessed at: <http://www.valleycollege.net>

## Writing Center

The Writing Center helps students at all levels and from all disciplines to improve their writing. The Center houses an experienced staff of writing consultants who are available for one-on-one writing conferences with students. In addition, the Center offers ESL conversation groups that meet weekly to explore language issues that challenge non-native speakers of English and schedules workshops throughout the year that focus on various aspects of the writing process. For more information, or to schedule an appointment with a writing consultant, visit the Writing Center in Liberal Arts Room 201, or call (909) 384-8244 for additional information.





## FINANCIAL AID PROGRAMS

If a student needs financial help to pay for the costs of attending San Bernardino Valley College, the Financial Aid Office (Campus Center, Room 211) offers assistance. While the primary responsibility for meeting college costs rests with the student and the student's family, the college recognizes that many students are not able to meet the full cost of a college education. Therefore, San Bernardino Valley College offers programs to provide assistance for students with documented need who might not otherwise be able to attend.

It is important that students apply for financial aid early. A minimum of six weeks is required to file the necessary documents and to process an application within the Financial Aid Office. Students may apply for financial aid at any time during the academic year. Financial aid awards, however, are limited to availability of funds and are awarded on a first-come, first-served basis with priority given to students with the greatest need who apply by the priority deadline.

The Financial Aid office can be reached by calling (909) 384-4400 ext. 4403.

### Eligibility Requirements

In order to receive financial assistance, a student must either possess a high school diploma (or its equivalent) or pass a standardized test. Students with professionally verified disabilities may request testing accommodations (for example, large print or Braille version of the test or additional time) by contacting Disabled Student Programs and Services at (909) 384-4443. In addition, a student receiving aid must have a stated educational objective and maintain satisfactory progress. California programs require recipients to be a resident of the State of California. Federal programs (grants and work) require recipients to be U.S. citizens or eligible non-citizens.

### Application Procedure

For most student aid programs described in this section, students must complete the *Free Application for Federal Student Aid (FAFSA)*. This form is available in the Financial Aid Office. Make sure San Bernardino Valley College is listed on your FAFSA. The Federal School Code for SBVC is 001272. These forms are available in the Financial Aid Office.

Applications for each new academic year are available in January. Financial aid is not continued from one year to the next. A student must apply for financial aid each school year. Deadlines for the various programs may vary; therefore, students are encouraged to visit the Financial Aid Office early each January for information.

### Financial Aid Programs

San Bernardino Valley College participates in the financial aid programs listed below. Additional information regarding each of the programs listed is available in the Financial Aid Office.

#### ***Board of Governors Enrollment Fee Waiver (BOG)***

This waiver is available to California residents to cover basic enrollment and health fees. Students must demonstrate financial need and complete the *Free Application for Federal Student Aid (FAFSA)* or *Board of Governors Enrollment Fee Waiver* application.

#### ***Cal Grant:***

The Cal Grant B program is for students from low-income families who meet all CalGrant eligibility requirements. The Cal Grant C program helps meet vocational training program costs for students from low and middle-income families. Selection is based on grades, vocational interests, and aptitude. Cal Grant C is not available to students who are pursuing a standard four-year college program. The deadline for all Cal Grant applications is March 2 for considered eligibility for the following academic year. Please be aware that a GPA verification form and a FAFSA must be completed prior to March 2 or September 2 to be considered for the Cal Grant programs. March 2 for considered eligibility for the following academic year.



**Federal Pell Grant Program:**

The Federal Pell Grant program provides federal grants up to a maximum of \$4,000 per year for students, depending upon the financial ability of the family and/or individual to contribute toward their cost of education (as determined by a federal formula).

**Federal Supplemental Education Opportunity Grant (FSEOG):**

The FSEOG program provides federal grants to a maximum of \$2,000 per year for students who qualify. The average grant at San Bernardino Valley College is \$500.

**Federal Work-Study:**

Federal Work-Study offers students the opportunity to earn a portion of their college expenses through part-time employment during the school year.

**Federal Stafford Loans:**

Subsidized Stafford Loans are awarded based on demonstrated financial need. The federal government pays the interest while a student is enrolled in school and for the first six months after the student graduates, leaves school or drops below half-time enrollment. The amount that can be borrowed depends upon the student's year in school (maximum 2<sup>nd</sup> year student at a community college), college costs and other aid being received. The maximum loan amount for first-year students is \$2,625 and \$3,500 for second-year students.

**Progress Requirement**

All students receiving financial aid are required to maintain satisfactory progress. Satisfactory progress will be monitored at the end of each spring semester for all Financial Aid students who apply for aid for the next school year. Detailed information on standards required to maintain satisfactory progress is available in the Financial Aid Office.

**Financial Aid Refund Policy**

San Bernardino Valley 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 percent 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 San Bernardino Valley College, a student's withdrawal date is: 1) the date the student officially notified the Admission 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.

**Air Force ROTC**

Through arrangements with California State University, San Bernardino (CSUSB), the first two years of the Air Force ROTC program are available for all qualified students. Scholarship opportunities, which pay up to \$9,000 tuition per year plus books/fees and a \$150 monthly allowance, are available for minorities and students in certain technical majors. Students in the last two years of the program automatically qualify for \$3,500 per school year. Upon graduation, students continuing in Air Force ROTC must transfer to a four-year university in the Inland Empire (including CSUSB, University of California, Riverside, and the University of Redlands) and complete the junior and senior years of a bachelor's degree. Entry into the last two years of the program is competitive and is based on academic qualifications, scores on physical fitness tests, and performance in Air Force ROTC leadership training.

Successful completion of the Air Force ROTC program and a four-year bachelor's degree leads to a commission as a Second Lieutenant with subsequent active-duty service in the Air Force. Interested students may obtain more information by contacting the CSUSB Air Force ROTC unit at (909) 880-5442.





## CAMPUS SAFETY

### College Police and Safety Services

It is a policy of the Board of Trustees for the San Bernardino Community College District to protect members of the total college community and the property of San Bernardino Valley College. In accordance with this policy, SBVC maintains police and safety services 24 hours a day, 7 days a week.

- FOR NON-EMERGENCIES: Contact the College Police and Safety Services Office at (909) 384-4491. (For example, this would be where to call in order to locate or turn in lost articles or to relay concerns for personal safety on campus).
- TO REPORT ANY CRIMINAL ACTION OR A LIFE-THREATENING EMERGENCY: Contact the College Police and Safety Services Office at (909)384-1222, or use any of the emergency telephones located in all campus buildings to connect directly to the College Police.

San Bernardino Valley College is required by the United States Department of Education to post and/or publish crime statistics. Crime statistics are available in the College Police and Safety Services Office.

### Parking Regulations

A parking permit or a daily pass is required to park in all college streets and lots. Semester and annual parking permits may be purchased through telephone registration, during arena registration, or at the College Police and Safety Services Office. Daily permits may be purchased through ticket vending machines in campus parking lots #6 and #7, and on College Drive. Individuals with disabilities must display a valid DMV Handicap Permit and a college parking permit to park in designated disabled parking spaces. The San Bernardino Community College District is not responsible for loss or damage to vehicles that are parked or stored on college property. Protect your vehicle and its contents by locking your car!

#### The fee for parking permits is as follows:

Annual (includes Fall, Spring and Summer)	\$35
One Semester (Fall or Spring)	\$20
Summer Session	\$15
Daily Pass	\$ 1

To be eligible for a refund of the parking permit fee: 1) all classes must be cancelled by the college and such cancellation must result in a student's withdrawal from the college; or 2) the student must withdraw from all classes PRIOR to the first day of instruction. The parking permit must be attached to the refund request. Refund request forms are available through the College Police & Safety Services Office (Campus Center, Rom 106).

Brochures are available in the College Police and Safety Services Office for additional information on parking rules and regulations.

### Substance Abuse

The San Bernardino Community College District strives to maintain a workplace free from the illegal use, possession or distribution of controlled substances, as defined in the Controlled Substances Act. Students, employees and visitors are subject to applicable legal sanctions under local, state or federal law for the unlawful possession or distribution of illicit drugs and alcohol. Disciplinary action may be imposed on a student for misconduct for the following infractions while attending college classes or college-sponsored events:

- The use, sale or possession of illegal drugs.
- The presence on campus of anyone under the influence of drugs or alcohol.
- The use or possession of alcoholic beverages on college property or at any college-sponsored event.

#### Federal Penalties and Sanctions for Illegal Possession of a Controlled Substance 21 U.S.C. 844 (a)

- **1st conviction:** Up to 1 year imprisonment and fined at least \$1,000 but not more than \$100,000, or both.
- **After 1 prior drug conviction:** At least 15 days in prison, not to exceed 2 years and fined at least \$2,500 but not more than \$250,000, or both.
- **After 2 or more prior drug convictions:** At least 90 days in prison, not to exceed 3 years and fined at least \$5,000 but not more than \$250,000, or both.

**Special sentencing provisions for possession of crack cocaine:** Mandatory at least 5 years in prison, not to exceed 20 years and fined up to \$250,000, or both.

(a) first conviction and the amount of crack possessed exceeds 5 grams.

(b) second crack conviction and the amount of crack possessed exceeds 3 grams.

(c) third or subsequent crack conviction and the amount of crack possessed exceeds 1 gram.

#### 21 U.S.C. § 853 (a) (2) and § 881 (a) (7)

Forfeiture of personal and real property used to possess or to facilitate possession of a controlled substance if that offense is punishable by more than 1 year imprisonment. (See special sentencing provisions re: crack.)

#### 21 U.S.C. § 881 (a) (4)

Forfeiture of vehicles, boats, aircraft or any other conveyance used to transport or conceal a controlled substance.

#### 21 U.S.C. § 844 a

Civil fine of up to \$10,000 (pending adoption of final regulations).

#### 21 U.S.C. § 853 a

Denial of Federal benefits, such as student loans, grants, contracts, and professional and commercial licenses, up to 1 year for first offense, up to 5 years for second and subsequent offenses.

#### 18 U.S.C. § 922 (g)

Ineligible to receive or purchase a firearm.

#### Miscellaneous

Revocation of certain Federal licenses and benefits, e.g. pilot licenses, public housing tenancy, etc., are vested within the authorities of individual Federal agencies. **NOTE:** These are only **Federal** penalties and sanctions. Additional **State** penalties and sanctions may apply.

## Drugs

**Hallucinogens** are very unpredictable. On some occasions euphoria may result; on other occasions disorientation, depression, or panic may prevail. A reaction or "trip" can occur without warning weeks or months after taking the drug.

**Heroin/Narcotics** are opiates and are used to relieve pain. Narcotics are both physically and psychologically addictive.

**Marijuana**, when smoked or burned, breaks down into over 2,000 chemicals entering the body. Two or three marijuana "joints" per day can do as much damage to the body as a pack of cigarettes a day.

**Nicotine** is the active chemical found in tobacco. Its chief hazards are cancer of the lungs, larynx, and mouth. It is estimated that nicotine kills approximately 340,000 Americans every year.

**Sedatives/Barbiturates** cause motor activities and coordination to be hampered and brain functions to decrease. It is very dangerous, as well as unlawful, to drive while under the influence of any sedative.

**Amphetamines/Stimulants** often provide a feeling of euphoria initially. However, these feelings usually change to anxiety, depression, and fatigue - often quickly and without warning.

**Anabolic Steroids (artificial male hormones)** suppress the gonadotropic functions of the pituitary. Some side effects include: liver and kidney dysfunction, testicular atrophy, premature closure of bone growth plates, hair loss, and acne.

**Caffeine** is found in coffee, tea, cocoa, cola drinks, some aspirin and diet pills, and some non-prescription cough and cold remedies. High doses may cause nausea, diarrhea, sleeplessness, headache, nervousness, and trembling.

**Cocaine/Crack** is extremely physically and psychologically addictive. The effects of crack are especially intense, immediate, and potentially deadly. There is *no antidote* for cocaine or crack overdose.

**FOR ILLEGAL DRUGS, THERE IS NO SUCH THING AS RESPONSIBLE USE.**

### It's the Law!

A blood alcohol level of .08 = Driving Under the Influence. This means if you weigh 150 lbs, you'll reach the DUI (Driving Under the Influence) level after consuming three drinks or less in one hour.

## Alcohol & The Body

### MOUTH AND ESOPHAGUS

Alcohol irritates the delicate linings of the throat and esophagus; that's why it causes a burning sensation as it goes down.

### STOMACH AND INTESTINES

Alcohol also irritates the stomach's protective lining and can result in gastric or duodenal ulcers. In the small intestine, alcohol blocks absorption of substances such as thiamine, folic acid, xylose, fat, vitamin B1, vitamin B12, and amino acids.

### BLOODSTREAM

Ninety-five percent of the alcohol taken into the body is absorbed into the bloodstream through the lining of the stomach and duodenum. Alcohol causes a slowing of the circulation systems and deprives tissues of oxygen. Alcohol also slows the ability of white blood cells to engulf and destroy bacteria and the clotting ability of blood platelets.

### PANCREAS

Alcohol irritates the cells of the pancreas and can lead to acute hemorrhagic pancreatitis. Pancreatitis can destroy the pancreas and create a lack of insulin.

## LIVER

Alcohol inflames and destroys the cells of the liver. This condition prevents bile from being properly filtered through the liver. Jaundice develops, turning the whites of the eyes and the skin yellow.

## HEART

Alcohol causes inflammation of the heart muscle.

## BLADDER AND KIDNEYS

Alcohol inflames the lining of the bladder. In the kidneys, alcohol causes an increased loss of fluids through its irritating effect.

## SEX GLANDS

Swelling of the prostate gland caused by alcohol interferes with the ability of the male to perform sexually. It also interferes with the ability of the male and female to climax during intercourse.

## BRAIN

The most dramatic and noticed effect of alcohol is on the brain. It produces a lack of coordination, confusion, disorientation, stupor, amnesia, coma, and finally death.

## Referral Resources

### CAMPUS:

#### STUDENT HEALTH CENTER

Women's Gym 9 • (909) 384-4495  
Monday -Thursday • 8 a.m. - 10 p.m.

#### ALCOHOL & DRUG STUDIES PROGRAM • (909) 384-8583

#### CODEPENDENTS ANONYMOUS

Weekly meetings  
Contact Student Health Center for information.

#### COUNSELING

(909) 384-4404

### LOCAL:

#### OFFICE OF ALCOHOL & DRUG PROGRAMS TREATMENT CENTER

565 N. Mt. Vernon Ave., Suite 100  
San Bernardino, CA 92410, (909) 387-7677

#### ALCOHOLICS ANONYMOUS

1263 N. Mt. Vernon Ave.  
Colton, CA 92324, (909) 825-4700 / 825-9216

#### AL ANON (For Families)

1012 E. Cooley Dr., Suite J2  
Colton, CA 92324, (909) 824-1516

#### NARCOTICS ANONYMOUS

(818) 780-3951 or (909) 883-2519

#### TOLL FREE INFORMATION

1-800-222-LINK - California Self Help Center (for self help groups near you)  
1-800-322-3363 - The Resource Center  
1-800-356-9996 - Al-Anon  
1-800-527-5344 - American Council on Alcoholism Help Line  
1-800-COCAINE - Cocaine Hotline  
1-800-NCA-CALL - National Council on Alcoholism  
1-800-662-HELP - National Institute on Drug Abuse Hotline



## STUDENT RIGHTS AND RESPONSIBILITIES

### Academic Records

Students have a right to expect their academic records to be treated in a confidential and responsible manner as required by the Family Educational Rights and Privacy Act of 1974 (FERPA). Specifically, they have:

1. *The right to inspect and review their education records within 45 days of the day the College receives a request for access.*

A student should submit to the Dean, Campus Gateway Division, a written request that identifies the record(s) he/she wishes to inspect. The Dean will make arrangements for access and will notify the student of the time and place where the record(s) may be inspected. If the records are not maintained by the Records Office, the Dean will advise the student of the correct official to whom the request should be addressed.

2. *The right to request the amendment of the portions of their education records that they believe are inaccurate or misleading.*

Students should write to the Dean, Campus Gateway Division, clearly identifying the part of the record they want changed, and specifying why it is inaccurate or misleading. If the college decides not to amend the record as requested by the student, the college will notify the student of the decision and will advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

3. *The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent.*

One exception that permits release of student records without written consent is disclosure to school officials with legitimate educational interests. A "school official" is defined as a person employed by the college in an administrative, supervisory, academic, research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the college has contracted (such as an attorney, auditor, or collection agent); a member of the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official has a "legitimate educational interest" if the official needs to review an education record in order to fulfill his or her professional responsibility.

4. *Students have the right to file a complaint with the U.S. Department of Education concerning alleged failures by San Bernardino Valley College to comply with the requirements of FERPA. The name and address of the Office that administers FERPA is:*

Family Policy Compliance Office  
U.S. Department of Education  
600 Independence Avenue, SW  
Washington, DC 20202-4605

### Animals on Campus

The college does not permit staff or students to bring animals on campus, with the exception of "seeing eye" and "hearing ear" dogs and animals used for instructional purposes. At no time should dogs be left in vehicles.

## Cheating and Plagiarism

It is the belief at San Bernardino Valley College that students share a responsibility with their instructors for assuring that their education is honestly attained. In keeping with this belief, every instructor has the responsibility and authority to deal with any instances of cheating or plagiarism that occur in the classroom. Cases of this nature may be heard by a grievance committee under the provisions of Board Policy 6090.

## Children on Campus and in the Classroom

All children (with the exception of high school juniors and seniors who have been admitted to the college) must be accompanied by an adult while on campus. Children are not allowed in the classroom under any conditions and are not to be left unattended in any campus facility.

## Complaints

Any complaint about a grade, an instructor, or course content should be made to the instructor involved, then to that instructor's Department Head, then to the Division Dean, and if necessary, to the Vice President of Instruction. See the description of the "Student Grievance Policy" in this catalog for a more formal procedure that is also an available option.

## Financial Obligations

Students who have an outstanding financial obligation will not be allowed to register for classes, receive grades, transcripts, diplomas or certificates, obtain enrollment verification or receive any other services normally afforded students in good standing. Examples of obligations falling under this policy include (but are not limited to) returned checks, unpaid loans, equipment breakage, and unpaid library fines. An item or service withheld shall be released when the student satisfactorily meets the financial obligation.

## Standards of Conduct

*In the Classroom:* Students are expected to take responsibility for helping to create a quality classroom environment. Students are expected to show:

1. **Respect for the instructor:** This would include arriving on time, staying for the entire class period, bringing assignments, textbooks and other appropriate materials to class, refraining from talking while the instructor or classmates are making a presentation, leaving cell phones and other electronic devices off during class periods, and using a moderate, mature and respectful tone when participating in group discussions.
2. **Respect for other students:** This would include using appropriate language in public areas and refraining from physically or verbally 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 or assignments, turning in work that is not one's own (i.e. plagiarism), talking during tests, furnishing false

information to college personnel, or knowingly misrepresenting oneself to the college is grounds for disciplinary action. The consequences of cheating are severe and may include receiving a grade of "F" for the class or possible expulsion from the college.

An instructor has the right to remove a student from class any time he or she considers the student's actions to be interfering with a proper collegiate environment. The instructor may also refer the incident to the administration for disciplinary action as warranted.

*On the Campus:* Creating a proper campus environment is also very important for academic and individual success. The Board of Trustees of the San Bernardino Community College District has established district-wide standards of student conduct, which will be enforced at all times. These rules of conduct are particularly important in large common areas such as the cafeteria, bookstore, vending areas, campus quads, and other highly frequented areas.

## Grounds for Disciplinary Action

Student conduct must conform to district and college rules and regulations. Violations of such rules and regulations, for which students are subject to disciplinary action, include, but are not limited to, the following:

- Continued disruptive behavior, willful disobedience, habitual profanity or vulgarity, or the open and persistent defiance of the authority or persistent abuse of college personnel.
- Dishonesty, such as cheating, plagiarizing or knowingly furnishing false information to the college or to college officials.
- Willful or persistent smoking in any area where smoking has been prohibited by law or by regulation of the Board of Trustees.
- The use or possession of alcoholic beverages on college property or at any college sponsored event, or the presence on campus of anyone under the influence of alcohol.
- Assault, battery or any threat of force of violence upon a student, visitor to the campus, or college personnel.
- Willful misconduct which results in injury or death to a student, campus visitor or college personnel member, or cutting, defacing, or otherwise harming any real or personal property owned by the district.
- The use, sale or possession of illegal drugs or substance or any poison classified as such in § 4160, Schedule D of the Business and Professions Code, or the presence on campus of anyone under the influence of such drug substances.
- Forgery, alteration or misuse of college documents, records or identification.
- Violation of college regulations governing student organizations, the use of college facilities or the time, place and manner of public expression or distribution of materials.
- Unauthorized entry to facilities or unauthorized use of college supplies, equipment, and telephones.
- Possession or use of any firearm, explosive device, dangerous chemical or other deadly weapons while on college property or at college-sponsored activities.
- Driving of motorcycles and other off-road vehicles on college property other than the regular roads and parking lots.

- Persistent, serious misconduct where other means of correction have failed to bring about proper conduct.
- Obstruction of pedestrian and/or vehicular traffic while on college property or at college-sponsored activities.

See Board Policy 6060 for additional information about student conduct.

## Types of Disciplinary Action

Disciplinary actions that are imposed by the college for the violation of its rules or the laws of the state of California include the following:

- **Reprimand** (a verbal or written recognition of a violation of good conduct which admonishes the offender to avoid future infractions).
- **Probation** (a disciplinary action which returns the offender to the college community on his or her promise of appropriate future behavior; may include, but is not limited to, ineligibility to participate in extra-curricular activities and certain other student privileges.)
- **Suspension** (exclusion from the college and college-sponsored activities for a specified time).
- **Expulsion** (exclusion from the college and all college-sponsored activities by the District Board of Trustees).

## Student Grievance Policy

It is the stated policy of the Board of Trustees of the San Bernardino Community College District that "the relationship between students and college personnel is of vital importance to the learning process." With this principle comes the recognition that there may be many divergent viewpoints and that a process by which these viewpoints can be aired and resolved must be established.

In accordance with Board Policy 6060, a student may initiate a grievance against a college employee for any of the following reasons:

- An act or threat of intimidation, harassment, discrimination or physical aggression.
- Any arbitrary action without proper regard to academic due process.
- Any violation of student rights.

No individual or group has the authority to change a grade assigned by an instructor unless persuasive evidence of instructor error, fraud, bad faith or incompetence is presented.

The San Bernardino Community College District has established a due process procedure that has as its goal the satisfactory resolution of the problem at the lowest possible level. The procedure has several levels:

<b>Level I</b>	<b>Informal Discussion</b>
<b>Level II</b>	<b>Review of Request for Student Grievance Committee Hearing</b>
<b>Level III</b>	<b>Student Grievance Committee Hearing</b>
<b>Level IV</b>	<b>Recommendation of Grievance Committee/Action by College President</b>

At the beginning of each school year, a standing panel is appointed from which one or more Student Grievance Hearing Committees may be appointed. The panel consists of five to fifteen faculty members, five to fifteen students and four to ten administrators/supervisors. The Hearing Committee will consist of a maximum of two faculty members, two students, and one administrator/supervisor to hear each grievance.

### Level I: Informal Discussion

A student who wishes to discuss a grievance relating to a condition or practice of the district/college, including but not limited to alleged unlawful discrimination, must first attempt to resolve the issue by contacting the instructor/administrator/supervisor of the class, service or office most closely related to the origin of the alleged problem. A student not satisfied with the outcome of that conference may next attempt to resolve the alleged problem by conferring with the immediate supervisor of the person with whom the initial conference was held. In most cases, this will be the Division Dean.

### Level II: Review of Request for Student Grievance Committee Hearing

If the alleged problem is still unresolved, the student may request a formal hearing. A request for a hearing shall be submitted in writing to the Vice President of Student Services. This written notice shall state the condition, practice or alleged act, injustice, or unlawful discrimination that is being grieved and, if possible, should include a proposed resolution to the problem.

Within three working days of receipt of the grievance notice, the Vice President of Student Services shall determine if the allegations were filed in a timely manner. If the grievance notice meets the above criterion, the Vice President of Student Services, within five working days, shall appoint a Student Grievance Hearing Committee following the guidelines of the "Standards of Student Conduct and Disciplinary Procedures."

The student and any college personnel involved in the allegations shall be notified of the time and place of the hearing in writing. The notice shall include the names of the Hearing Committee and all documentation relating to the allegation(s).

### Level III: Student Grievance Committee Hearing

The hearing shall convene within ten working days. Persons appearing before the committee have the right to be assisted by an advocate and/or legal counsel. The burden of proof rests upon the party bringing the charge. The committee renders a written report and a recommendation.

### Level IV: Recommendation by Student Grievance Committee/Action by College President

Within five working days following receipt of the report of the Hearing Committee Chairperson, the college President or designee shall provide a written notification to the student and to other parties directly involved in the issues as to the recommendation. In the case of a designee, the college President will advise all parties directly involved of the decision within five working days.

Note: If either party is not satisfied with the final college-level disposition of the grievance, he/she shall, through the District Chancellor's Office, appeal directly to the San Bernardino Community College District Board of Trustees within ten working days. Person's wishing to do so should contact: Chancellor's Office, San Bernardino Community College District, 114 S. Del Rosa Drive, San Bernardino, CA 92408.

## Ombudsperson

The President of the College appoints an Ombudsperson to assist students with their grievances. This person's responsibility is to help students resolve issues of concern. If an informal resolution is not obtained, the Ombudsperson will explain to the student the policies and procedures necessary to present a grievance to the campus Grievance Committee. The current Ombudsperson is Dr. Diane Pfahler, whose office is located in Liberal Arts 150, and who can be reached at (909) 384-8592. Students may also contact the Vice President of Student Services, Maria Elena Martinez, by calling (909) 384-8992.





## PART II - DEGREE, CERTIFICATE AND TRANSFER INFORMATION

Successful completion of approved programs at San Bernardino Valley College may lead to:

- Completion of lower division (freshman and sophomore) requirements for transfer to upper division (junior) standing at a four-year college or university.
- An *Associate of Arts* or *Associate of Science* degree.
- A *Certificate of Completion* in a specific occupational field.

Even though these objectives are listed separately, it is possible to achieve all three concurrently during the first two years of college. For example, it is possible to use the coursework completed for a certificate program as a major for an associate degree. Similarly, students completing lower division requirements for transfer to a four-year college or university will find it possible to meet the requirements for an associate degree from San Bernardino Valley College.

Students are encouraged to work with a counselor to develop a plan to help them meet their educational goals in a time-effective manner.

### Associate Degree (Graduation) Requirements

Graduates from San Bernardino Valley College (SBVC) receive an Associate of Arts degree or an Associate of Science degree. To earn an Associate degree, students must complete general education breadth requirements as specified in Option #1 or Option #2 below, as well as additional units of electives and/or lower division requirements for a major.

Students must file a Graduation Application in the Records Office by the deadlines listed below:

Fall graduation -	October 1
Spring graduation -	March 1
Summer graduation -	July 1

When printed deadlines fall on either Saturday or Sunday, the filing period will be extended to the Monday following the deadline date.

### Associate Degree: Option #1

The Option 1 associate degrees are general degrees designed for students who plan to attend a four-year college or university.

#### **Associate Degree Option 1a**

The general education breadth requirements are the same as the requirements for the *Intersegmental General Education Transfer Curriculum* (IGETC). Refer to page 32 of the catalog for the IGETC requirements. In the process of completing this coursework the student must fulfill these general requirements:

1. Complete a minimum of 60 semester units of college coursework, with at least 12 semester units in residence at SBVC.
2. Earn a letter grade of C or higher in each course.

#### **Associate Degree Option 1b**

The general education breadth requirements for this degree are the same as the requirements for the *California State University General Education Breadth Requirements* (CSU GE). Refer to page 34 of the catalog for the CSU GE requirements. In the process of completing this coursework the student must fulfill these general requirements:

1. Complete a minimum of 60 semester units of college coursework, with at least 12 semester units in residence at SBVC.
2. Earn at least a 2.0 grade point average for the CSU GE coursework. Earn a grade of C or better for each course in the Oral Communication, Written Communication, Critical Thinking and Mathematical/Quantitative Reasoning categories.

## Associate Degree: Option #2

This general Associate Degree is designed for students planning to seek immediate employment after graduation. The general education breadth requirements for this degree are listed below. In the process of completing this coursework, students must fulfill these general requirements:

1. Complete ACAD 100.
2. Complete a minimum of 60 semester units of college coursework, with at least 12 semester units in residence at SBVC.
3. Earn an overall grade point average of C (2.00) or higher.
4. Complete coursework for an Associate of Arts or an Associate of Science major as listed in Part III of the *San Bernardino Valley College Catalog*.
5. Demonstrate competency in English, mathematics and reading by satisfying the following criteria:
  - a. Competency in English as demonstrated by completion of ENGL 015 or ENGL 101 or ENGL 101H with a grade of C or higher.
  - b. Competency in mathematics as demonstrated by:
    - (1) Completion of MATH 090, BUSCAL 091, TECALC 097, or a higher level course in mathematics with a grade of C or higher, or
    - (2) Completion of a mathematics proficiency examination which is equivalent to a comprehensive final examination in MATH 090 with the equivalent to a grade of C or higher.
  - c. Competency in reading as demonstrated by:
    - (1) Completion of READING 970X3, 100, or 101 with a grade of C or higher, or
    - (2) Completion of all courses required to satisfy minimum graduation requirements in Categories I, II and III as listed below with an overall grade point average of 2.00 or higher.
6. Complete 24 to 26 of the 60 semester units needed for graduation from the five subject categories as listed below:

**Category I: Natural Science (minimum: 4 semester units if a laboratory is included; otherwise 6 semester units).** Courses in the following subjects carry credit for Natural Science:

ANTHRO 106  
 ASTRON (all courses)  
 BIOL (all courses)  
 CHEM (all courses)  
 FCS 162  
 GEOG 050, 110, 111, 114, 285  
 GEOL (all courses)  
 OCEAN (all courses)  
 PHYSIC (all courses)  
 PS 101

**Category II: Social and Behavioral Science (minimum: 6 semester units; the two courses must be from two different subject areas).** Courses in the following subjects carry credit for Social and Behavioral Sciences:

ANTHRO (all courses)  
 CD 105  
 ECON 100, 200, 201, 285  
 GEOG 102, 106, 120  
 HIST (all courses)  
 POLIT (all courses)  
 PSYCH 052, 100, 101, 102, 103, 104, 110, 111, 112, 113, 114, 116, 118, 285  
 SOC 100, 110, 130, 141, 285  
 SPEECH 135, 174, 176

**Category III: Humanities (minimum: 6 semester units; the two courses must be from different subject areas with no more than three semester units within the category of Applied Courses).** Courses in the following subjects carry credit for Humanities:

ANTHRO 109, 110  
 ARCH 145, 146, 150  
 ART 100, 102, 103, 105, 108, 109, 110, 111, 112, 285  
 ASL 109, 110, 111  
 COMM 100  
 DANCE 200, 203  
 ENGL 055, 063, 065, 151, 153, 155, 161, 163, 165, 167, 175, 232, 260, 261, 270, 271, 275, 280, 281, 285A, 285B, 285C  
 FRENCH 101, 102, 103, 104  
 HIST 135, 153, 160, 161, 170, 171  
 MUS 100, 101, 102, 104, 105, 106, 107, 121, 122, 285  
 PHIL (all courses)  
 RELIG (all courses)  
 SPAN 101, 102, 103, 104, 158, 285  
 SPEECH 110, 120  
 THART 100, 110, 115

**Humanities, Applied Courses (Maximum of 3 units):**

ARCH 151, 159  
 ART 120X4, 124X4, 126X4, 132X4, 145, 148, 149, 150, 158X4, 159X4, 161, 164X4, 175X4, 181, 182, 183, 212X4, 240X4, 270X4  
 MUS 103, 117X4, 126, 130, 133, 134, 136, 141X4, 150X4, 152X4, 154X4, 156X4, 158X4, 160X2, 162X4, 168X4, 170X4, 171X4, 174X4, 176X4, 178X4  
 THART 114X4, 120, 135, 160X4, 165, 222

**Category IV: Communication and Learning Skills (minimum: 6 semester units).**

1. English composition is required of all students. Courses meeting this requirement are ENGL 015 or 101 or 101H.
2. Students may select from the following courses to complete the other portion of the requirement:



BUSCAL 091, 200, 208  
 CD 140  
 COMM 107, 110, 113, 114  
 CSYS (all courses)  
 ECON 208  
 FRENCH 101, 102, 103  
 LIB 110  
 MIS (all courses)  
 MATH (all courses except MATH 942, 952 and TECALC 950)  
 OIS 115A, 173, 174A, 176, 179  
 PHIL 103  
 PSYCH 105  
 READ 970X3, 100, 101  
 SPAN 015, 016, 101, 102, 103, 119, 140, 158  
 SPEECH 100, 111, 125, 130, 140

**Category V: Physical and Health Education (minimum 2 semester units).** Courses in the following subjects carry credit for Physical and Health Education: (Note: A maximum of *four* semester units of Physical Education activity courses can apply for graduation requirements.)

BIOL 140  
 DANCE 101X2, 102X2, 103X4, 105X2, 106X4, 107X4, 114x4  
 FCS 062, 162  
 HEALTH (all courses)  
 PE-I (all courses)  
 PE-T (all activities)

Students are exempt from this requirement if they have completed any of the following programs of study at SBVC: Nursing, Psychiatric Technology, or POLICE 001 (Basic Law Enforcement Academy). Veterans of the armed forces may have met this requirement; consult with a counselor. PE 231 (First Aid and CPR) does not satisfy this graduation requirement.

#### Important Note:

The purpose of categorical subject requirements for graduation is to assure that the graduate will have adequate breadth outside of the area of specialization. For this reason, **NO COURSES IN ANY OF THE PRECEDING CATEGORIES MAY BE USED TO MEET MORE THAN ONE REQUIREMENT.** However, units in a student's subject major may be used to fulfill the requirements in Categories I through V above.

### Associate Degree Majors

San Bernardino Valley College offers associate degree majors in most departments listed in Part III of this catalog. Refer to the chart on page 40 for a complete list of associate degree majors. Refer to the particular department for course descriptions and a complete list of the courses required for that major.

A minimum of 18 units in associate degree-applicable coursework is required for a major in a subject discipline. The amount of flexibility a student has in selecting which courses will be used to meet these 18 units will vary from department to department, as described in Part III of this catalog.

The associate degree major in a specialized field or major is primarily intended for students who plan to enter an occupation after obtaining their two-year degree. Students preparing for the four-year baccalaureate degree normally do not begin to specialize or major until they leave San Bernardino Valley College. For these students, their lower division coursework will consist primarily of General Education Requirements and prerequisite courses that will lead to a major in their junior year. Thus a student planning to be a professional biologist or geologist is actually a pre-biology or pre-geology major during his/her first two years. Accordingly, these students should declare their associate degree major to be Liberal Arts, and should plan their lower division program on the basis of the requirements and recommendations of the four-year college or university to which they intend to transfer. Students are advised to consult the catalogs of the four-year schools they are interested in and to discuss specific requirements with their counselors.

### Graduation Catalog Rights

A student in continuous attendance at San Bernardino Valley College, (or one who does not have a break in attendance of over five years), may either meet the graduation requirements in effect at the time of his/her initial enrollment at the college or the requirements in effect at the time of his/her graduation. A student who has had a break in attendance of over five years must meet the graduation requirements in effect at the time of readmission to the college or those in effect at the time of his/her graduation.

### Graduation Requirement Exceptions

When a student has a deficiency in one or more of the areas required for graduation, he/she has the option of filing a *Petition for Academic Exception*, which is available in the Counseling Center (Administration 111). Each petition will be considered on the basis of its overall, individual merit by the Scholastic Standards Committee.

### Vocational Certificate Programs

San Bernardino Valley College offers certificates of occupational proficiency in many fields. Certificates enable the student to gain marketable skills relatively quickly and at less expense than would be required for an associate degree. Students working toward a certificate are not typically required to take advanced academic courses in such fields as philosophy, foreign languages or history. Nonetheless, they must have a sufficient background in arithmetic, reading and writing in order to complete their coursework and to succeed in the occupations they select. Refer to page 40 of this catalog for a complete list of certificates, and to the individual programs described in Part III for a complete list of the sequence and scope of courses required for each certificate. Students interested in enrolling in certificate programs should confer with a counselor and talk with representatives of the departments that offer the desired program. In some instances, courses completed in high school may be used to satisfy some of the requirements for a certificate. In addition, training programs such as military courses, apprenticeships or other training may be credited toward a certificate program.

At the beginning of the student's final semester, he/she should obtain a Graduation and/or Certificate Application either from the Records Office or the division office of his/her certificate program. This form should be submitted to the Department Chair for verification that all requirements for the certificate have been met with a grade of "C" or higher. The student will then submit the application to the Records Office for a final check by the deadline date for the semester in question. Those dates are as follows:

Fall	October 1
Spring	March 1
Summer	July 1

When printed deadlines fall either Saturday or Sunday, the filing period will be extended to the Monday following the deadline date.

Twelve units, or 50 percent of the coursework required for a certificate, whichever is the lesser, must be completed at San Bernardino Valley College. This residency requirement may be waived in the case of extenuating circumstances with the permission of the program coordinator or Department Chair. The certificate will be prepared by the Records office and will be available to the student by the start of each new semester following the semester of submission.

## Requirements for Transfer to Four-Year Colleges and Universities

San Bernardino Valley College offers a range of coursework to prepare students to transfer to four-year colleges and universities. All four-year colleges prescribe their own standards for course evaluation and admission. Since these criteria are likely to change annually, students planning to transfer should study the admission regulations and transfer conditions of the colleges to which they intend to transfer as early as possible in their college careers. To ensure that no time is lost in unnecessary coursework, students are advised to work closely with a counselor.

Students who had deficiencies in high school subjects or in grades needed for entrance to the four-year college or university of their choice may make these up while they are completing their community college coursework. The University of California gives full college credit for transferable community college courses used to remove high school grade or course deficiencies. This practice of allowing students to make up deficiencies is generally accepted by other colleges and universities as well.

## Intersegmental General Education Transfer Curriculum (IGETC)

Completion of all the requirements in the Intersegmental General Education Transfer Curriculum (IGETC) will permit a student to transfer from a community college to a campus in either the University of California (UC) or the California State University (CSU) without the need to complete additional lower-division general education courses. The IGTC is not an admission requirement for transfer to UC or CSU, nor is it the only way to fulfill prior to transfer, the lower-division, general education requirements of UC or CSU. Students pursuing majors that require extensive lower-division preparation may not find the IGETC option to be advantageous. The requirements listed here,

must be entirely completed and certified in order to be accepted by CSU and UC. Students with Advanced Placement (AP) Examinations, which are recognized as equivalent to SBVC courses listed below, will obtain credit for IGETC. A minimum grade of "C" is required in each course.

### AREA 1 - English Communication.

CSU: Three (3) courses required, one from each group below.

UC: Two (2) courses required, one each from group A and B.

#### Group A: English Composition.

1 course, 3 semester units/4-5 quarter units. Select from:  
ENGL 101\*\*, 101H\*\*

#### Group B: Critical Thinking - English Composition.

1 course, 3 semester units/4-5 quarter units. Select from:  
ENGL 102

PHIL 102

#### Group C: Oral Communication (CSU only).

1 course, 3 semester units/4-5 quarter units.

SPEECH 100

### AREA 2 - Mathematical Concepts and Quantitative Reasoning

1 course, 3 semester units/4-5 quarter units. Select from:

MATH 102\*\*, 108, 115, 151, 250, 251, 252, 265, 266, 285

### AREA 3 - Art and Humanities

At least three (3) courses, with at least one from the Arts and one from the Humanities, 9 semester units/12-15 quarter units. Select from:

#### Arts:

ART 100, 102, 103\*\*, 105, 108, 109 (or ANTHRO 109), 110, 111, 112, 285

MUS 100, 101, 104, 105, 107, 108, 121, 122

THART 100

ENGL 151, 153, 155, 161, 163, 165, 167, 175 (or RELIG 175), 260, 261, 270, 271, 275, 280, 281, 285A, 285B, 285C

FRENCH 103, 104

HIST 100, 101, 107\*(same as ANTHRO 107), 124, 126, 135 (or RELIG 135), 137, 138, 139, 140, 145, 150, 153, 160, 161, 170, 171

MUS 285

PHIL 101, 105, 112, 119, 120, 285

RELIG 100, 101, 110 (same as ANTHRO 110), 135 (or HIST 135), 150, 175 (or ENGL 175), 176

SPAN 103, 104, 285

### AREA 4 - Social and Behavioral Sciences

At least three courses from at least two disciplines or an interdisciplinary sequence, 9 semester units/12-15 quarter units. Select from:

ANTHRO 100, 102, 106, 107\* (same as HIST 107), 110\* (same as RELIG 110)

ECON 100\*\*, 200, 201, 285

GEOG 102, 104, 106, 120

POLIT 100, 285

PSYCH 100, 101, 102, 103, 110, 111\*\*, 112\*\*, 113\*\*, 114, 116, 118, 285

SOC 100, 110, 141, 145, 285

SPEECH 174, 176

**AREA 5 - Physical and Biological Sciences**

Two (2) courses, one Physical Science course and one Biological course. At least one must include a laboratory. Laboratory classes are underlined, 7-9 semester units/9-12 quarter units. Select from:

**Physical Science:**

ASTRON 120\*\*, 123\*\*, 125\*\*  
 CHEM 101\*\*, 104\*\*, 110\*\*, 150, 151, 212, 213, 216  
 GEOG 110\*\*, 111\*\*, 114, 285\*\*  
 GEOL 100, 101\*\*, 111\*\*, 112, 122, 250  
 OCEAN 100\*\*, 101\*\*, 111\*\*  
 PHYSIC 101\*\*, 150A\*\*, 150B\*\*, 200\*\*, 201\*\*  
 PS 101\*\*

**Biological Science:**

BIOL 100\*\*, 102, 104, 108, 201, 202, 203, 240, 250\*\*, 251\*\*, 260\*\*, 261\*\*, 270

**Language Other Than English (UC Requirement Only)**

Proficiency equivalent to two (2) years of high school study in the same language: FRENCH 102, SPAN 102, and SPAN 158 are equivalent to two (2) years of high school study. Select from:

FRENCH 102

SPAN 102\*\*, 158\*\*

**CSU Graduation Requirements in U.S. History, Constitution and American Ideals**

(Not a part of IGETC; may be completed prior to transfer) Six (6) units, one (1) course from Group 1 and one (1) course from Group 2; courses used to meet this requirement may not be used to satisfy requirements for IGETC.

1: POLIT 100\*, 101\*

2: HIST 100\*, 101\*, 107\* (same as ANTHRO 107), 126\*, 135\* (same as RELIG 135), 137\*, 138\*, 139\*, 140\*

1. Courses designated with one asterisk (\*) may be counted in one area only.
2. Courses designated with a double asterisk (\*\*) indicate that transfer credit may be limited by UC and/or CSU. Please consult with a counselor for further information.
3. Students request official IGETC certification from the SBVC Records Office. For students who have completed coursework at multiple campuses, the campus of last attendance prior to transfer to UC or CSU will certify the IGETC. San Bernardino Valley College (SBVC) will certify coursework from other campuses according to the IGETC list of the originating campus. Official transcripts from high school and other colleges and universities must be on file at the SBVC Records Office.
4. Courses on this list are approved for Fall 2002 and beyond. SBVC courses not listed above may not be used for IGETC.

**The University of California**

The University of California has eight major campuses: Berkeley, Davis, Irvine, Los Angeles, Riverside, San Diego, Santa Barbara, and Santa Cruz. With the exception of Berkeley, these campuses are on a quarter-unit basis. When converting semester units to quarter units, the number of semester units should be divided by two-thirds. When converting from quarter units to semester units, the number of quarter units should be multiplied by two-thirds.

Students who plan to transfer to the University of California may complete all of the required lower division courses at San Bernardino Valley College. While the UC campuses have similar general

breadth lower division requirements and will accept a maximum of 70 semester units (or 105 quarter units) of transfer work, there are some subject differences among the campuses. Consult the catalog of the desired UC campus to identify these differences.

It is also possible to transfer to a University of California campus upon completion of the Intersegmental General Education Transfer Curriculum (IGETC), as discussed in the preceding section of this catalog.

The admission cycle for the fall term of the University of California begins each year on November 1 of the preceding year. Each campus will accept for consideration all applications filed during the month of November. Since enrollment ceilings have been established at each campus, students may be accepted only at their second or third choice campus.

The requirements for admission to the University as a transfer student vary in accordance with the high school record of the applicant. A transfer student must meet one of the following:

1. A student who completed all of the University of California a-f subject requirements and met the eligibility index at the time of high school graduation may be admitted any time he/she has established an overall college grade point average of 2.00 or better.
2. A student who met the eligibility index but who did not complete one or more of the a-f required courses in high school may be admitted after he/she has:
  - a. Established an overall grade point average of 2.00 or better in another college or university; and
  - b. Completed appropriate college courses in the deficient high school subject requirement with a grade of C or better.
3. A student who did not meet the eligibility index, or a student who did not meet the eligibility index and who lacked required subjects, may be admitted when he/she has:
  - a. Established an overall grade point average of 2.40 or better in another college or university; and
  - b. Completed 56 semester units of college credit in courses accepted by the University for transfer; and
  - c. Completed the following:
    1. Appropriate college courses in the deficient high school subject with a grade of C or better; or
    2. One college course in mathematics; one in English; and one in either U.S. History, a laboratory science, or a foreign language, all with grades of C or better. The course in mathematics must assume a proficiency level at least equivalent to three years of high school mathematics (elementary and advanced algebra and geometry). All courses with the exception of mathematics must be transferable.

Two programs are available to smooth the transition from San Bernardino Valley College to a University of California campus:

**Transfer Admission Guarantee Program** is an agreement between the University of California, Riverside, and San Bernardino Valley College. Consult with the Transfer Center for details of this admissions agreement.

**Transfer Alliance Program (TAP)** is an agreement between the University of California, Los Angeles, and the Honors Program at San Bernardino Valley College. Consult with the Honors Program Coordinator or the Honors Program Counselor for details of this admissions agreement.

Catalogs for each of the UC campuses are available in the Transfer Center. Also in the Transfer Center are two booklets that provide a summary of the unique requirements of each University of California campus: *Introducing the University* and *Answers for Transfers*.

## The California State University

The California State University system consists of 22 campuses, ranging in location from San Diego to Humboldt. The admission cycle for the fall term of each year begins on November 1 of the preceding year. Eligible students may also be accepted during the winter and/or spring terms. Check with the Transfer Center to determine the acceptance dates for each CSU campus.

The California State University system has specific admission requirements for freshman standing. Eligibility is based on a combination of high school grade point average for the last three years of high school, exclusive of physical education and military science, and scores on the ACT or SAT tests.

Students who do not enter the California State University system as freshmen may enter with advanced standing under the following conditions:

- Students who would have been eligible for admission as freshmen may transfer at the end of any semester, provided they have maintained a C or better average in all work attempted.
- Students who would have been ineligible for admission as freshmen must complete a minimum of 56 transferable semester units of work with a 2.00 grade point average or better.

A maximum of 70 transfer-level semester units (or 105 quarter units) earned in a community college will be accepted for transfer.

Students transferring to the California State University should check both the general education and major requirements as early as possible by referring to the current catalogs for the colleges of their choice. A Guaranteed Admissions Program is available to smooth the transition between San Bernardino Valley College and California State University, San Bernardino. Consult with the Transfer Center for details on this agreement.

## California State University Regulations and General Education Breadth Requirements

San Bernardino Valley College may certify that a student has satisfied the minimum general education requirements of 39 lower division transfer units. Courses that are listed in more than one category may be used to certify only one requirement. (It is also possible to transfer to a California State University campus upon completion of the Intersegmental General Education Transfer Curriculum [IGETC], as discussed in the preceding section of this catalog.) The number of units which may be certified are as follows:

### Category A: Communication in the English Language and Critical Thinking.

9 semester units / 12 quarter units, one (1) course from each group. A minimum grade of C is required in each course.

**A.1 Oral Communication.** Select from:

SPEECH 100, 111, 130, 140

**A.2 Written Communication**

ENGL 101, 101H

**A.3 Critical Thinking.** Select from:

ENGL 102

PHIL 102, 103

SPEECH 125

**Category B: Physical Universe and its Life Forms**

9 semester units / 12 quarter units. One course B1 Physical Science, one course from B2 Life Science, one course from B4 Mathematics / Quantitative Reasoning, and a laboratory course must be included. Laboratory courses are underlined.

**B.1 Physical Science**

ASTRON 120, 123

CHEM 101, 104, 110, 150, 151, 212, 213

GEOG 110, 114

GEOL 100, 101, 112, 122, 250, 251

OCEAN 100, 101

PHYSIC 101, 150A, 150B, 200, 201

PS 101

**B.2 Life Science**

ANTHRO 106

BIOL 100, 102, 104, 108, 123, 201, 202, 203, 240, 250, 251, 260, 261, 270

**B.3 Laboratory Activity**

ASTRON 123, 125

BIOL 100, 102, 201, 202, 203, 240, 250, 251, 260, 261, 270

CHEM 101, 104, 150, 151, 212, 213, 216

GEOG 111, 285

GEOL 100, 111

OCEAN 100, 111

PHYSIC 101, 150A, 150B, 200, 201

**B.4 Mathematics/Quantitative Reasoning**

A minimum grade of C is required.

BUSCAL 200, 208

ECON 208

MATH 102, 103, 108, 115, 151, 250, 251, 252, 265, 266, 285, 286

**Category C: Arts, Literature, Philosophy and Foreign Language**

Minimum of 9 semester / 12 quarter units with at least one course in the Arts and one from Humanities.

**C.1 Arts (Art, Dance, Music, Theatre)**

ANTHRO 109 (same as ART 109)

ARCH 145, 146, 150

ART 100, 102, 103, 105, 108, 109 (same as ANTHRO 109), 110, 111,

112, 124x4, 126x4, 132x4, 164x4, 212x4, 285

DANCE 200, 203

MUS 100, 101, 102, 104, 105, 107, 121, 122, 285

THART 100

**C.2 Humanities (Foreign Language, Literature, Philosophy)**

ASL 109, 110, 111

ENGL 151, 153, 155, 161, 163, 165, 167, 175, 232, 260, 261, 270, 271, 275, 280, 281, 285A, 285B, 285C

FRENCH 101, 102, 103, 104

HIST 100, 101, 107, 124, 126, 135 (same as RELIG 135), 137, 138, 139, 140, 145, 150, 153, 160, 161, 170, 171

PHIL 101, 105, 112, 119, 120, 180, 285

RELIG 100, 101, 110 (same as ANTHRO 110), 135 ( same as HIST 135), 150, 175, 176, 180

SPAN 101, 102, 103, 104, 158, 285

**Category D: Social, Political and Economic Institutions and Behavior; Historical Background**

9-12 semester units.

**D.1 Anthropology and Archaeology**

ANTHRO 100, 102, 106, 107 (same as HIST 107), 109 (same as ART 109), 110 (same as RELIG 110)

ART 109 (same as ANTHRO 109)

**D.2 Economics**

ECON 100, 200, 201, 285

**D.3 Ethnic Studies**

HIST 137, 138, 139, 140; SOC 141

**D.4 Gender Studies**

PSYCH 116; SOC 145; SPEECH 176

**D.5 Geography**

GEOG 102, 106, 120

**D.6 History**

HIST 100, 101, 107 (same as ANTHRO 107), 124, 126, 135 (same as RELIG 135), 137, 138, 139, 140, 145, 150, 153, 160, 161, 170, 171

RELIG 135 (same as HIST 135)

**D.7 Interdisciplinary Social or Behavioral Science**

CD 105

SPEECH 174

**D.8 Political Science, Government, and Legal Institutions**

POLIT 100, 101, 200, 285

**D.9 Psychology**

PSYCH 100, 101, 102, 103, 110, 111, 112, 113, 114, 116, 118, 285

**D.0 Sociology and Criminology**

SOC 100, 110, 130, 141, 145, 285

**U.S. History and American Ideals Requirement:**

Graduation from the California State University requires U.S. History and American Political Institutions. Any combination of one selection from each of the following lists of history and politics courses will normally fulfill this requirement:

(1) HIST 100, 101, 107, 124, 126, 135, 137, 138, 139, 140

(2) POLIT 100, 101

**Category E: Lifelong Understanding and Self-Development**

3 or 4 semester units. Only one unit can be a Physical Education Activity course.

ACAD 100

BIOL 140

CD 101

FCS 162

GEOG 106

HEALTH 101, 102, 103

PSYCH 100, 102, 103, 104, 111, 113, 114, 116, 118

SPEECH 111

**Activity Courses (only one unit allowed toward Area E)**

DANCE 101x2, 102x4, 103x4, 105x2, 106x4, 107x4, 114x4,

PE-I 103X4, 105X4, 107x4, 108X4, 110X4, 111x4, 115X4, 116x4,

127X4, 138x4, 144x4, 148X4, 164x4, 168x4, 173x4, 184X4, 185X4,

186X4, 187X4, 188X4, 189X4

PE-T 100x4, 104x4, 108x4, 116x4, 120x4, 124x4

1. Students with AP Examinations will receive appropriate CSU GE-Breadth credit according to the CSU Office of the Chancellor guidelines.
2. Students are encouraged to complete early Areas A and B4. CSU will not admit students until the grades are recorded for courses in Areas A and B4.
3. Upon transfer, students will be required to complete at least nine units of upper division courses at the CSU.

4. For CSU GE-Breadth certification purposes, students may use the catalog of entry or any catalog thereafter as long as continuous enrollment is maintained until transfer to CSU. CSU defines continuous enrollment as one semester or two quarters in each calendar year.
5. Students may request official certification of CSU GE-Breadth requirements at the SBVC Records Office.
6. Although SBVC will certify Areas A through E individually, the CSU encourages students to complete all areas prior to transfer. Upper division transfer students are required to complete a minimum of 30 units of CSU GE-Breadth courses with a minimum grade of C in each course.
7. Coursework from other colleges will be evaluated according to the CSU GE-Breadth pattern of those respective colleges. For out-of-state coursework, the SBVC Records Office will determine equivalency to SBVC courses. Official transcripts must be on file in the Records Office.
8. A single course may not be certified as meeting more than one category.
9. Some majors at the CSU have required general education courses and/or do not allow double-counting of courses toward major requirements. Students are encouraged to consult with a counselor and the catalog of the CSU to which they want to transfer.
10. The courses on this list are approved by the CSU Chancellor's office for Fall 2002 and beyond. **SBVC courses not on this list may not be used for CSU GE-Breadth requirements.**

**Requirements for Transfer to Independent California Colleges and Universities**

California's fully accredited independent colleges and universities provide a host of options at undergraduate, graduate and professional levels for students planning to continue their education beyond community college. Students who transfer to independent colleges often find that they are given academic credit for most, if not all, of their community college studies. Virtually all institutions give full credit for general education courses and usually for other courses designated for transfer by the community college.

Some colleges stipulate a certain number of completed units before considering students for transfer. Others will accept students at any time. The requirements are outlined in the respective college catalogs.

Listed on the following page are some of the independent colleges and universities a student may choose to attend. Additional information is available in the Transfer Center.

- American Academy of Dramatic Arts West
- Art Center College of Design
- Azusa Pacific University
- Biola University
- California Baptist University
- California College of Arts and Crafts
- California Institute of the Arts
- California Institute of Technology
- California Lutheran University
- Chapman University
- Claremont McKenna College
- Cogswell Polytechnical College
- College of Notre Dame
- Concordia University
- DeVRY Institute of Technology
- Dominican University of California
- Fresno Pacific University
- Golden Gate University
- Harvey Mudd College
- Holy Names College
- Hope International University
- Humphreys College
- John F. Kennedy University
- La Sierra University
- Loma Linda University
- Los Angeles College of Chiropractic
- Loyola Marymount University
- The Master's College
- Menlo College
- Mills College
- Mount St. Mary's College
- National University
- New College of California
- Occidental College
- Otis College of Art and Design
- Pacific Oaks College
- Pacific Union College
- Patten College
- Pepperdine University
- Pitzer College
- Point Loma Nazarene University
- Pomona College
- Samuel Merritt College
- San Francisco Art Institute
- San Francisco Conservatory of Music
- Santa Clara University
- St. Mary's College of California
- Scripps College
- Simpson College
- Southern California College of Optometry
- Stanford University
- Thomas Aquinas College
- United States International University
- University of Judaism
- University of La Verne
- University of the Pacific
- University of Redlands
- University of San Diego
- University of San Francisco
- University of Southern California
- University of West Los Angeles
- Vanguard University of Southern California
- Western University of Health Sciences
- Westmont College
- Whittier College
- Woodbury University

## The California Articulation Numer System (CAN)

The California Articulation Number (CAN) System is a statewide numbering system independent from course numbers assigned by local colleges. A CAN number signals that participating California colleges and universities have determined that courses offered by other campuses are equivalent in content and scope to courses offered on their own campuses, regardless of their unique titles or local identifying numbers. Thus, if a schedule of classes or catalog lists a course bearing a CAN number, students on one campus can be assured that it will be accepted in lieu of the comparable CAN course noted in the catalog or schedule of classes of another campus. For example, CAN ECON 2 on one campus will be accepted as meeting the requirement of the designated CAN ECON 2 course on other participating community college or university campus.

The CAN numbering system is obviously useful for students attending more than one community college and is applied to many of the transferable, lower division courses students need as preparation for their intended major. Because these course requirements may change, however, and because courses are continually being redefined, qualified for or deleted from the CAN database, students should always check with their campus' counselors, articulation officer, or the transfer center director to determine how CAN-designated courses fit into their educational plans for transfer.

Students should consult the ASSIST database at [www.assist.org](http://www.assist.org) for specific information on course agreements. The college staff will help students interpret this information.





DEGREE, CERTIFICATE AND TRANSFER INFORMATION

PROGRAM	DEGREE CERTIFICATE	PG	PROGRAM	DEGREE CERTIFICATE	PG
<b>ACCOUNTING</b> .....	AA	• 42	<b>GEOGRAPHIC INFORMATION SYSTEMS</b> .....	•	117
Bookkeeping .....		• 42	<b>GEOGRAPHY</b> .....	AS	119
Governmental and Non-Profit Accounting ..		• 42	<b>GEOLOGY</b> .....	AS	120
Tax Preparers .....		• 42	<b>HUMAN SERVICES</b> .....	AA	• 125
<b>ADMINISTRATION OF JUSTICE</b> .....	AA	• 45	Alcohol/Drug Studies .....		• 125
<b>AERONAUTICS</b> .....		46	Career Specialist .....		• 126
Airframe Maintenance Technician .....		• 48	Case Management .....		• 126
Airframe and Powerplant Technology .....	AS	47	Eating Disorders Studies .....		• 126
Aviation Maintenance Technician .....		• 47	<b>INSPECTION TECHNOLOGY</b> .....	AS	• 131
Engineering Technology .....	AS	47	<b>LIBERAL ARTS *</b> .....	AA	
Flight Operations .....		• 47	<b>LIBRARY TECHNOLOGY</b> .....	AA	• 133
Flight Operations and Management .....	AS	47	<b>MACHINIST TECHNOLOGY</b> .....	AS	• 135
Powerplant Maintenance Technician .....		• 48	Computer Numerical Control: CAD/CAM ....	AS	• 135
<b>AIR TRAVEL CAREERS</b> .....		51	Machinist Standard .....	AS	• 135
Flight .....	AS	• 51	Tool and Die .....	AS	• 135
Ground .....	AS	• 51	<b>MANAGEMENT INFORMATION SYSTEMS</b> ...	AA	• 137
Travel .....	AS	• 52	<b>MATHEMATICS</b> .....	AS	142
<b>ARCHITECTURE</b> .....	AA	56	<b>MUSIC</b> .....	AA	145
Architectural Drafting Technician .....		• 56	Electronic Music .....		• 146
Construction Engineering Technology .....		• 57	<b>NURSING</b> .....	AS	151
<b>ART</b> .....	AA	59	<b>OFFICE INFORMATION SYSTEMS</b> .....	AA	155
Graphic Design .....	AA	• 59	Administrative Assistant .....		• 156
Web and Multimedia Design .....		• 59	Clerical Assistant .....		• 156
<b>ASTRONOMY</b> .....	AS	169	Information Processing Specialist .....		• 156
<b>AUTOMOTIVE TECHNOLOGY</b> .....		64	Legal Administrative Assistant .....		• 156
Automatic Transmission .....	AS	• 64	Medical Administrative Assistant .....		• 156
Basic Automotive Body & Paint Technician	AS	• 64	<b>PARALEGAL STUDIES</b> .....	AA	160
Advanced Automotive Body & Paint			<b>PHARMACY TECHNOLOGY</b> .....	AS	• 162
Technician .....	AS	• 64	<b>PHYSICAL EDUCATION &amp; ATHLETICS</b> .....		165
Automotive Tune-up .....	AS	• 65	Athletic Training & Sports Medicine .....		• 165
Wheel Alignment and Brakes .....	AS	• 65	<b>PHYSICS</b> .....	AS	169
<b>BIOLOGY</b> .....	AS	70	<b>POLICE SCIENCE</b> .....		171
<b>BUSINESS ADMINISTRATION</b> .....	AA	• 73	Basic Law Enforcement .....		• 171
Retail Management .....		• 73	<b>PSYCHIATRIC TECHNOLOGY</b> .....	AS	• 180
<b>CHEMISTRY</b> .....	AS	77	<b>REAL ESTATE/ESCROW</b> .....		186
<b>CHILD DEVELOPMENT</b> .....	AA	78	Escrow .....	AA	• 187
Associate Teacher .....		• 79	Real Estate .....	AA	• 187
Family Child Care .....		• 80	<b>REFRIGERATION &amp; AIR CONDITIONING</b> ..	AS	• 189
Infant Development .....		• 80	<b>RESTAURANT MANAGEMENT</b> .....	AA	• 192
Master Teacher .....		• 79	Dining Room Service .....		• 192
Preschool .....		• 80	Food Preparation .....		• 192
School-Age .....		• 80	Food Service .....		• 192
Site Supervisor .....		• 80	<b>WATER SUPPLY ENGINEERING</b> .....	AS	• 201
Teacher .....		• 79	<b>WELDING</b> .....	AS	202
<b>COMMUNICATIONS/BROADCASTING</b> .....	AA	• 85	Consolidation Welding .....	AS	• 202
Radio Production and Operations .....		• 86	Flux Core Arc Welding (FWAC) .....	AS	• 203
Television Production and Operations .....		• 86	Gas Metal Arc Welding (GMAW) .....	AS	• 203
<b>COMPUTER SCIENCE</b> .....	AS	• 89	Gas Tungsten Arc Welding (GTAW) .....	AS	• 203
<b>COMPUTER SYSTEMS</b> .....	AA	• 91	General Welding .....	AS	• 203
<b>DIESEL</b> .....		98	Shielded Metal Arc Welding (SMAW) .....	AS	• 203
Heavy-Duty Diesel Technician .....		• 99	<b>*Students graduate with a major in Liberal Arts with 18 units of</b>		
<b>ELECTRICITY/ELECTRONICS</b> .....		101	<b>course work in Natural Sciences, Social and Behavioral Science,</b>		
Avionics .....	AS	• 101	<b>and Humanities as listed under Associate Degree:</b>		
Communication Engineering Technology ...	AS	• 101	<b>Option #2. The 18 units required for the Liberal Arts major are</b>		
Computer Engineering Technology .....	AS	• 101	<b>in addition to general education requirements.</b>		
Electric Power Technology .....	AS	• 101			
Electronics Technology .....	AS	• 101			
<b>FAMILY &amp; CONSUMER SCIENCE</b> .....	AS	111			
Dietetic Aide .....		• 112			
Dietetic Service Supervisor .....		• 112			
Dietetic Technician .....	AS	111			



## PART III - ANNOUNCEMENT OF COURSES

Each course entry in this catalog includes the course number, title, a brief description, the number of semester units, and the number of hours the course meets based on a 16-18 week semester. The course entries also include information about how the course credit applies to associate degrees and transfer to the California State University or University of California systems.

Courses numbered from 001 through 099 are generally applicable to certificate and associate degree programs. In some instances, these courses are also applicable to specific majors at some campuses of the California State Universities.

Courses numbered from 100 through 299 are generally applicable toward baccalaureate degrees conferred by universities.

Courses numbered from 900-999 are not applicable to associate degrees and do not transfer to four-year institutions.

Certain course entries include a symbol x and a number following the symbol, such as MUSIC 141x4. This symbol (x) indicates that this skill-based course may be taken for credit more than once; the number following the symbol (x) indicates the number of times the course may be taken for credit.

### ACADEMIC ADVANCEMENT

#### ACADEMIC ADVANCEMENT

COORDINATOR:	Odette C. Salvaggio, Ph.D. (909) 384-8588
OTHER FACULTY:	Dan Angleo, M.H.R.O.D.
LIAISON COUNSELOR:	Cindy Parish, M.S. (909) 384-8977
OFFICE ASSISTANT:	Robyn Wicklund (909) 384-8588

ACAD 100 is required of all students taking 9 or more units a semester. This course must be completed within a student's first two semesters of course work. Students are exempt from this requirement if they have already earned 30 units or more of college credit or if they have already earned an associate or baccalaureate degree. Students on a career track within vocational disciplines that have articulated programs with four-year institutions may apply for exemption through the Department Chair and Division Dean of their area of study.

The rest of the courses offered through this department are designed to help students perform well in their other classes and at their place of employment.

**ACAD 100**  
**STRATEGIES FOR COLLEGE SUCCESS** 1 UNIT  
**PREREQUISITE:** None.

**LECTURE:** 1 hour per week.

Introduces student to college environment, educational opportunities, college services, academic procedures and policies, graduation and transfer requirements. College survival skills such as educational planning, goal-setting, learning styles, time management, and interpersonal skills are key components.

*Associate Degree Applicable*  
*Course credit transfers to CSU.*

**ACAD 110**  
**TUTOR TRAINING** 1 UNIT

**PREREQUISITE:** None.

**DEPARTMENTAL ADVISORY:** *Completion of the courses to be tutored with a minimum grade of "B", departmental recommendation, or related experience.*

**LECTURE:** .50 hour per week and

**LABORATORY:** 1.50 hours per week.

Techniques and strategies for effective academic peer tutoring in a community college setting. Emphasis on tutoring, study skill techniques and practical skills to use in a variety of tutoring situations. Completion of any college-level course to be tutored with a grade of B or better is required. Graded on Credit/No Credit basis only.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

**ACAD 600A-1x4**  
**SUPERVISED TUTORING** Non-Credit

**PREREQUISITE:** None.

**LECTURE:** *Hours will vary according to student need.*

Students enrolling in this non-credit class will receive assistance in understanding course-specific content in areas in which they are having difficulty. Peer tutors will provide examples and supplementary instruction based on course texts and homework exercises. Enrollment in this class is limited to students who have been recommended by an instructor or counselor on the basis of an identified learning need. Call (909) 384-8566 for additional information about tutoring.

**ACAD 900**  
**EMPLOYABILITY SKILLS** 1 UNIT

**PREREQUISITE:** None.

**LECTURE:** 1 hour per week.

An introduction to the skills necessary to find and maintain a job; with emphasis on learning the appropriate skills to be successful on the job. Topics include information on desirable employee traits, on-the-job communication and the skills needed to conduct a successful job search. Graded on a Credit/No Credit basis only.  
*Not Applicable to Associate Degree*

**ACAD 910x4**  
**VOCATIONAL BASIC SKILLS ENHANCEMENT** 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

Offers a review and practice of basic skills materials in mathematics, reading, writing English as a second language, GED materials, and applied computational and verbal skills; a self-paced, open-entry computer-assisted review tailored to meet students' individual academic needs each time the class is taken. Graded on Credit/No Credit basis only.

*Not Applicable to Associate Degree*

## ACCOUNTING

DIVISION:	Business and Information Technology
DIVISION DEAN:	Margaret Ortiz, M.A.
DEPARTMENT HEAD:	Nickolas Zoumbos, M.S. Business 100D (909) 384-8912
OTHER FACULTY:	Janet Courts, M.A.
DIVISION SECRETARY:	Chris Williams
DIVISION OFFICE:	Business 101 (909) 384- 8908
LIAISON COUNSELORS:	Wilma Cochrane, M.A. (909) 384-8986

Accounting, as the language of business, is concerned with how businesses report their transactions and how they interpret the summaries of those transactions. Accountants record and summarize the economic events within a business. In addition, they interpret financial information and conduct solvency and profitability analyses to serve as a basis for sound business decisions.

Students planning to transfer to a four-year institution and major in accounting should consult with a counselor regarding the transfer process and lower division requirements.

### ACCOUNTING ASSOCIATE OF ARTS DEGREE

To graduate with a specialization in Accounting, students must complete all requirements for the certificate plus the general breadth requirements for the Associate Degree (minimum total = 60 units).

Students working for certificates must have a basic knowledge of arithmetic, reading and writing in order to learn and work in the occupations they select.

### ACCOUNTING CERTIFICATE

The Certificate in Accounting is designed to prepare students for employment in the fields of accounting or bookkeeping.

REQUIRED COURSES:	UNITS
ACCT 200 Principles of Accounting I (or ACCT 100 & 101)	4
ACCT 201 Principles of Accounting II	4
ACCT 204 Computer Accounting: Spreadsheets	1
ACCT 207 Integrated Accounting Software	2
BUSAD 100 Introduction to Business	3
BUSAD 210 Business Law	3
BUSCAL 208 Business and Economics Statistics	4
ECON 200 Principles of Economics (Macro)	3
ECON 201 Principles of Economics (Micro)	3
MATH 095 Intermediate Algebra	4
BUSCAL 091 Beginning Algebra for Business	4
or	
Math 090 Elementary Algebra	
Ten Units from the list of RECOMMENDED COURSES	10
<b>TOTAL UNITS</b>	<b>45</b>

RECOMMENDED COURSES:	UNITS
ACCT 015 Federal Income Tax Return Preparation	1.5
ACCT 130 Federal and State Revenue Tax Accounting	3
ACCT 090 Payroll Accounting	3
ACCT 202 Intermediate Accounting	3
ACCT 206 Cost Accounting	3
ACCT 235 Accounting for Government and Not-For-Profit Organizations I	4
BUSAD 203 Marketing Management	3
BUSCAL 200 Algebra and Finite Methods in Business	3
or	
MATH 102 Introduction to College Algebra	4
MIS 101 Introduction to Management Information Systems	3
OIS 070 Introduction to Disk Operating System (PC/MS DOS)	1.5
REALST 100 Real Estate Principles	3

### BOOKKEEPING CERTIFICATE

REQUIRED COURSES	UNITS
ACCT 010 Bookkeeping	3
or	
ACCT 100 Introduction to Accounting I	(4)
ACCT 090 Payroll Accounting	3
ACCT 204 Computer Accounting Spreadsheet	1
ACCT 207 Integrated Accounting Software	2
BUSCAL 050 Quantitative Methods in Business	3
OIS 142 Machine Calculations	3
<b>TOTAL UNITS</b>	<b>15-16</b>

### GOVERNMENTAL AND NON-PROFIT ACCOUNTING CERTIFICATE

The purpose of this certificate is to prepare students for a successful career in the public sector.

REQUIRED COURSES	UNITS
ACCT 235 Accounting for Government and Not-For-Profit Organizations I	4
ACCT 236 Accounting for Government and Not-For-Profit Organizations II	4
ACCT 237 Budgeting for Governments	4
ACCT 202 Intermediate Accounting	3
<b>TOTAL UNITS</b>	<b>15</b>

### TAX PREPARERS CERTIFICATE

REQUIRED COURSES	UNITS
ACCT 090 Payroll Accounting	3
ACCT 130 Federal and State Revenue Tax Accounting	3
ACCT 131 California Income Taxation	2
ACCT 132x4 Volunteer Income Tax Assistance I (VITA I)	2
ACCT 133x4 Volunteer Income Tax Assistance II (VITA II)	2
OIS 142 Machine Calculations	3
<b>TOTAL UNITS</b>	<b>15</b>

## COURSES OFFERED BY THE DEPARTMENT OF ACCOUNTING:

ACCT 010  
BOOKKEEPING 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

Fundamentals of bookkeeping, such as recording transactions in journals, posting to ledgers, preparation of the trial balance and use of controlling accounts and related schedules. Practice in opening, adjusting and closing various professional sets of books. Recommended for occupational students and for those who wish preparatory training before entering ACCT 200.

*Associate Degree Applicable*

ACCT 015  
FEDERAL INCOME TAX RETURN PREPARATION 1.5 UNITS

**PREREQUISITE:** None.

**LECTURE:** 1.5 hours per week.

Instruction in the preparation of the various forms of individual tax returns with the use of training materials prepared by the Internal Revenue Service.

*Associate Degree Applicable*

ACCT 090  
PAYROLL ACCOUNTING 3 UNITS

**PREREQUISITE:** None.

**DEPARTMENTAL ADVISORY:** ACCT 101 or ACCT 200.

**LECTURE:** 3 hours per week.

Accounting aspects of the Social Security Act, the California Unemployment Insurance Act and the California Worker's Compensation Insurance Act.

*Associate Degree Applicable*

ACCT 100  
INTRODUCTION TO ACCOUNTING I 3-4 UNITS

**PREREQUISITE:** None.

**DEPARTMENTAL ADVISORY:** BUSCAL 050 or ACCT 010.

**LECTURE:** 3-4 hours per week.

Exploration of the basic principles and practices of the financial accounting process for a sole proprietorship including the sources of financial information, journalizing and posting transactions, and preparing and analyzing financial statements for merchandise. Students completing ACCT 100 and ACCT 101 are eligible to enroll in ACCT 201.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

*Limited transfer to UC; contact a counselor for details.*

ACCT 101  
INTRODUCTION TO ACCOUNTING II 4 UNITS

**PREREQUISITE:** ACCT 100.

**LECTURE:** 4 hours per week.

Exploration of the basic principles and practices of the financial accounting process in a sole proprietorship including accounting for cash, posting receivables and payables, inventories, fixed assets and payroll. Students completing ACCT 100 and ACCT 101 are eligible to enroll in ACCT 201.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

*Limited transfer to UC; contact a counselor for details.*

ACCT 130  
FEDERAL AND STATE REVENUE TAX ACCOUNTING 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

Fundamentals of current revenue tax laws and regulations. Primary emphasis on theory and methods of preparation of Federal and State Income Tax returns for individuals. Actual forms are studied and returns are prepared.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

ACCT 131  
CALIFORNIA INCOME TAXATION 2 UNITS

**PREREQUISITE:** None.

**DEPARTMENTAL ADVISORIES:** ACCT 130; BUSCAL 050 or MATH 952; ACCT 010; ACCT 090; ACCT 100 or ACCT 200.

**LECTURE:** 2 hours per week.

Combining both theory and practical application, this course allows the student to research and analyze current California tax issues and to prepare tax returns and case studies. Students have the opportunity to study state tax law in a controlled setting under the supervision of a CPA, LL.M. or licensed tax preparer.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

ACCT 132x4  
VITA: VOLUNTEER INCOME TAX ASSISTANCE I  
(VITA I) 2 UNITS

**PREREQUISITE:** None.

**DEPARTMENTAL ADVISORIES:** BUSCAL 050 or MATH 952; ACCT 010; ACCT 090; ACCT 100 or ACCT 200.

**LECTURE:** 2 hours per week.

Combining both theory and practical application, this course allows the student to research and analyze current state and federal tax issues and to assist lower income and elderly citizens in the preparation of tax returns under the supervision of a CPA or licensed tax preparer. This course may be taken four times.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

ACCT 133x4  
VITA: VOLUNTEER INCOME TAX ASSISTANCE II  
(VITA II) 2 UNITS

**PREREQUISITE:** ACCT 132x4.

**LECTURE:** 1 hour per week and

**LABORATORY:** 3 hours per week.

A continuation of ACCT 132x4 (VITA I), this course allows the student to research and analyze current tax issues, to interview real taxpayers, and to prepare and electronically file real tax returns under the supervision of a CPA or licensed tax preparer. NOTE: VITA I & II must be taken consecutively in the same calendar year. This course may be taken four times.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

ACCT 200  
PRINCIPLES OF ACCOUNTING I 4 UNITS

**PREREQUISITE:** None.  
**DEPARTMENTAL ADVISORY:** BUSCAL 050 or ACCT 010.  
**LECTURE:** 4 hours per week.

Development of the basic principles and practices applicable to the general accounting process, primarily in a sole proprietorship including transaction analysis, statement preparation and analysis, internal control, payroll, revenue recognition, and user analysis of accounting information and systems.

Associate Degree Applicable  
Course credit transfers to CSU.

Limited transfer to UC; contact a counselor for details.  
CAN: (California Articulation Number): BUS2

ACCT 201  
PRINCIPLES OF ACCOUNTING II 4 UNITS

**PREREQUISITES:** ACCT 200 or ACCT 100 and ACCT 101.  
**LECTURE:** 4 hours per week.

Examination of the basic principles and practices of financial and managerial accounting relevant to partnerships and corporations. Application of these concepts in the fields of cost; income tax; department and branch accounting; income projections and decision making; and financial statement preparation and analysis.

Associate Degree Applicable  
Course credit transfers to CSU and UC.

CAN: (California Articulation Number): BUS4

ACCT 202  
INTERMEDIATE ACCOUNTING 3 UNITS

**PREREQUISITE:** ACCT 201.  
**LECTURE:** 3 hours per week.

Adjustments, working papers, financial statements, cash and receivables, inventories, investments, plant assets, intangibles, liabilities, capital stock and retained earnings, statement analysis and application of funds.

Associate Degree Applicable  
Course credit transfers to CSU.

ACCT 204  
COMPUTER ACCOUNTING: SPREADSHEETS 1 UNIT

**PREREQUISITE:** None.  
**DEPARTMENTAL ADVISORIES:** ACCT 100 or ACCT 200 and MIS 101.

**LECTURE:** 0.5 hour per week and  
**LABORATORY:** 1.5 hours per week.

Solution of accounting problems using personal computers and spreadsheet software including creating spreadsheets using formulas, macros, and graphics.

Associate Degree Applicable  
Course credit transfers to CSU.

ACCT 206  
COST ACCOUNTING 3 UNITS

**PREREQUISITE:** ACCT 201.  
**LECTURE:** 3 hours per week.

Objectives and procedures of accounting for manufacturing enterprises including job-order and process costing, accounting for manufacturing overhead, joint-product and by-product costing, cost budgeting, standard costs and cost reports.

Associate Degree Applicable  
Course credit transfers to CSU.

ACCT 207  
INTEGRATED ACCOUNTING SOFTWARE 2 UNITS

**PREREQUISITE:** None.  
**DEPARTMENTAL ADVISORIES:** BUSCAL 050 or MATH 952;  
ACCT 010; ACCT 090; ACCT 100 or ACCT 200.

**LECTURE:** 1.5 hours per week and  
**LABORATORY:** 1.5 hours per week.

Provides a comprehensive overview of application software in the field of accounting. Topics covered include the analysis of source documents and the use of accounting software to prepare, understand, and interpret financial statements for a variety of management purposes.

Associate Degree Applicable  
Course credit transfers to CSU.

ACCT 222  
SPECIAL PROBLEMS IN ACCOUNTING I 1 UNIT

**PREREQUISITE:** ACCT 200.  
**INDEPENDENT STUDY:** 3 hours per week.

Assigned problems involving library and field work for selected students who are interested in furthering their knowledge of accounting on an independent study basis. Students are required to devote three hours per week to their project throughout the semester. Prior to registration, a contract must be prepared. See instructor for details.

Associate Degree Applicable  
Course credit transfers to CSU.

ACCT 223  
SPECIAL PROBLEMS IN ACCOUNTING II 2 UNITS

**PREREQUISITE:** ACCT 200.  
**INDEPENDENT STUDY:** 6 hours per week.

Assigned problems involving library and field work for selected students who are interested in furthering their knowledge of accounting on an independent study basis. Students are required to devote six hours per week to their project throughout the semester. Prior to registration, a contract must be prepared. See instructor for details.

Associate Degree Applicable  
Course credit transfers to CSU.

ACCT 235  
ACCOUNTING FOR GOVERNMENT AND NOT-FOR-PROFIT ORGANIZATIONS I 4 UNITS

**PREREQUISITE:** ACCT 201.  
**LECTURE:** 4 hours per week.

Fund accounting as applied to governmental operations and non-profit institutions including problems of budgeting tax levies, appropriations and accounting for revenues and expenditures. Includes general funds, special revenue, bond sinking, working capital, special assessment, trust, agency, and utility.

Associate Degree Applicable  
Course credit transfers to CSU.

ACCT 236  
ACCOUNTING FOR GOVERNMENT AND NOT-FOR-PROFIT ORGANIZATIONS II 4 UNITS

**PREREQUISITE:** ACCT 235.  
**LECTURE:** 4 hours per week.

This course is intended to continue the topics introduced in ACCT 235. Emphasis is on budgeting operations and managerial control of budgets in nonprofit organizations such as school districts, health care facilities and charitable organizations.

Associate Degree Applicable  
Course credit transfers to CSU.

ACCT 237  
BUDGETING FOR GOVERNMENTS 4 UNITS

**PREREQUISITE:** ACCT 235.

**LECTURE:** 4 hours per week.

An introduction to the concepts and practices of budgeting in the public sector at the federal, state and local government levels including how budgeting operates in the political arena as well as budgeting as a process of public administration.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

ACCT 285  
HONORS IN ACCOUNTING 3 UNITS

**PREREQUISITE:** ACCT 200.

**LECTURE:** 3 hours per week.

Designed to develop thinking and analytical skills of business students through a variety of user based activities in the areas of accounting ethics, information systems design and controls, financial planning and statement analysis, budgeting, forecasting and decision making.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

## ADMINISTRATION OF JUSTICE

DIVISION: Criminal Justice  
DIVISION DEAN: Gloria M. Fisher, J.D.  
DEPARTMENT HEAD: Frank Peterson, J.D.  
Liberal Arts 124  
(909) 384-8604

DIVISION SECRETARY: Sharen Chavira  
DIVISION OFFICE: Planetarium, 2nd Floor  
(909) 384-4431

LIAISON COUNSELOR: To Be Announced  
(909) 384-4404

The Administration of Justice discipline involves the study of the theory and practice of law, law enforcement, the courts, and corrections systems. Law enforcement specializes in police activities including effective investigation and patrol services to the public. The courts specialize in responsibilities to the public through the trial system. The corrections systems specialize in the punishment and incarceration process as well as rehabilitation of the offender. Private security services explore private protection through private agencies.

Administration of Justice offers a wide range of career opportunities. Students interested in careers as peace officers should refer to the Department of Police Science in this catalog. Students planning to transfer to a four-year institution and major in Administration of Justice should consult with a counselor regarding the transfer process and lower division requirements.

### ADMINISTRATION OF JUSTICE ASSOCIATE OF ARTS DEGREE

To graduate with a specialization in Administration of Justice, students must complete all requirements for the certificate plus the general breadth requirements for the Associate Degree (minimum total = 60 units).

Students working for certificates must have a basic knowledge of arithmetic, reading and writing in order to learn and work in the occupations they select.

## ADMINISTRATION OF JUSTICE CERTIFICATE

### REQUIRED COURSES UNITS

ADJUS 101 Introduction to Administration of Justice 3  
ADJUS 102 Principles and Procedures of the Justice System 3  
ADJUS 103 Concepts of Criminal Law 3  
ADJUS 104 Legal Aspects of Evidence 3  
ADJUS 105 Community Relations 3  
SPAN 015 Conversational Spanish 3  
SPEECH 100 Elements of Public Speaking 3

or

SPEECH 111 Interpersonal Communication (3)  
ENGL 101 Freshman Composition 4  
SOC 100 Introduction to Sociology 3  
SOC 141 Race and Ethnic Relations 3

or

HIST 137 Ethnic Minorities in United States History (3)  
Six units from the list of RECOMMENDED COURSES 6

**TOTAL UNITS 37**

### RECOMMENDED COURSES: UNITS

Any Political Science Course 3  
ADJUS 106 Principles of Investigation 3  
ADJUS 107 Concepts of Enforcement Services 3  
ADJUS 108 Juvenile Procedures 3  
ADJUS 109 Police Records and Report Writing 3  
OIS 100 Beginning Keyboarding 3  
PE 231 First Aid and CPR 3  
PHIL 105 Introduction to Ethics 3

### COURSES OFFERED BY THE DEPARTMENT OF ADMINISTRATION OF JUSTICE:

ADJUS 101  
INTRODUCTION TO  
ADMINISTRATION OF JUSTICE 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

The history and philosophy of administration of justice in the United States; recapitulation of the system; identifying the various sub-systems, role expectations and their inter-relationships; theories of crime, punishment, and rehabilitation, ethics, education and training for professionalism in the system.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

*CAN (California Articulation Number): AJ2*

ADJUS 102  
PRINCIPLES AND PROCEDURES OF  
THE JUSTICE SYSTEM 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

A study of the role and responsibilities of each segment within the Administration of Justice System, law enforcement, judicial, corrections. A past, present and future exposure to each sub-system, procedures from initial entry to final disposition and the relationship each segment maintains with its system members.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

ADJUS 103  
 CONCEPTS OF CRIMINAL LAW 3 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week.  
 Historical development, philosophy of law and constitutional provisions, definitions, classification of crime and their application to the system of administration of justice, legal research, study of case law, methodology, and concepts of law as a social force.  
*Associate Degree Applicable*  
*Course credit transfers to CSU and UC.*  
 CAN (California Articulation Number): AJ4

ADJUS 104  
 LEGAL ASPECTS OF EVIDENCE 3 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week.  
 Origin, development, philosophy and constitutional bases of evidence; constitutional and procedural considerations affecting arrest, search and seizure; kinds and degrees of evidence; rules governing admissibility; judicial decisions interpreting individual rights; and case studies.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*

ADJUS 105  
 COMMUNITY RELATIONS 3 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week.  
 The roles of the administration of justice practitioners and their agencies. Emphasis on the professional image of the system of Justice Administration and the development of positive relationships with the public.  
*Associate Degree Applicable*  
*Course credit transfers to CSU and UC.*

ADJUS 106  
 PRINCIPLES OF INVESTIGATION 3 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week.  
 The study of basic principles of various types of investigations utilized in the justice system. Includes dealing with the public, techniques for handling crime scenes, interviews, evidence, surveillance, follow-up, technical resources, and case preparation.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*

ADJUS 107  
 CONCEPTS OF ENFORCEMENT SERVICES 3 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week.  
 Exploration of theories, philosophies, and concepts related to the role expectations of the line enforcement officer. Emphasis on patrol, traffic and public service responsibilities and their relationship to the administration of justice.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*

ADJUS 108  
 JUVENILE PROCEDURES 3 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week.  
 Organization, function and jurisdiction of juvenile agencies, processing and detention of juvenile case disposition, juvenile status and court procedures.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*

ADJUS 130  
 LEGAL ANALYSIS RESEARCH AND WRITING 3 UNITS  
**PREREQUISITE:** ADJUS 101.  
**LECTURE:** 3 hours per week.  
 Introduction to legal research by familiarizing the students with the many aids and legal volumes available to facilitate research and analysis of a legal problem together with guidance in legal writing. This course will be a valuable tool for paralegal persons and others in the courts.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*

ADJUS 198  
 ADMINISTRATION OF JUSTICE  
 WORK EXPERIENCE 1-4 UNITS  
**PREREQUISITE:** None.  
 Supervised training in the form of on-the-job employment that will enhance the student's educational goals. The student's major and job must match. Work Experience 5-20 hours per week, with 5 hours each week equal to one unit. Students may earn a total of 16 units toward graduation in work experience courses.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*

## AERONAUTICS

DIVISION:	Technical
DIVISION DEAN:	Thomas Bauman, M.S.C.
DEPARTMENT HEAD:	Dick Thompson, Ed.D. (909) 384-8269
OTHER FACULTY:	Kevin Kammer, A.A. Allen Moore, A.A.
DIVISION SECRETARY:	Patsy Martinez (909) 384-8902
DIVISION OFFICE:	Technical 108 (909) 384-4451
LIAISON COUNSELOR:	George Fleming, M.S. (909) 384-8975

The aeronautics industry is presently experiencing a shortage of personnel in all aspects of aviation until 2010. Jobs are available locally, throughout the U.S. and globally.

The Aeronautics Department curriculum offers students several ways to qualify for employment in the aviation industry. Students may pursue either Associate of Science degrees or certificates in Flight Operations and Management or Airframe and Powerplant Technology. Students desiring specific ratings or licenses should consult with faculty in the Aeronautics Department and/or the Federal Aviation Administration.

Students planning to transfer to a four-year institution and major in aeronautics should consult with a counselor regarding the transfer process and lower division requirements.

## AERONAUTICS ASSOCIATE OF SCIENCE DEGREE

The Aeronautics Department offers three areas of specialization for the Associate of Science degree: (1) Airframe and Powerplant Technology, (2) Engineering Technology, and (3) Flight Operations and Management. To graduate with a specialization in these areas, students must complete all requirements plus the general breadth requirements for the Associate Degree (minimum total = 60 units).

## 1. AIRFRAME AND POWERPLANT TECHNOLOGY

Each of the following courses must be completed with a grade of C or higher.

REQUIRED COURSES:	UNITS
AERO 100 Airframe and Power Plant General Curriculum - Calculations/Publications	5
AERO 101 Airframe and Power Plant General Curriculum - Servicing/Materials	5
AERO 102 Airframe Maintenance Lecture - Structures	6
AERO 103 Airframe Maintenance Lecture - Systems & Components	6
AERO 104 Power Plant Maintenance Lecture - Reciprocating Engine Overhaul	6
AERO 105 Power Plant Maintenance Lecture - Accessory Overhaul	6
AERO 106 Airframe and Power Plant General Laboratory - Calculations/Publications	2
AERO 107 Airframe and Power Plant General Laboratory - Servicing/Materials	2
AERO 108 Airframe Maintenance Laboratory - Structures	5
AERO 109 Airframe Maintenance Laboratory - Systems & Components	5
AERO 110 Power Plant Maintenance Laboratory - Reciprocating Engine Overhaul	5
AERO 111 Power Plant Maintenance Laboratory - Accessory Overhaul	5
<b>TOTAL UNITS</b>	<b>58</b>

## 2. ENGINEERING TECHNOLOGY

REQUIRED COURSES:	UNITS
AERO 121 Aviation Fundamentals	3
AERO 124 Aircraft Power Plants	3
AERO 126 Aircraft Structures	3
ENGG 125 Engineering Drawing	2
ENGG 131 Machine Shop for Engineers	2
ENGG 132 Advanced Machine Shop for Engineers	2
ENGL 101 Freshman Composition	4
GEOG 114 Weather and Climate	3
MATH 102 Introduction to College Algebra	4
MATH 103 Plane Trigonometry	4
MATH 151 Prealgebra	4
MATH 250 Single Variable Calculus I	4
PHYSICS 150A Physics for the Life Sciences I	4
PHYSICS 150B Physics for the Life Sciences II	4
SPEECH 100 Elements of Public Speaking	3
<b>TOTAL UNITS</b>	<b>49</b>

## 3. FLIGHT OPERATIONS AND MANAGEMENT

REQUIRED COURSES:	UNITS
AERO 121 Aviation Fundamentals	3
*AERO 122A F.A.A. Private Pilot Ground School	6
AERO 124 Aircraft Power Plants	3
AERO 125 Flight Safety	2
AERO 126 Aircraft Structures	3
AERO 134 Civil Aviation Management and Laws	3
AERO 140A Instrument Ground School and Flight Simulators	4
AERO 144 Aviation Weather	3
BUSAD 100 Introduction to Business	3
MATH (See advisor for appropriate level)	3-4
PHYSICS 101 Basic Physics	4
<b>TOTAL UNITS</b>	<b>37-38</b>

\*Will be waived if students have taken equivalent course.

## AERONAUTICS CERTIFICATES

Students working for certificates must have a basic knowledge of arithmetic, reading and writing in order to learn and work in the occupations they select.

## 1. AVIATION MAINTENANCE TECHNICIAN

This certificate program is designed to qualify students for the airframe and powerplant certificate issued by the Federal Aviation Administration. The written examinations are administered by the Federal Aviation Administration through computer testing centers. The practical portion of the certificate is administered here at San Bernardino Valley College. The total program requires 1,900 hours of lecture and laboratory. This maintenance technician certificate enables the holder to perform 100 hour and annual inspections on aircraft ranging from small aircraft used in general aviation through jets utilized by commercial airlines.

REQUIRED COURSES:	UNITS
AERO 100 Airframe and Power Plant General Curriculum - Calculations/Publications	5
AERO 101 Airframe and Power Plant General Curriculum - Servicing/Materials	5
AERO 102 Airframe Maintenance Lecture - Structures	6
AERO 103 Airframe Maintenance Lecture - Systems and Components	6
AERO 104 Power Plant Maintenance Lecture - Reciprocating Engine Overhaul	6
AERO 105 Power Plant Maintenance Lecture - Accessory Overhaul	6
AERO 106 Airframe and Power Plant General Laboratory - Calculations/Publications	2
AERO 107 Airframe and Power Plant General Laboratory - Servicing/Materials	2
AERO 108 Airframe Maintenance Laboratory - Structures	5
AERO 109 Airframe Maintenance Laboratory - Systems and Components	5
AERO 110 Power Plant Maintenance Laboratory - Reciprocating Engine Overhaul	5
AERO 111 Power Plant Maintenance Laboratory - Accessory Overhaul	5
<b>TOTAL UNITS</b>	<b>58</b>

## 2. FLIGHT OPERATIONS

The certificate program in Flight Operations is designed for students interested in careers as a pilot in general aviation, commercial aviation, or military aviation. This certificate prepares students for immediate employment or for transfer to other colleges, and includes Federal Aviation Administration approved curricula in basic ground school, advanced ground school, and instrument ground school. Through the San Bernardino Valley College Flying Club, students have the opportunity to gain additional flight experience at a nominal cost as they prepare for the private pilot, commercial pilot, or instrument pilot ratings.

REQUIRED COURSES:	UNITS
AERO 121 Aviation Fundamentals	3
*AERO 122A F.A.A. Private Pilot Ground School	6
AERO 124 Aircraft Power Plants	3
AERO 125 Flight Safety	2
AERO 126 Aircraft Structures	3
AERO 140A Instrument Ground School and Flight Simulators	4
AERO 144 Aviation Weather	3
<b>TOTAL UNITS</b>	<b>24</b>

\*Will be waived if students have taken equivalent course.

3. POWERPLANT MAINTENANCE TECHNICIAN

This certificate program is designed to qualify students for the powerplant certificate issued by the Federal Aviation Administration. The written examinations are administered by the Federal Aviation Administration through computer testing centers. The practical portion of the certificate is administered here at San Bernardino Valley College. The total program requires 1150 hours of lecture and laboratory. This maintenance technician certificate enables the holder to perform 100 hour and annual inspections on aircraft ranging from small aircraft used in general aviation through jets utilized by commercial airlines.

REQUIRED COURSES:	UNITS
AERO 100 Airframe and Powerplant General Curriculum- Calculations/Publications	5
AERO 101 airframe and Powerplant General Curriculum- Servicing/Materials	5
AERO 104 Powerplant Maintenance Lecture- Reciprocating Engine Overhaul	6
AERO 105 Powerplant Maintenance Lecture- Accessory Overhaul	6
AERO 106 Airframe and Powerplant General Laboratory- Calculations/Publications	2
AERO 107 Airframe and Powerplant General Laboratory- Servicing/Materials	2
AERO 110 Powerplant Maintenance Laboratory- Reciprocating Engine Overhaul	5
AERO 111 Powerplant Maintenance Laboratory- Accessory Overhaul	5
<b>TOTAL UNITS</b>	<b>36</b>

4. AIRFRAME MAINTENANCE TECHNICIAN

This certificate program is designed to qualify students for the airframe certificate issued by the Federal Aviation administration. The written examinations are administered by the Federal Aviation administration through computer testing centers. The practical portion of the certificate is administered here at San Bernardino Valley College. The total program requires 1,150 hours of lecture and laboratory. This maintenance technician certificate enables the holder to perform 100 hour and annual inspections on aircraft ranging from small aircraft used in general aviation through jets utilized by commercial airlines.

REQUIRED COURSES:	UNITS
AERO 100 Airframe and Powerplant General Curriculum- Calculations/Publications	5
AERO 101 airframe and Powerplant General Curriculum- Servicing/Materials	5
AERO 102 Airframe Maintenance Lecture- Structures	6
AERO 103 Airframe Maintenance Lecture- Systems and Components	6
AERO 106 Airframe and Powerplant General Laboratory- Calculations/Publications	2
AERO 107 Airframe and Powerplant General Laboratory- Servicing/Materials	2
AERO 108 Airframe Maintenance Laboratory- Structures	5
AERO 109 Airframe Maintenance Laboratory- Systems and Components	5
<b>TOTAL UNITS</b>	<b>36</b>

COURSES OFFERED BY THE DEPARTMENT OF AERONAUTICS:

AERO 011  
 POWER PLANT MAINTENANCE REVIEW 6 UNITS  
*PREREQUISITE: None.*  
*LECTURE: 6 hours per week.*  
 A comprehensive review of the power plant curriculum in preparation for the F.A.A. written examination.  
*Associate Degree Applicable*

AERO 013  
 AIRFRAME MAINTENANCE REVIEW 6 UNITS  
*PREREQUISITE: None.*  
*LECTURE: 6 hours per week.*  
 A comprehensive review of the aircraft airframe and general curriculum in preparation for the F.A.A. written examination.  
*Associate Degree Applicable*

AERO 015  
 BASIC FUNDAMENTALS OF AIRCRAFT COMPOSITE STRUCTURES 2 UNITS  
*PREREQUISITE: None.*  
*LECTURE: 2 hours per week.*  
 An introduction to aircraft composite structures including the manufacturing, uniqueness and strength and repair methods.  
*Associate Degree Applicable*

AERO 100  
 AIRFRAME AND POWER PLANT GENERAL CURRICULUM - CALCULATIONS/PUBLICATIONS 5 UNITS  
*PREREQUISITE: None.*  
*COREQUISITES: AERO 106 and either AERO 102 and AERO 108 or AERO 104 and AERO 110.*  
*LECTURE: 5 hours per week.*  
 Federal Aviation Administration approved curriculum that provides training for all general requirements in maintenance mandated by the F.A.A. Focus on the applications of mathematics, physics, and electricity in aeronautics; how to interpret and use aircraft drawings; fluid lines and fittings; and strategies for testing various aircraft materials and processes.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AERO 101  
 AIRFRAME AND POWER PLANT GENERAL CURRICULUM- SERVICING/MATERIALS 5 UNITS  
*PREREQUISITE: None.*  
*COREQUISITES: AERO 107 and either AERO 103 and AERO 109 or AERO 105 and AERO 111.*  
*LECTURE: 5 hours per week.*  
 Federal Aviation Administration approved curriculum that provides training for all general requirements in maintenance mandated by the F.A.A. Focus on cleaning and corrosion control; ground operation and servicing; maintenance publications, forms and records; mechanic privileges and limitations, and solutions to common weight and balance problems.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*



**AERO 102**  
**AIRFRAME MAINTENANCE LECTURE - STRUCTURES**  
**6 UNITS**

**PREREQUISITES/COREQUISITES: AERO 100 and AERO 106.**

**COREQUISITE: AERO 108.**

**LECTURE: 6 hours per week.**

Federal Aviation Administration approved curriculum which provides training in airframe structures and airframe systems and components. Satisfactory completion of AERO 102 and AERO 103, in conjunction with the corresponding laboratory courses, qualifies students to take the F.A.A. examination for airframe certification. Focus on shop safety; aircraft covering; aircraft finishing; theory of flight; assembly and rigging; structural repair; aircraft inspection; and aircraft fuel systems.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

**AERO 103**  
**AIRFRAME MAINTENANCE LECTURE - SYSTEMS**  
**AND COMPONENTS**  
**6 UNITS**

**PREREQUISITES/COREQUISITES: AERO 101 and AERO 107.**

**COREQUISITE: AERO 109.**

**LECTURE: 6 hours per week.**

Federal Aviation Administration approved curriculum which provides training in airframe structures and airframe systems and components. Satisfactory completion of AERO 102 and AERO 103, in conjunction with the corresponding laboratory courses, qualifies students to take the F.A.A. examination for airframe certification. Focus on aircraft welding; electrical circuits; and basic aircraft systems for power, landing, brakes, warning, instrumentation, auto-pilot, cabin atmosphere control, ice and rain control, fire protection and communications.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

**AERO 104**  
**POWER PLANT MAINTENANCE LECTURE -**  
**RECIPROCATING ENGINE OVERHAUL**  
**6 UNITS**

**PREREQUISITES/COREQUISITES: AERO 100 and AERO 106.**

**COREQUISITE: AERO 110.**

**LECTURE: 6 hours per week.**

Federal Aviation Administration approved curriculum which provides training in power plant theory and maintenance. Satisfactory completion of AERO 104 and AERO 105, in conjunction with the corresponding laboratory courses, qualifies students to take the F.A.A. examination for the power plant certification. Includes reciprocating engines, turbine engines, and engine inspections.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

**AERO 105**  
**POWER PLANT MAINTENANCE LECTURE - ACCESSORY**  
**OVERHAUL**  
**6 UNITS**

**PREREQUISITES/COREQUISITES: AERO 101 and AERO 107.**

**COREQUISITE: AERO 111.**

**LECTURE: 6 hours per week.**

Federal Aviation Administration approved curriculum which provides training in power plant systems and components. Satisfactory completion of AERO 104 and AERO 105, in conjunction with the corresponding laboratory courses, qualifies students to take the F.A.A. examination for the power plant certification. Includes basic systems for instrumentation, fire protection, electrical, lubrication, ignition, fuel and fuel metering, induction, cooling, exhaust, and propellers.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

**AERO 106**  
**AIRFRAME AND POWER PLANT GENERAL LABORATORY**  
**- CALCULATIONS/PUBLICATIONS**  
**2 UNITS**

**PREREQUISITE: None.**

**COREQUISITES: AERO 100 and either AERO 102 and AERO 108 or AERO 104 and AERO 110.**

**LABORATORY: 6 hours per week.**

Practical shop work companion to AERO 100 to provide the hands-on experience mandated by the F.A.A. Focus on the applications of mathematics, physics, and electricity in aeronautics; how to interpret and use aircraft drawings; fluid lines and fittings; and strategies for testing various aircraft materials and processes.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

**AERO 107**  
**AIRFRAME AND POWER PLANT GENERAL**  
**LABORATORY - SERVICING/MATERIALS**  
**2 UNITS**

**PREREQUISITE: None.**

**COREQUISITES: AERO 101 and either AERO 103 and AERO 109 or AERO 105 and AERO 111.**

**LABORATORY: 6 hours per week.**

Practical shop work companion to AERO 101 to provide the hands-on experience mandated by the F.A.A. Focus on cleaning and corrosion control; ground operation and servicing; maintenance publications, forms and records; mechanic privileges and limitations, and solutions to common weight and balance problems.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

**AERO 108**  
**AIRFRAME MAINTENANCE LABORATORY -**  
**STRUCTURES**  
**5 UNITS**

**PREREQUISITES/COREQUISITES: AERO 100 and AERO 106.**

**COREQUISITE: AERO 102.**

**LABORATORY: 15 hours per week.**

Laboratory section of Federal Aviation Administration approved curriculum which provides training in airframe structures and airframe systems and components. This laboratory is a required corequisite to AERO 102 and focuses on shop safety; aircraft covering; aircraft finishing; theory of flight; assembly and rigging; structural repair; aircraft inspection; and aircraft fuel systems.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

**AERO 109**  
**AIRFRAME MAINTENANCE LABORATORY -**  
**SYSTEMS AND COMPONENTS**  
**5 UNITS**

**PREREQUISITES/COREQUISITES: AERO 101 and AERO 107.**

**COREQUISITE: AERO 103.**

**LABORATORY: 15 hours per week.**

Laboratory section of Federal Aviation Administration approved curriculum which provides training in airframe structures and airframe systems and components. This laboratory is a required corequisite to AERO 103 and focuses on aircraft welding; electrical circuits; and basic aircraft systems for power, landing, brakes, warning, instrumentation, auto-pilot, cabin atmosphere control, ice and rain control, fire protection and communications.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

AERO 110  
POWER PLANT MAINTENANCE LABORATORY -  
RECIPROCATING ENGINE OVERHAUL 5 UNITS  
**PREREQUISITES/COREQUISITES:** AERO 100 and AERO 106.  
**COREQUISITE:** AERO 104.  
**LABORATORY:** 15 hours per week.  
Laboratory section of Federal Aviation Administration approved curriculum which provides training in power plant theory and maintenance. This laboratory is a required corequisite to AERO 104 and includes reciprocating engines, turbine engines, and engine inspections.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AERO 111  
POWER PLANT MAINTENANCE LABORATORY -  
ACCESSORY OVERHAUL 5 UNITS  
**PREREQUISITES/COREQUISITES:** AERO 101 and AERO 107.  
**COREQUISITE:** AERO 105.  
**LABORATORY:** 15 hours per week.  
Laboratory section of Federal Aviation Administration approved curriculum which provides training in power plant systems and components. This laboratory is a required corequisite to AERO 105 and includes basic systems for instrumentation, fire protection, electrical, lubrication, ignition, fuel and fuel metering, induction, cooling, exhaust, and propellers.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AERO 121  
AVIATION FUNDAMENTALS 3 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week.  
Introduction to the basic principles of aeronautics, aircraft structure and operations. An orientation to the aviation industry including space, rocketry and aeronautical occupations. The history of aviation is presented with an outlook for the future of the aviation and aerospace industries.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AERO 122B  
F.A.A. PRIVATE PILOT GROUND SCHOOL 6 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 6 hours per week.  
Complete preparation for the F.A.A. private pilot written examination including aerodynamics, weight and balance, flight computer, navigation, meteorology and federal air regulations.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AERO 124  
AIRCRAFT POWER PLANTS 3 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week.  
Designed to familiarize the aviator or prospective pilot with the operating principles and construction highlights of both reciprocating and jet aircraft engines. Enables the professional flier to operate and maintain the power plants of most modern as well as vintage aircraft.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AERO 125  
FLIGHT SAFETY 2 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 2 hours per week.  
An in-depth study of flight safety including flight safety records, aircraft accident prevention, casual cause factors, agencies and organizations contributing to flight safety, pilot and command responsibilities, liability and litigation.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AERO 126  
AIRCRAFT STRUCTURES 3 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week.  
The fundamentals of aircraft design and construction including the types of construction; reasons for variances in construction from aircraft to aircraft; manufacturing processes for each type of aircraft and the basic working principles of major aircraft systems.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AERO 131B  
PRIVATE AND COMMERCIAL PILOT  
GROUND SCHOOL 6 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 6 hours per week.  
A review of the private pilot F.A.A. ground school and preparation for the F.A.A. private or commercial pilot examination. Topics include weight and balance and flight computers. The final is the F.A.A. written examination.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AERO 134  
CIVIL AVIATION MANAGEMENT AND LAWS 3 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week.  
The history of civil aviation in the United States including federal legislation on civil aviation; international treaties and agreements relevant to civil aviation; and regulations pertaining to the management of airports and airplane companies.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AERO 140B  
INSTRUMENT GROUND SCHOOL AND FLIGHT  
SIMULATORS 4 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week and  
**LABORATORY:** 3 hours per week.  
An instrument ground school which provides academic and practical training in the fundamentals of instrument flying. Includes aerodynamic factors, flight instruments and techniques, electronic navigational aids, flight planning, communication, air traffic control, and procedures such as departures, enroute, arrival, approach, missed approach, and emergencies. The subject matter is reinforced by flying the various procedures in the flight simulators. This is an excellent refresher course for students who currently possess an Instrument Rating or an Airline Transport Rating. **COMPLETION OF BASIC F.A.A. GROUND SCHOOL OR ENROLLMENT IN GROUND SCHOOL OR COMMERCIAL AERONAUTICAL COURSES IS REQUIRED.**  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AERO 144  
 AVIATION WEATHER 3 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week.

The aspects of weather as they relate to aircraft operation and flight safety. Includes basic and hazardous weather and interpretation of weather reports, forecasts, charts and maps.

*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AERO 198  
 AERONAUTICS WORK EXPERIENCE 1-4 UNITS  
**PREREQUISITE:** None.

Supervised training in the form of on-the-job employment that will enhance the student's educational goals. The student's major and job must match. Work Experience 5-20 hours per week, with 5 hours each week equal to one unit. Students may earn a total of 16 units toward graduation in work experience courses.

*Associate Degree Applicable*  
*Course credit transfers to CSU.*

## AIR TRAVEL

DIVISION: Technical  
 DIVISION DEAN: Thomas Bauman, M.S.C.  
 DEPARTMENT HEAD: Dick Thompson, Ed.D.  
 (909) 384-8269  
 OTHER FACULTY: Kevin Kammer, A.A.  
 Allen Moore, A.A.  
 DIVISION SECRETARY: Patsy Martinez  
 (909) 384-8902  
 DIVISION OFFICE: Technical 108  
 (909) 384-4451  
 LIAISON COUNSELOR: George Fleming, M.S.  
 (909) 384-8975

### AIR TRAVEL CAREERS

The Air Travel Careers curriculum prepares students for the competitive customer service careers in the airline and travel industry. Classes include career survey, hiring requirements, communication skills, appearance/image standards, oral interviewing techniques, written employment skills, airline, airport and travel terminology and codes plus airline reservation systems.

A specialization in Air Travel Careers prepares students for work in every sector of the airline and travel industry such as flight attendant, reservationist, gate agent, customer/passenger service agent, ramp agent, sales and management plus a variety of other positions.

### AIR TRAVEL CAREERS ASSOCIATE OF SCIENCE DEGREE

To graduate with a specialization in one of the Air Travel Careers majors, students must complete all the requirements for the appropriate certificate with a grade of C or better plus the general breadth requirements for the associate degree (minimum total = 60 units).

### AIR TRAVEL CAREERS CERTIFICATES

Students working for certificates must have a basic knowledge of arithmetic, reading and writing in order to learn and work in the occupations they select.

There are three Air Travel Career Certificates: (1) Air Travel Careers - Flight, (2) Air Travel Careers - Ground, and (3) Airline Travel Careers - Travel. Each of these certificates requires the core courses, plus specialized courses.

<b>CORE REQUIRED COURSES:</b>		<b>UNITS</b>
AIRTVL 101	Survey of Travel Careers	1.5
AIRTVL 103	Image, Attitude, and Appearance	1.5
AIRTVL 104	Terminology, Codes, and Operations	1.5
AIRTVL 105	Written Employment Skills	1.5
AIRTVL 106	Oral Interviewing Skills for Employment	1.5
AIRTVL 107	Cultural Awareness	1.5
AIRTVL 108	Service: Ground and In-flight	1.5
AIRTVL 109	Safety: Ground and In-flight	1.5
AIRTVL 110	Travel Reservation System I	1.0
AIRTVL 111	Travel Reservation System II	1.0
AIRTVL 197	Internship Seminar/Work Experience	3.0
PE 231	First Aid and Medical Self-Help	3.0

Three courses from the following list of Travel Geography are required for certification:		4.5
AIRTVL 112	Travel Geography - United States	(1.5)
AIRTVL 113	Travel Geography - The Americas	(1.5)
AIRTVL 114	Travel Geography - Pacific Rim	(1.5)
AIRTVL 115	Travel Geography - Southern Europe	(1.5)
AIRTVL 116	Travel Geography - Northern Europe	(1.5)
AIRTVL 117	Travel Geography - Eastern Europe	(1.5)
AIRTVL 118	Travel Geography - Africa	(1.5)
AIRTVL 120	Travel Geography - Resort Destinations	(1.5)

**TOTAL UNITS for Air Travel Careers Core Requirements 24.5**

### SUGGESTED ELECTIVES

AERO 121	Aviation Fundamentals	3.0
AERO 134	Civil Aviation Management and Laws	3.0
BUSAD 100	Introduction to Business	3.0
ENGL 101	Freshman Composition	4.0
OIS 100	Beginning Keyboarding	3.0
SPEECH 100	Elements of Public Speaking	3.0

### 1. Air Travel Careers - Flight

This certificate prepares students for work as flight attendants, reservationists, ticket agents, travel agents, gate agents, customer/passenger service agents, ramp agents plus a variety of other positions.

**REQUIRED COURSES:** **UNITS**

<b>Air Travel Careers Core Requirements</b>	<b>24.5</b>
AIRTVL 102 Flight Attendant Survey	1.5

Total Units for Air Travel Careers - Flight Specialized Courses 1.5

**Total Units For Air Travel Careers - Flight Certificate 26.0**

### 2. Air Travel Careers - Ground

This certificate prepares students for work as ground support for the aviation industry such as reservationists, ticket agents, travel agents, gate agents, customer/passenger service agents, ramp agents plus a variety of other positions.

**REQUIRED COURSES:** **UNITS**

<b>Air Travel Careers Core Requirements</b>	<b>24.5</b>
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**Total Units For Air Travel Careers - Ground Certificate 24.5**

3. Air Travel Careers - Travel

This certificate prepares students for work as ticket agents, travel agents, reservationists, gate agents, customer/passenger service agents, ramp agents, sales and management plus a variety of other positions.

REQUIRED COURSES:	UNITS
<b>Air Travel Careers Core Requirements</b>	<b>24.5</b>
AIRTVL 130 Air Fares and Ticketing I: Domestic	3.0
AIRTVL 131 Air Fares and Ticketing II: International	3.0
AIRTVL 132 Introduction to Cruises, Tours, Ground Transportation and Accommodations	3.0
AIRTVL 133 Travel Agency Sales and Business Management	1.5
<b>Total Units for Air Travel Careers - Travel Specialized Courses</b>	<b>10.5</b>
<b><u>Total Units For Air Travel Careers - Travel Certificate</u></b>	<b><u>35.0</u></b>

COURSES OFFERED BY THE DEPARTMENT OF AIR TRAVEL:

AIRTVL 101  
 SURVEY OF TRAVEL CAREERS 1.5 UNITS  
**PREREQUISITE: None.**  
**LECTURE: 1.5 hours per week.**  
 Introduction to travel careers employment opportunities, qualifications, salary, and benefits. Includes an overview of employment in airports, hospitality industries, travel agencies, and aviation support businesses, and on airlines, trains, cruises, and tours.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AIRTVL 102  
 FLIGHT ATTENDANT SURVEY 1.5 UNITS  
**PREREQUISITE: None.**  
**LECTURE: 1.5 hours per week.**  
 Introduction to flight attendant and in-flight service team qualifications, employment opportunities, responsibilities, lifestyles, salaries and benefits.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AIRTVL 103  
 IMAGE, ATTITUDE AND APPEARANCE 1.5 UNITS  
**PREREQUISITE: None.**  
**LECTURE: 1.5 hours per week.**  
 Overview of the appearance, image, attitude, lifestyle decisions, goals, etiquette and wellness standards established by major United States airlines. Includes techniques to build confidence, professionalism, and business skills to secure successful employment in airline travel careers.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AIRTVL 104  
 TERMINOLOGY, CODES AND OPERATIONS 1.5 UNITS  
**PREREQUISITE: None.**  
**LECTURE: 1.5 hours per week.**  
 Survey of terminology unique to the airline travel industry, such as airline codes, airport and city codes, schedules, Official Airline Guide, federal agencies, airport operations, history, airline deregulation, mergers and acquisitions.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AIRTVL 105  
 WRITTEN EMPLOYMENT SKILLS 1.5 UNITS  
**PREREQUISITE: None.**  
**LECTURE: 1.5 hours per week.**  
 Prepares students with written skills required for employment such as drafting a resume, application, business letters, self-evaluation, marketing plan, personal register of employment data, employment testing, and document on employee/labor organizations and affirmative action.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AIRTVL 106  
 ORAL EMPLOYMENT INTERVIEW SKILLS 1.5 UNITS  
**PREREQUISITE: None.**  
**LECTURE: 1.5 hours per week.**  
 Prepares students for employment interviews through role playing and feedback on responding to interview questions. Student interviews are videotaped and critiqued, providing students with opportunities to see the image they project during mock interviews.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AIRTVL 107  
 CULTURAL AWARENESS 1.5 UNITS  
**PREREQUISITE: None.**  
**LECTURE: 1.5 hours per week.**  
 Introduction to the history and belief systems of various world cultures with a focus on etiquette, gestures, body language, eating/drinking practices, business and social behavior.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AIRTVL 108  
 SERVICE: GROUND AND IN-FLIGHT 1.5 UNITS  
**PREREQUISITE: None.**  
**LECTURE: 1.5 hours per week.**  
 Survey of service techniques for ground and in-flight operations including the identification and pronunciation of foods and beverages, airline equipment to provide quality food/beverage service, and the development of a personal serving style.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AIRTVL 109  
 SAFETY: GROUND AND IN-FLIGHT 1.5 UNITS  
**PREREQUISITE: None.**  
**LECTURE: 1.5 hours per week.**  
 Survey of safety and security procedures for the travel industry including ground and in-flight equipment, passenger psychology, airport security, federal regulations and safety precautions.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AIRTVL 110  
TRAVEL RESERVATION SYSTEM I 1 UNIT

**PREREQUISITE:** None.

**LECTURE:** .75 hour per week and  
**LABORATORY:** .75 hour per week.

Introduction to computer travel industry reservation and ticketing systems, with extensive practice in entering simulated reservations.

*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AIRTVL 111  
TRAVEL RESERVATION SYSTEM II 1 UNIT

**PREREQUISITE:** AIRTVL 110.

**LECTURE:** .75 hour per week and  
**LABORATORY:** .75 hour per week.

A second-level course in computer travel industry reservation and ticketing systems, with extensive role-playing practice in procedures required for reservations, follow-up confirmations, and effective customer service.

*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AIRTVL 112  
TRAVEL GEOGRAPHY - UNITED STATES 1.5 UNITS

**PREREQUISITE:** None.

**LECTURE:** 1.5 hours per week.

A travel-industry view of the United States including information on such items as regional accents and dialects, shopping, historical and recreational tourist destinations, regional culture, and ethnic diversity to maximize the travel experience in the United States.

*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AIRTVL 113  
TRAVEL GEOGRAPHY - THE AMERICAS 1.5 UNITS

**PREREQUISITE:** None.

**LECTURE:** 1.5 hours per week.

A travel-industry view of the Americas including information on such items as culture, currency, language, shopping and tourist destinations in Canada, Mexico, the Caribbean, Central America, and South America.

*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AIRTVL 114  
TRAVEL GEOGRAPHY - PACIFIC RIM 1.5 UNITS

**PREREQUISITE:** None.

**LECTURE:** 1.5 hours per week.

A travel-industry view of the Pacific Rim including information on such items as regional accents and dialects, currency, shopping, historical and recreational tourist destinations, regional culture, ethnic diversity, and customs requirements to maximize the travel experience in Australia, New Zealand, Japan, South Korea, Hong Kong, China, Taiwan, Thailand, Philippines, Tahiti, Samoa, Fiji, Singapore, Malaysia, Indonesia, and Indochina.

*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AIRTVL 115  
TRAVEL GEOGRAPHY - SOUTHERN EUROPE 1.5 UNITS

**PREREQUISITE:** None.

**LECTURE:** 1.5 hours per week.

A travel-industry view of Southern Europe including information on such items as culture, currency, language, shopping, tourist destinations and regional cultures in Greece, Spain, Portugal, Italy, Austria, Germany, Switzerland, and France.

*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AIRTVL 116  
TRAVEL GEOGRAPHY - NORTHERN EUROPE 1.5 UNITS

**PREREQUISITE:** None.

**LECTURE:** 1.5 hours per week.

A travel-industry view of Northern Europe including information on such items as customs requirements, currency, language and dialects, shopping, historical and recreational tourist destinations, regional culture, and ethnic diversity to maximize the travel experience in Scandinavia, the British Isles, and the Low Countries.

*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AIRTVL 117  
TRAVEL GEOGRAPHY - EASTERN EUROPE 1.5 UNITS

**PREREQUISITE:** None.

**LECTURE:** 1.5 hours per week.

A travel-industry view of Eastern Europe including information on such items as culture, currency, language, shopping, tourist destinations and regional cultures in Russia, Czechoslovakia, Hungary, Poland, the Yugoslav republics, Romania, and Albania.

*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AIRTVL 118  
TRAVEL GEOGRAPHY - AFRICA 1.5 UNITS

**PREREQUISITE:** None.

**LECTURE:** 1.5 hours per week.

A travel-industry view of Africa including information on such items as customs, entry requirements, currency, language and dialects, shopping, historical and recreation tourist destinations and regional cultures in Africa.

*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AIRTVL 120  
TRAVEL GEOGRAPHY - RESORT DESTINATIONS 1.5 UNITS

**PREREQUISITE:** None.

**LECTURE:** 1.5 hours per week.

A travel-industry view of resort destinations in and near the United States. Includes information on such items as local cruises and their corresponding itineraries, culture, currency, language, shopping, historical and recreational tourist destinations, ethnic diversity, and regional culture to maximize the travel experience in the Caribbean, the Bahamas, Bermuda, the Mexican Riviera, the Yucatan Peninsula, and the state of Hawaii.

*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AIRTVL 130  
AIR FARES AND TICKETING I: DOMESTIC 3 UNITS

**PREREQUISITE/COREQUISITE:** AIRTVL 110.

**LECTURE:** 3 hours per week.

This course provides an introduction into domestic airline fares, fare construction ticketing, route construction and corresponding rules. Included in the course will be instruction on correctly writing an airline ticket and an understanding of industry accountable documents and their use. The course is designed for those interested in becoming employed in the air travel industry as an airline ticket agent, travel agent, tour agent or airline reservationist.

*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AIRTVL 131  
AIR FARES AND TICKETING II: INTERNATIONAL 3 UNITS

**PREREQUISITES/COREQUISITES:** AIRTVL 111 and AIRTVL 130.

**LECTURE:** 3 hours per week.

This course provides an introduction into international airline fares, fare construction, ticketing, route construction and corresponding rules. Also covered will be international taxes, refunds and exchanges both domestic and international. This course is designed for those interested in becoming employed in the air travel industry as an airline ticket agent, travel agent, tour agent or airline reservationist.

*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AIRTVL 132  
INTRODUCTION TO CRUISES, TOURS, GROUND TRANSPORTATION AND ACCOMMODATIONS 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

This course provides an introduction into cruising, rail travel, tours and accommodations for students entering the travel agency / airline industry. Each module will include information on products available to the public: destinations, itineraries, and services offered, cost of product, value comparison and the corresponding target market for the products.

*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AIRTVL 133  
TRAVEL AGENCY SALES AND BUSINESS MANAGEMENT 1.50 UNITS

**PREREQUISITE:** None.

**LECTURE:** 1.50 hours per week.

This course provides the travel student the information and knowledge required to successfully manage and operate a travel agency. Students will become familiar with sales and marketing technology, communication and money management. The course is designed to meet the industry standards of the Institute of Certified Travel Agents (ICTA). Each student will have the opportunity to earn a "Travel Career Development Test Certificate" awarded by the ICTA, which is recognized by travel industry employers nationwide.

*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AIRTVL 197  
INTERNSHIP SEMINAR/WORK EXPERIENCE 3 UNITS

**PREREQUISITE:** AIRTVL 104 and AIRTVL 110 or equivalent skills verified through occupational experience in a travel agency, other training institution, military or airlines.

**LECTURE:** 16 hours per week and 120 hours of non-paid work or 150 hours of paid work.

A lecture-based foundation for students' work experience in the field. Supervised training in the form of social skills, and application of information about airline and travel industries.

*Associate Degree Applicable*  
*Course credit transfers to CSU.*

AIRTVL 198  
AIR TRAVEL CAREERS WORK EXPERIENCE 1-4 UNITS  
**PREREQUISITE:** None.

Supervised training in the form of on-the-job employment that will enhance the student's educational goals. The student's major and job must match. Work Experience 5-20 hours per week, with 5 hours each week equal to one unit. Students may earn a total of 16 units toward graduation in work experience courses.

*Associate Degree Applicable*  
*Course credit transfers to CSU.*

## ALCOHOL/DRUG STUDIES

See courses within the HUMAN SERVICES DEPARTMENT

## AMERICAN SIGN LANGUAGE

DIVISION:	Humanities
INTERIM DIVISION DEAN:	Robert Rippy, M.F.A.
DEPARTMENT HEAD:	Susan Spagna, Ph.D. North Hall 204 (909) 384-8543
OTHER FACULTY:	Antonio Duarte, M.A. Nori Mejia, M.A. Jeff Schmidt, M.A.
DIVISION SECRETARIES:	Kelly Adcock North Hall 240 (909) 384- 8906 To Be Announced Liberal Arts 217 (909) 384-8633
LIAISON COUNSELOR:	Juan Zepeda, M.S.C. (909) 384-8976

## AMERICAN SIGN LANGUAGE

ASL 109  
BEGINNING AMERICAN SIGN LANGUAGE 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

Introduction to the basic vocabulary and grammar of American Sign Language including a review of characteristics of the deaf community. Emphasis on receptive skills. This course qualifies for continuing education credit for nurses. Provider approved by the California Board of Registered Nursing, provider number 01480, for 45 contact hours.

*Associate Degree Applicable*  
*Course credit transfers to CSU and UC.*

ASL 110  
INTERMEDIATE AMERICAN SIGN LANGUAGE 3 UNITS

**PREREQUISITE:** ASL 109.

**LECTURE:** 3 hours per week.

This second-level course in American Sign Language continues with the development of conversational skills with emphasis on both receptive and expressive abilities. This course qualifies for continuing education credit for nurses. Provider approved by the California Board of Registered Nursing, provider number 01480, for 45 contact hours.

*Associate Degree Applicable*  
*Course credit transfers to CSU and UC.*

ASL 111  
ADVANCED AMERICAN SIGN LANGUAGE 3 UNITS

**PREREQUISITE:** ASL 110.

**LECTURE:** 3 hours per week.

The continuing study of American Sign Language with emphasis on idiomatic constructions, expressive skills in conversation, and further study of deaf cultural issues. This course qualifies for continuing education credit for nurses. Provider approved by the California Board of Registered Nursing, provider number 01480, for 45 contact hours.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

## ANATOMY

See courses within the BIOLOGY DEPARTMENT

## ANTHROPOLOGY

DIVISION: Social Science and Organizational Development

DIVISION DEAN: Troy Sheffield, Ed.D.

DEPARTMENT HEAD: Janet Pielke Brennecke, M.A.

FACULTY: Gary Olson, M.A.

DIVISION SECRETARY: Laura Cross

DIVISION OFFICE: Liberal Arts Building, Room 122  
(909) 384-8603

LIAISON COUNSELOR: Laura Gomez-Guillen, M.A.  
(909) 384-8979

Anthropology is the study of humanity in all times and places. As such, it has the broadest scope of any of the social sciences.

The Anthropology Department includes basic introductory courses in cultural and physical anthropology as well as archaeology. In addition, courses are offered which focus on selected areas, such as religion, art, and North American Indians.

With the goal of understanding people in all parts of the world, anthropology is useful to anyone living or working in a multicultural environment, such as the business world, health sciences, or any other profession which involves working with people from diverse backgrounds. The courses within this department are designed to provide students with survival skills for the global community in which we live, a community in which all of the world's people are interdependent. Students planning to transfer to a four-year institution and major in anthropology should consult with a counselor regarding the transfer process and lower division requirements.

### COURSES OFFERED BY THE DEPARTMENT OF ANTHROPOLOGY:

ANTHRO 100  
INTRODUCTION TO ARCHEOLOGY 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

The study of material remains, usually from the past, to describe and explain human behavior. Includes the methods, objectives, and history of archeology; a survey of the biological and cultural development of humanity as revealed by archaeological discoveries from around the world; and the contribution of archeology to an understanding of the present and the future.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

ANTHRO 102  
CULTURAL ANTHROPOLOGY 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

The focus is on human behavior, studied through the approaches of archaeology, linguistics, and ethnology. Selected topics cover the range of cultural phenomena including material culture, social organization, and religion. This course qualifies for continuing education credit for nurses. Provider approved by the California Board of Registered Nursing, provider number 01480, for 45 contact hours.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

*CAN (California Articulation Number): ANTH 4*

ANTHRO 106  
PHYSICAL ANTHROPOLOGY 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

The systematic study of humans as biological organisms including the origin and antiquity of humanity, our place in nature, modern biological diversity including race, and the future prospects for the human species. This course qualifies for continuing education credit for nurses. Provider approved by the California Board of Registered Nursing, provider number 01480, for 45 contact hours.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

*CAN (California Articulation Number): ANTH 2*

ANTHRO 107  
THE UNITED STATES AND  
THE NORTH AMERICAN INDIANS 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

A systematic survey of North American Indian groups, from their prehistoric roots to the present. Includes their place in American history, U.S. Government policies and regulation, and future prospects for North American Indians. This course is also offered as HIST 107.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

ANTHRO 109  
TRIBAL AND ETHNIC ART 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

A world-wide survey of the artistic achievement of past and present tribal peoples with an emphasis on the meaning of art in each society. Art works are surveyed through films, slides, field trips and examination of actual art works and include cultures of North American Indians, ancient America, the Pacific, Africa and Australia. This course is also offered as ART 109.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

ANTHRO 110  
TRIBAL AND ETHNIC RELIGIONS 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

A comparative study of supernaturalism in tribal societies, both past and present including witchcraft, magic, totemism, mythology and ritual, nativistic movements, and the religious context of drug usage. Prehistoric religion will be examined, as well as the belief systems of selected tribal peoples. This course is also offered as RELIG 110.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

**ANTHRO 222**  
**SPECIAL PROBLEMS IN ANTHROPOLOGY I** 1 UNIT  
**PREREQUISITE/COREQUISITE: ANTHRO 100**  
*or ANTHRO 102 or ANTHRO 106.*

**INDEPENDENT STUDY: 3 hours per week.**  
 An opportunity for selected students with some background in anthropology to pursue special research problems in the field. Topics are selected on an individual basis, and may include practical experience in archaeological excavation or museum work. Students are required to devote three hours per week to their project throughout the semester. Prior to registration, a contract must be prepared. See instructor for details.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*  
*Limited transfer to UC; contact a counselor for details.*

**ANTHRO 223**  
**SPECIAL PROBLEMS IN ANTHROPOLOGY II** 2 UNITS  
**PREREQUISITE/COREQUISITE: ANTHRO 100**  
*or ANTHRO 102 or ANTHRO 106.*

**INDEPENDENT STUDY: 6 hours per week.**  
 An opportunity for selected students with some background in anthropology to pursue special research problems in the field. Topics are selected on an individual basis, and may include practical experience in archaeological excavation or museum work. Students are required to devote six hours per week to their project throughout the semester. Prior to registration, a contract must be prepared. See instructor for details.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*  
*Limited transfer to UC; contact a counselor for details.*

## ARCHITECTURE

**DIVISION:** Science and Math  
**DIVISION DEAN:** W. William Hughes, Ph.D.  
**DEPARTMENT HEAD:** Susan Bangasser  
 Chemistry 118  
 (909) 384-8650  
**DIVISION SECRETARY:** Rose Garcia  
**DIVISION OFFICE:** Chemistry 121  
 (909) 384-8645  
**LIAISON COUNSELOR:** Diana Rodriguez, M.A.  
 (909) 384-8950  
 (909) 384-8234

The Architecture curriculum is designed to provide students with the following understanding and skills:  
 1) Verbal and graphic methods of communication;  
 2) An understanding of the social and environmental problems in the United States and other countries;  
 3) Creative solutions to existing and future problems in the United States and other countries; and  
 4) How to implement new ideas in a reasonable time frame.  
 The areas of study include how to develop a better quality of life through efficient housing, new building material development, new construction methods, new work methods, solar and wind

power, efficient use of resources, and a reduction of waste in materials and time. A learning-by-doing approach is stressed in preparation for the job market or transfer to a university for further study in architecture, architectural engineering, city planning, or landscape architecture. Students planning to transfer to a four-year institution and major in one of these fields should consult with a counselor regarding the transfer process and lower division requirements.

## ARCHITECTURE ASSOCIATE OF ARTS DEGREE

To graduate with a specialization in Architecture, students must complete the following required courses plus the general breadth requirements for the Associate Degree (total = 60 units).

<b>REQUIRED COURSES:</b>	<b>UNITS</b>
ARCH 150 Introduction to Architectural Design I	3
ARCH 151 Introduction to Architectural Design II	3
ARCH 159 Architectural Freehand Drawing	1
ARCH 160 Architectural Drawing	4
ARCH 165 Architectural Illustration	4
ARCH 200 Basic Design I	4
ARCH 201 Basic Design II	4
ARCH 230 Architectural Practice I	3
ARCH 231 Architectural Practice II	3
Nine units from the list of RECOMMENDED COURSES	9
<b>TOTAL UNITS</b>	<b>38</b>

<b>RECOMMENDED COURSES:</b>	<b>UNITS</b>
ARCH 145 History of Architecture I	3
ARCH 146 History of Architecture II	3
ARCH 170 Architectural Building Construction Systems	4
MATH 151 Precalculus	4
MATH 250 Single Variable Calculus I	4
MATH 251 Single Variable Calculus II	4
MATH 252 Multivariable Calculus	5

## ARCHITECTURE CERTIFICATES

Students working for certificates must have a basic knowledge of arithmetic, reading and writing in order to learn and work in the occupations they select.

**1. ARCHITECTURAL DRAFTING TECHNICIAN CERTIFICATE**  
 The Architectural Drafting Technician Certificate is designed to prepare students for entry-level work in the architectural field doing architectural drafting and detailing, rendering, sketching, and simple computations. Students would most likely work for a licensed architect, structural engineer, mechanical engineer or for local, state, and federal governmental agencies or urban planning commissions.



REQUIRED COURSES:	UNITS
ARCH 130 Materials of Architectural Construction	3
ARCH 150 Introduction to Architectural Design I	3
ARCH 151 Introduction to Architectural Design II	3
ARCH 159 Architectural Freehand Drawing	1
ARCH 160 Architectural Drawing	4
ARCH 165 Architectural Illustration	4
ARCH 200 Basic Design I	4
ARCH 201 Basic Design II	4
ARCH 230 Architectural Practice I	3
ARCH 231 Architectural Practice II	3
TECALC 097 Technical Calculations	(4)
or	
MATH 102 Introduction to College Algebra	4
<b>TOTAL UNITS</b>	<b>36</b>

## 2. CONSTRUCTION ENGINEERING TECHNOLOGY CERTIFICATE

The Construction Engineering Technology Certificate is designed to prepare students for the building fields and the architectural design fields.

REQUIRED COURSES:	UNITS
ARCH 130 Materials of Construction	3
ARCH 144 Introduction to Architectural Computer-Aided Drafting (CAD)	3
ARCH 150 Introduction to Architectural Design I	3
ARCH 159 Architectural Freehand Drawing	1
ARCH 160 Architectural Drawing	4
ARCH 170 Architectural Building Construction Systems	4
ARCH 230 Architectural Practice I	3
ARCH 231 Architectural Practice II	3
MATH 103 Plane Trigonometry	4
<b>TOTAL UNITS</b>	<b>28</b>

## COURSES OFFERED BY THE DEPARTMENT OF ARCHITECTURE:

ARCH 130  
MATERIALS OF ARCHITECTURAL CONSTRUCTION 3 UNITS  
**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

Sources, properties and production of the common materials used in construction, such as steel, iron, non-ferrous metals and their alloys, concrete, brick and wood.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

ARCH 141  
INTRODUCTION TO ARCHITECTURAL  
COMPUTER AIDED DRAFTING (CAD) 3 UNITS  
**PREREQUISITE:** None.

**LECTURE:** 2 hours per week and  
**LABORATORY:** 3 hours per week.

This course introduces students to the theories and principles of computer aided design/drafting and to its principal applications in the field of architecture (generating, evaluating, modeling, drafting, and rendering design solutions).

*Associate Degree Applicable*

*Course credit transfers to CSU.*

ARCH 145  
HISTORY OF ARCHITECTURE I 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

A comparative study of architecture and architects from a variety of cultures with emphasis on the people, locations, structures, materials, and methods of construction. Includes prehistoric monolithic, Crete, Greece, Pre-Italian, Roman, English Medieval, and Gothic cultures.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

*Limited transfer to UC; contact a counselor for details.*

ARCH 146  
HISTORY OF ARCHITECTURE II 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

A comparative study of architecture and architects from a variety of cultures with emphasis on the people, locations, structures, materials, and methods of construction. Includes early colonial settlements in the United States, Mayan, Native American, the Industrial Revolution, and modern cultures.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

*Limited transfer to UC; contact a counselor for details.*

ARCH 150  
INTRODUCTION TO ARCHITECTURAL DESIGN I 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

Introduction to architecture and the design process with emphasis on reason and principles for the development of creativity.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

ARCH 151  
INTRODUCTION TO ARCHITECTURAL DESIGN II 3 UNITS

**PREREQUISITE:** ARCH 150.

**LECTURE:** 1 hour per week and

**LABORATORY:** 5 hours per week.

Development of skills in basic composition and basic design as applied to architecture. A series of projects introduce line, color, form, materials, and promote awareness of environment.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

*Limited transfer to UC; contact a counselor for details.*

ARCH 159  
ARCHITECTURAL FREEHAND DRAWING 1 UNIT

**PREREQUISITE:** None.

**LABORATORY:** 3 hours per week.

Development of skills in rapid free-hand sketching with several medium with emphasis on the skills required to record and communicate architectural concepts.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

ARCH 160  
ARCHITECTURAL DRAWING 4 UNITS

**PREREQUISITE:** None.

**LECTURE:** 1 hour per week and

**LABORATORY:** 8 hours per week.

Basic architectural techniques and skills used in graphic communication including orthographic, isometric developments, descriptive geometry, perspective (perspective shades, shadows, reflections), and basic model building.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

*Limited transfer to UC; contact a counselor for details.*

ARCH 165  
ARCHITECTURAL ILLUSTRATION 4 UNITS

**PREREQUISITE:** None.

**LECTURE:** 1 hour per week and

**LABORATORY:** 8 hours per week.

Development of skills required to produce graphic illustrations used in the architectural profession including black and white, color, photographic, and video methods.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

ARCH 170  
ARCHITECTURAL BUILDING CONSTRUCTION SYSTEMS 4 UNITS

**PREREQUISITE:** None.

**LECTURE:** 2 hours per week and

**LABORATORY:** 6 hours per week.

Construction project course to give students knowledge and experience in building construction as it relates to architecture.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

ARCH 180  
FUNDAMENTALS OF STRUCTURAL DESIGN 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

Provides an overview of the variety of forces acting upon building structural systems. Covers topics relative to the strength, mechanical principles and design of concrete, wood, steel and other building materials as they are used in foundations, floors, walls, columns and roofs.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

ARCH 200  
BASIC DESIGN I 4 UNITS

**PREREQUISITE:** ARCH 151.

**LECTURE:** 1 hour per week and

**LABORATORY:** 8 hours per week.

Development of creative design skills and problem solving as required in the architectural profession including the study and solution of elementary problems involving the natural and social environment and basic model building.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

*Limited transfer to UC; contact a counselor for details.*

ARCH 201  
BASIC DESIGN II 4 UNITS

**PREREQUISITE:** ARCH 200.

**LECTURE:** 1 hour per week and

**LABORATORY:** 8 hours per week.

Development of creative design skills and problem solving as required in the architectural profession including advanced problems in space relationships, structures, and human requirements and advanced model building.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

*Limited transfer to UC; contact a counselor for details.*

ARCH 230  
ARCHITECTURAL PRACTICE I 3 UNITS

**PREREQUISITES:** ARCH 130 and ARCH 160.

**LECTURE:** 1 hour per week and

**LABORATORY:** 6 hours per week.

Methods used in the architectural profession for the preparation of preliminary studies, construction drawings, detail drawings and building code applications including complete construction drawings of light wood frame and heavy timber construction.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

ARCH 231  
ARCHITECTURAL PRACTICE II 3 UNITS

**PREREQUISITE:** ARCH 230.

**LECTURE:** 1 hour per week and

**LABORATORY:** 6 hours per week.

Methods used in the architectural profession for the preparation of preliminary studies, construction drawings, detail drawings and building code applications including complete construction drawings for steel frame and concrete construction.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

## ART

DIVISION:	Humanities
INTERIM DIVISION DEAN:	Robert Rippey, M.F.A.
DEPARTMENT HEAD:	Mary Sue Andersen, M.F.A.
DEPARTMENT OFFICE:	Art Gallery (909) 384-8939
OTHER FACULTY:	Gary Calote, M.A. James Stewart, M.F.A. Susan Williams, M.F.A.
DIVISION SECRETARIES:	Kelly Adcock North Hall 240 (909) 384-8906 To Be Announced Liberal Arts 217 (909) 384-8633
LIAISON COUNSELOR:	Richard Long, M.A. (909) 384-8972

The study of art involves both an appreciation of the cultural heritage of art and the development of skills. Consequently, the Art Department offers courses in art history as well as studio courses in drawing, design, ceramics, painting, film-making, sculpture, and glassblowing.

In addition to an associate degree in fine arts, the department offers a certificate in commercial art, designed for students seeking employment in the design, advertising, and entertainment fields.

A baccalaureate degree in art qualifies students for employment in the fine arts, industry, and education. Students planning to transfer to a four-year institution and major in art should consult with a counselor regarding the transfer process and lower division requirements.

Many of the courses in this department are activity courses that may be taken more than once. These courses are indicated by (x) following the three-digit course number; the number following the (x) indicates the number of times the course may be repeated.

## ART ASSOCIATE OF ARTS DEGREES

## 1. ART

To graduate with a specialization in Art, students must complete the following required courses plus the general breadth requirements for the Associate Degree (total = 60 units). The art courses chosen should reflect the individual student's interests.

REQUIRED COURSES:	UNITS
ART 100 Art History: The Stone Age to the Middle Ages	3
ART 102 Art History: The Renaissance	3
ART 120x4 Basic Design	3
Or	
ART 175x4 Sculpture	(3)
Or	
ART 212x4 Ceramics	(3)
ART 124x4 Drawing	3
ART 126x4 Painting	3
Or	
ART 132x4 Life Drawing	(3)
ART 148 Beginning Computer Graphics	3
ART 164x4 Creative Filmmaking	3
<b>TOTAL UNITS</b>	<b>21</b>

## 2. GRAPHIC DESIGN

REQUIRED COURSES:	UNITS
ART 100 Art History: The Stone Age to the Middle Ages	3
ART 102 Art History: The Renaissance	3
ART 120x4 Basic Design	3
ART 124x4 Drawing	3
ART 145 Graphic Design	3
ART 148 Beginning Computer Graphics	3
ART 158x4 Basic Photography	3
Three units from the list of RECOMMENDED COURSES	3
<b>TOTAL UNITS</b>	<b>24</b>

RECOMMENDED COURSES:	UNITS
ART 109 Tribal and Ethnic Art	3
ART 120x4 Basic Drawing	3
ART 126x4 Painting	3
ART 132x4 Life Drawing	3
ART 149 Intermediate Computer Graphics	3
ART 150 Advanced Computer Graphics	3
ART 164x4 Creative Filmmaking	3
ART 180 Beginning Computer Animation	3

## GRAPHIC DESIGN CERTIFICATE

Students working for certificates must have a basic knowledge of arithmetic, reading and writing in order to learn and work in the occupations they select.

REQUIRED COURSES:	UNITS
ENGL 015 Preparation for College Writing	4
Or	
ENGL 101 Freshman Composition	(4)
ART 100 Art History: The Stone Age to the Middle Ages	3
Or	
ART 102 Art History: The Renaissance to the 20th Century	(3)
Or	

ART 105 History of 20th Century Art	(3)
ART 120x4 Basic Design	3
ART 145 Graphic Design	3
ART 148 Beginning Computer Graphics	3
ART 149 Intermediate Computer Graphics	3
ART 161 Digital Photography	3
ART 185 Intermediate Web and Multimedia Design	3
<b>TOTAL UNITS</b>	<b>25</b>

## WEB AND MULTIMEDIA DESIGN CERTIFICATE

Students working for certificates must have a basic knowledge of arithmetic, reading and writing in order to learn and work in the occupations they select.

REQUIRED COURSES:	UNITS
ENGL 015 Preparation for College Writing	4
Or	
ENGL 101 Freshman Composition	(4)
ART 100 Art History: The Stone Age to the Middle Ages	3
Or	
ART 102 Art History: The Renaissance to the 20th Century	(3)
Or	
ART 105 History of 20th Century Art	(3)
ART 120x4 Basic Design	3
ART 148 Beginning Computer Graphics	3
ART 161 Digital Photography	3
ART 180 Beginning Computer Animation	3
ART 185 Intermediate Web and Multimedia Design	3
ART 185 Intermediate Web and Multimedia Design	3
<b>TOTAL UNITS</b>	<b>25</b>

*\*Pending approval from the California Community College Chancellor's Office.*

## COURSES OFFERED BY THE DEPARTMENT OF ART :

ART 095x4 MULTI-MEDIA PRESENTATIONS	1 UNIT
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**PREREQUISITE:** None.

**LECTURE:** .50 hour per week and

**LABORATORY:** 1 hour per week.

An introductory, how-to course designed to facilitate creation of multi-media presentations using combinations of text, scanned photographic imagery, video, and sound. Includes design concepts, technical skills, and analysis of content for producing complete ideas clearly.

*Associate Degree Applicable*

ART 100 ART HISTORY: THE STONE AGE TO THE MIDDLE AGES	3 UNITS
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**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

A survey of Western art from the Stone Age to the Middle Ages including the art of Egypt, Greece, and the Aegean; and Etruscan, Roman, early Christian, Byzantine, Islamic, early Medieval, Romanesque and Gothic art.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

*CAN (California Articulation Number): ART 2*

ART 102  
ART HISTORY: THE RENAISSANCE TO THE  
20TH CENTURY 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

A survey of Western art from the Renaissance to the 20th Century including 15th and 16th century Italian art; Renaissance and Baroque art; the Rococo movement; Romanticism; Realism; Impressionism; Cubism; Surrealism; and other styles of the 19th and 20th centuries.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

*CAN (California Articulation Number): ART 4*

ART 103  
ART APPRECIATION 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

A multicultural exploration of the form and content of two- and three-dimensional art. Topics include: function of art in a society; the artists' language; techniques employed in creating painting, sculpture and other media; overview of the history of art.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

*Limited transfer to UC; contact a counselor for details.*

ART 105  
HISTORY OF 20TH CENTURY ART 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

Survey of Western modern art from 1900 to the present including cubism, fauvism, futurism, totalitarianism, constructivism; impressionism; surrealism; post-impressionism; pop art; and architectural movements of the 20th century.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

ART 108  
MEXICAN ART HISTORY 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

Survey of Mexican art from Precolumbian times through the 20th century muralists.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

ART 109  
TRIBAL AND ETHNIC ART 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

A world-wide survey of the artistic achievement of past and present tribal peoples with an emphasis on the meaning of art in each society. Art works are surveyed through films, slides, field trips and examination of actual art works. Includes cultures of North American Indians, ancient America, the Pacific, Africa and Australia. This course is also offered as ANTHRO 109.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

ART 110  
HISTORY OF AMERICAN CINEMA 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

The history of movies from the 1890's to the present, dealing with cinema as a unique economic, industrial, aesthetic, and cultural institution. Includes the experience of movie-going, cinematic story-telling, the roles played by the studio system and film genres in the creation of entertainment films which also serve as a portrait of national identity - industrialized mass culture which evolved over the past century.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

ART 111  
STUDIES IN FILM APPRECIATION 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

A study of script, directing, editing and other aspects of film making, aimed at providing a critical awareness of film technique and construction, and an understanding of what a successful film must possess.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

ART 112  
HISTORY AND APPRECIATION OF PHOTOGRAPHY 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

An overview of the history and technological developments of the medium of photography from the 19th Century to present time. Includes an examination of the prominent aesthetic trends and their evolution into contemporary styles of expression, emphasizing the development of critical and appreciative abilities.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

ART 120x4  
BASIC DESIGN 1.5-3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 1 - 2 hours per week and

**LABORATORY:** 1.5 - 3 hours per week.

A progressive study of the elements and principles of both two- and three-dimensional design. Focus is on the exploration of the concepts, tools, and techniques intrinsic to visual communication including color theory and the use of color to manipulate the illusion of space in a two-dimensional plane. This course may be taken four times.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

ART 124x4  
DRAWING 1.5-3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 1 - 2 hours per week and

**LABORATORY:** 1.5 - 3 hours per week.

A progressive study of the analysis and investigation of form, space, and concept using a variety of materials, such as charcoal, ink, pencil, tempera, collage, and mixed media. Includes the theory and analysis of perspective in two- and three-dimensional compositions, such as the various means of representing three-dimensional forms in space through aerial and linear perspective. Content and creativity are emphasized as students' skills develop. This course may be taken four times.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

*CAN (California Articulation Number): ART 8*

ART 126x4  
PAINTING 1.5-3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 1 - 2 hours per week and

**LABORATORY:** 1.5 - 3 hours per week.

A progressive study of the fundamentals of painting including techniques of composition, color mixing, spatial relationships, and imagery. This course may be taken four times.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

*CAN (California Articulation Number): ART 10*

ART 132x4  
LIFE DRAWING 1.5-3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 1 - 2 hours per week and

**LABORATORY:** 1.5 - 3 hours per week.

A progressive study of anatomy in figure drawing and an examination of the creative uses of human figures in art. Includes basic studies in contour, proportion, gesture, volume, and the functional qualities of the human form and the graphic interpretations of human figures with charcoal, pencil, pastel, colored pencil, paint, and mixed media. This course may be taken four times.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

*CAN (California Articulation Number): ART24*

ART 145  
GRAPHIC DESIGN 3 UNITS

**LECTURE:** 2 hours per week and

**LABORATORY:** 3 hours per week.

Focus on the technical skills necessary to enter the graphic design field and the impact of artwork on different audiences. Including the development of a personal style, increased facility with graphic software and analysis of content for a client's strategies and goals. Through reading and discussion, students will learn how to analyze, design, discuss and present work in a professional manner. (Formerly ART 145X4).

*Associate Degree Applicable*

*Course credit transfers to CSU.*

ART 148  
BEGINNING COMPUTER GRAPHICS 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 2 hours per week and

**LABORATORY:** 3 hours per week.

Focuses on desktop publishing and photographic digital imaging. Skills such as layout, page design and scanning and photographic are practiced. (Formerly ART 150X4).

*Associate Degree Applicable*

*Course credit transfers to CSU.*

ART 149  
INTERMEDIATE COMPUTER GRAPHICS 3 UNITS

**PREREQUISITE:** ART 148.

**LECTURE:** 2 hours per week and

**LABORATORY:** 3 hours per week.

Focus is on photographic digital imaging and manipulation. Skills such as scanning, photographic correction and combining photographic images are practiced. Projects will involve creating computer-generated images, integrating type, and inserting objects and a variety of materials into photographs. (Formerly ART 150X4).

*Associate Degree Applicable*

*Course credit transfers to CSU.*

ART 150  
ADVANCED COMPUTER GRAPHICS 3 UNITS

**PREREQUISITE:** ART 149.

**LECTURE:** 2 hours per week and

**LABORATORY:** 3 hours per week.

Focuses on layout, imaging and illustration skills. Methods of presentation portfolios will be examined. Skills such as optimizing finished artwork for print media and for screen presentation will be practiced. (Formerly ART 150X4).

*Associate Degree Applicable*

*Course credit transfers to CSU.*

ART 152  
DESKTOP WORKSHOP 2 UNITS

**PREREQUISITE:** 3 units of ART 150x4 or any OIS 115 course.

**LABORATORY:** 6 hours per week.

A laboratory course on Macintosh computers including practice with a variety of layout software to design and produce brochures, menus, and magazines.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

ART 158x4  
BASIC PHOTOGRAPHY 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 2 hours per week and

**LABORATORY:** 3 hours per week.

A basic course in photography designed for both art majors and non-art majors, including photographic terminology such as composition, tonality, color relationships and elements of balance; hands-on experience with cameras and studio equipment; analyses of great photographs; the development of visual literacy; and the development of an understanding of photography's relationship to the world of visual imagery. This course may be taken four times.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

ART 159x4  
 ADVANCED PHOTOGRAPHY 3 UNITS  
**PREREQUISITE:** ART 158x4.  
**LECTURE:** 2 hours per week and  
**LABORATORY:** 3 hours per week.

A progressive course designed for art majors and others with a serious interest in photography. Students learn to use appropriate techniques and materials to replace stereotypical photographs with authentic black and white or color images, drawing from the integration of students' emotions and intellect; develop an awareness of the creative process to define a personal direction and steps in solving problems; and how to evaluate the impact of photographic works on the viewer in different contexts, such as visual, historical, social, and cultural. This course may be taken four times.

*Associate Degree Applicable*  
*Course credit transfers to CSU.*

ART 161  
 DIGITAL PHOTOGRAPHY 3 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 2 hours per week and  
**LABORATORY:** 3 hours per week.

Focuses on visual communication and producing expressive images. Skills included are correcting and enhancing images using computers. This course is designed both for Art Department certificate majors and the general public. Students will supply their own film or digital camera and output media supplies.

*Associate Degree Applicable*  
*Course credit transfers to CSU and UC.*

ART 164x4  
 CREATIVE FILMMAKING 1.5-3 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 1 - 2 hours per week and  
**LABORATORY:** 1.5 - 3 hours per week.

A progressive study of the fundamentals of filmmaking including researching and writing treatments; drawing storyboards; producing films in 8mm, video, and 16mm formats; titling; and editing. Students work in crews and participate in all facets of filmmaking, such as operating camera and sound equipment; directing; set building; lighting; and casting. This course may be taken four times.

*Associate Degree Applicable*  
*Course credit transfers to CSU and UC.*

ART 175x4  
 SCULPTURE 1.5-3 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 1 - 2 hours per week and  
**LABORATORY:** 1.5 - 3 hours per week.

A progressive study of the fundamentals of sculpture with a focus on techniques of three-dimensional composition, spatial relationships, and imagery. Includes armature building, plaster mold making, and experiments with various materials, such as clay, wood, plaster, and styrofoam. This course may be taken four times.

*Associate Degree Applicable*  
*Course credit transfers to CSU and UC.*  
 CAN (California Articulation Number): ART12

ART 180  
 BEGINNING COMPUTER ANIMATION 3 UNITS  
**PREREQUISITE:** None.  
**DEPARTMENTAL ADVISORY:** ART 148.  
**LECTURE:** 2 hours per week and  
**LABORATORY:** 3 hours per week.

Focuses on computer animation, rendering and modeling. The introduction semester emphasizes the construction of space environments and objects in motion. Included are the principles and skills for building objects in a landscape, and changing environmental over time, such as clouds, atmospheric conditions and reflections.

*Associate Degree Applicable*  
*Course credit transfers to CSU.*

ART 181  
 INTERMEDIATE COMPUTER ANIMATION 3 UNITS  
**PREREQUISITE:** ART 180.  
**LECTURE:** 2 hours per week and  
**LABORATORY:** 3 hours per week.

Focus on computer animation, rendering and modeling. Included are such skills as complex construction of 3-dimensional models and complex movement control of multiple moving parts.

*Associate Degree Applicable*  
*Course credit transfers to CSU.*

ART 182  
 BEGINNING DIGITAL VIDEO EDITING 3 UNITS  
**PREREQUISITE:** ART 181.  
**LECTURE:** 2 hours per week and  
**LABORATORY:** 3 hours per week.

Focuses on rendering animated movies. Instruction emphasizes combining and integrating animations with still images and created footage. Students will work with video editing and special effects software to create QuickTime movies.

*Associate Degree Applicable*  
*Course credit transfers to CSU.*

ART 183  
 INTERMEDIATE DIGITAL VIDEO EDITING 3 UNITS  
**PREREQUISITE:** ART 182.  
**LECTURE:** 2 hours per week and  
**LABORATORY:** 3 hours per week.

Focuses on making multi-layer video compositions. Included are such skills as motion control and time-varying special effects.

*Associate Degree Applicable*  
*Course credit transfers to CSU.*

ART 185  
 BEGINNING WEB AND MULTIMEDIA DESIGN 3 UNITS  
**PREREQUISITE:** None.  
**DEPARTMENTAL ADVISORY:** ART 148.  
**LECTURE:** 2 hours per week and  
**LABORATORY:** 3 hours per week.

Focus on elements of Web page and CD-ROM production. The course will emphasize preparing material and designing for interactive projects. Practical and theoretical understanding of problems relating to digital technologies will be stressed.

*Associate Degree Applicable*  
*Course credit transfers to CSU.*

ART 186  
INTERMEDIATE WEB AND MULTIMEDIA DESIGN 3 UNITS

**PREREQUISITE:** ART 185.

**LECTURE:** 2 hours per week and

**LABORATORY:** 3 hours per week.

Focus is on web page and web site design and production skills such as animation, image maps, JavaScript and frames. Emphasis will be given to design concept, as well as an understanding of structure and impact web media.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

ART 187  
ADVANCED WEB AND MULTIMEDIA DESIGN 3 UNITS

**PREREQUISITE:** ART 186.

**LECTURE:** 2 hours per week and

**LABORATORY:** 3 hours per week.

Focus is on the elements of CD-ROM design and production. Practical experience in using programs such as MacroMedia Director, sound editing, and animation software will be emphasized. Conceptualization, research and the design of large projects will be stressed.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

ART 188  
PORTFOLIO WEB AND MULTIMEDIA DESIGN 3 UNITS

**PREREQUISITE:** ART 187.

**LECTURE:** 2 hours per week and

**LABORATORY:** 3 hours per week.

Focus is on multimedia project planning and design production. This course emphasizes planning, research and client communications skills as preparation for designing and executing a multimedia project.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

ART 198  
ART WORK EXPERIENCE 1-4 UNITS

**PREREQUISITE:** None.

Supervised training in the form of on-the-job employment that will enhance the student's educational goals. The student's major and job must match. Students work 5-20 hours per week, with 5 hours each week equal to one unit. Students may earn a total of 16 units toward graduation in work experience courses.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

ART 212x4  
CERAMICS 1.5 - 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 1 - 2 hours per week and

**LABORATORY:** 1.5 - 3 hours per week.

A progressive study of the fundamentals of ceramics including hand-building techniques, use of the potter's wheel, and methods of decorating and glazing. Students produce cylinders, bottles, vases, bowls, plates, lids, and vessels with handles, such as mugs, pitchers, and tea pots. This course may be taken four times.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

*CAN (California Articulation Number): ART6*

ART 222  
SPECIAL PROBLEMS IN ART 1 UNIT

**PREREQUISITE:** None.

**INDEPENDENT STUDY:** 3 hours per week.

Assigned problems involving library and/or studio work for selected students who are interested in furthering their knowledge of art on an independent study basis. Students are required to devote three hours per week to their project throughout the semester. Prior to registration, a contract must be prepared. See instructor for details.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

*Limited transfer to UC; contact a counselor for details.*

ART 223  
SPECIAL PROBLEMS IN ART II 2 UNITS

**PREREQUISITE:** None.

**INDEPENDENT STUDY:** 6 hours per week.

Assigned problems involving library and/or studio work for selected students who are interested in furthering their knowledge of art on an independent study basis. Students are required to devote six hours per week to their project throughout the semester. Prior to registration, a contract must be prepared. See instructor for details.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

*Limited transfer to UC; contact a counselor for details.*

ART 240x4  
GLASSBLOWING 1.5-3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 1 - 2 hours per week and

**LABORATORY:** 1.5 - 3 hours per week.

A progressive study of glass working techniques including designing and producing vessel and sculptural forms in hot glass. Emphasis on exploration of color, hot applications, team work, repeatable forms, sandblasting, cold working/fabrications, and non-conventional methods. This course may be taken four times.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

ART 270x4  
DESIGN IN GLASS 1.5-3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 1 - 2 hours per week and

**LABORATORY:** 1.5 - 3 hours per week.

A progressive study of glass-working techniques including designing and producing functional, decorative, and sculptural forms in kiln-fired glass; composition in two dimensions using fusion/lamination of colored glass elements; shallow relief slumping; three-dimensional relief using molds; and solid glass casting, such as pate de verre, lost wax, and sand casting. This course may be taken four times.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

ART 285  
HONORS IN ART 3 UNITS  
**PREREQUISITE:** Complete ART 102 or ART 120x4 or ART 124x4  
or ART 126x4 with an A or B, or

**COREQUISITE:** Art 102 or ART 120x4 or ART 124x4 or ART 126x4  
and an overall GPA of 3.0 or higher.

**LECTURE:** 3 hours per week.

A study of contemporary movements in art and the way these ideas are manifest in the work of artists. Includes an overview of the major innovations of Modernism and how those led to Post-modernist concerns, such as deconstructionism, appropriationism, and semiotics, as well as the impact of language, politics, and the mass media on contemporary art.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

## ASTRONOMY

See the Department of PHYSICS/ASTRONOMY

## AUTOMOTIVE TECHNOLOGY

DIVISION:	Technical
DIVISION DEAN:	Thomas Bauman, M.S.C.
DEPARTMENT HEAD:	Mark Williams, B.S. (909) 384-8571
OTHER FACULTY:	Guy M. Hinrichs, Sr., A.A. Richard Jaramillo, A.A. Donald Wilson
DIVISION SECRETARY:	Patsy Martinez (909) 384-8902
DIVISION OFFICE:	Technical 108 (909) 384-4451
LIAISON COUNSELOR:	George Fleming, M.S. (909) 384-8975

The Automotive Department offers courses designed to provide the skills and knowledge required for immediate employment as well as for students with a personal interest in automotive technology.

The course of study in automotive technology may lead to an Associate of Science Degree or a vocational certificate.

### AUTOMOTIVE TECHNOLOGY ASSOCIATE OF SCIENCE DEGREE

To graduate with a specialization in Automotive Technology, students must complete the following required courses for one of the following certificates plus the general breadth requirements for the Associate Degree (minimum total = 60 units).

### AUTOMOTIVE TECHNOLOGY CERTIFICATES

Students working for certificates must have a basic knowledge of arithmetic, reading and writing in order to learn and work in the occupations they select.

#### 1. AUTOMATIC TRANSMISSION CERTIFICATE

This certificate program is designed for entry-level employment as an automatic transmission specialist.

REQUIRED COURSES:	UNITS
AUTO 075x4 Hydraulic and Automatic Transmissions: Chrysler 3-Speed and Overdrive	6
AUTO 076x4 Hydraulic and Automatic Transmissions: Ford C-5 and Overdrive Automatic Units	6
AUTO 090x3 Engine Repair	6
TECALC 950 Shop Calculations	3
AUTO 059x3 Automotive Electrical & Electronic Laboratory 3 and	
AUTO 061x3 Automotive Electrical & Electronic Systems	3
or	
AUTO 058x3 Automotive Electricity Laboratory	(3)
and	
AUTO 060x3 Automotive Electricity	(3)
<b>TOTAL UNITS</b>	<b>45</b>

*\*Effective SP03*

#### 2. BASIC AUTOMOTIVE BODY AND PAINT TECHNICIAN

This certificate program is designed to provide students with the knowledge and skills necessary for entry-level employment as an auto body repair apprentice, an auto painter apprentice, or in related areas of an automotive dealership or shop, such as chassis, front end, brake or frame repair, and parts counter clerk.

REQUIRED COURSES:	UNITS
AUTO 038x3 Basic Auto Body	9
AUTO 039x3 Secondary Auto Body	9
AUTO 048x3 Intermediate Auto Body	9
AUTO 055 Advanced Auto Body	5
TECALC 950 Shop Calculations	3
<b>TOTAL UNITS</b>	<b>35</b>

*\*Effective SP03*

*Auto 038x3 may be waived through the Articulation 2+2+2 program with prior agreement with the Auto Body and Refinishing instructor.*

#### 3. ADVANCED AUTOMOTIVE BODY AND PAINT TECHNICIAN

This certificate program is designed to provide students with the knowledge and skills necessary for employment as an auto body repair apprentice and an auto painter apprentice beyond the Basic Automotive Body and Paint Technician Certificate. This certificate prepares students for Automotive Service Excellent (ASE) certification, and related areas of an automotive dealership or shop, such as an assistant to a chassis, front end and brake specialist, as well as a frame repair technician and parts counter clerk.

REQUIRED COURSES:	UNITS
AUTO 038x3 Basic Auto Body	9
AUTO 039x3 Secondary Auto Body	9
AUTO 048x3 Intermediate Auto Body	9
AUTO 055 Advanced Auto Body	5
AUTO 056x3 Automotive Air Conditioning	4



**Must complete one subject from each category:**

**Category #1**

AUTO 052 Automotive Suspension and Steering 4

**Category #2**

AUTO 059x3 Automotive Electrical & Electronic Laboratory 3

and

AUTO 061x3 Automotive Electrical & Electronic Systems 3

or

AUTO 058x3 Automotive Electricity Laboratory (3)

and

AUTO 060x3 Automotive Electricity (3)

**Category #3**

TECALC 950 Shop Calculations 3

**TOTAL UNITS 49**

*\*Effective SP03*

*Auto 038X3 may be waived through the Articulation 2+2+2 program with prior agreement with the Auto Body and Refinishing instructor.*

**4. AUTOMOTIVE TECHNICIAN CERTIFICATE**

This certificate program is designed to qualify students for entry-level employment as automotive technician's helpers (tune-up) or assistant automotive service technicians (tune-up). Successful completion of the certificate program will qualify the student for assignments such as new car get-ready technician or for minor tune-up in a service station.

**REQUIRED COURSES:**

**UNITS**

AUTO 058x3 Automotive Electricity Laboratory 3

AUTO 059x3 Automotive Electrical & Electronic Laboratory 3

AUTO 060x3 Automotive Electricity 3

AUTO 061x3 Automotive Electrical & Electronic Systems 3

AUTO 070x4 Automotive Ignitions Systems Laboratory 3

AUTO 071x4 Automotive Fuel Systems Laboratory 3

AUTO 072x4 Automotive Ignitions Systems 3

AUTO 073x4 Automotive Fuel Systems 3

AUTO 075x4 Hydraulic and Automatic Transmissions:

Chrysler 3-Speed and Overdrive 6

AUTO 076x4 Hydraulic and Automatic Transmissions:

Ford C-5 and Overdrive Automatic Units 6

AUTO 090x3 Engine Repair 6

TECALC 950 Shop Calculations 3

**TOTAL UNITS 45**

*PREREQUISITES: Two years of general vocational automotive work in a high school, trade or service school are required as well as satisfactory completion of tests covering automotive engine fundamentals administered by the automotive department.*

*\*Effective SP03*

**5. AUTOMOTIVE TUNE-UP CERTIFICATE**

This certificate program is designed to qualify students for entry-level employment as automotive technician's helpers (tune-up) or assistant automotive-service technicians (tune-up). Successful completion of the certificate program qualifies students for work such as new car get-ready technician or for minor tune-up in a service station.

**REQUIRED COURSES:**

**UNITS**

AUTO 058x3 Automotive Electricity Laboratory 3

AUTO 060x3 Automotive Electricity 3

AUTO 067x3 Automotive Smog Controls 4

AUTO 070x4 Automotive Ignitions Systems Laboratory 3

AUTO 071x4 Automotive Fuel Systems Laboratory 3

AUTO 072x4 Automotive Ignitions Systems 3

AUTO 073x4 Automotive Fuel Systems 3

AUTO 090x3 Engine Repair 6

TECALC 950 Shop Calculations 3

**TOTAL UNITS 31**

*\*Effective SP03*

**6. DIESEL TECHNICIAN CERTIFICATE**

The Diesel Technician Certificate Program is designed to qualify students for entry-level employment or as a diesel mechanic helper in a diesel engine overhaul and maintenance shop. Additional experience and on-the-job training would be required to become a fully qualified Diesel Engine Mechanic or repair person. Effective Fall 2002.

**REQUIRED COURSES:**

**UNITS**

AUTO 032x3 Diesel Engines 4

AUTO 033x3 Diesel Engines 4

AUTO 058x3 Automotive Electricity Laboratory 3

AUTO 059x3 Automotive Electrical & Electronic

Laboratory 3

AUTO 060x3 Automotive Electricity 3

AUTO 061x3 Automotive Electrical & Electronic Systems 3

AUTO 075x4 Hydraulic and Automatic Transmissions:

Chrysler 3-Speed and Overdrive 6

AUTO 076x4 Hydraulic and Automatic Transmissions:

Ford C-5 and Overdrive Automatic Units 6

TECALC 950 Arithmetic 3

WELD 077x4 Continuous Wire Welding 1

**TOTAL UNITS 36**

*\*Effective through FA02 only*

**7. WHEEL ALIGNMENT AND BRAKES CERTIFICATE**

This program is designed to qualify students for entry-level employment as a wheel alignment and brake specialist.

**REQUIRED COURSES:**

**UNITS**

AUTO 050 Automotive Brakes 4

AUTO 051 Advanced Automotive Brakes 4

AUTO 052 Advanced Suspension and Steering 4

AUTO 053 Advanced Automotive Suspension and Steering 4

AUTO 059x3 Automotive Electrical & Electronic Laboratory 3

AUTO 061x3 Automotive Electrical & Electronic Systems 3

AUTO 084x4 General Automotive Technology 4

TECALC 950 Shop Calculations 3

**TOTAL UNITS 29**

*\*Effective SP03*

**COURSES OFFERED BY THE DEPARTMENT OF AUTOMOTIVE TECHNOLOGY:**

AUTO 032x3  
DIESEL ENGINES 4 UNITS

*PREREQUISITE: None.*

*LECTURE: 3 hours per week and*

*LABORATORY: 3 hours per week.*

Practical shop work in the repair, operation and maintenance of light duty automotive diesel engines, fuel and injection systems, pumps, nozzles, governors, general trouble-shooting and diagnostic testing. This course may be taken three times.

*Associate Degree Applicable*

**AUTO 038x3**  
**BASIC AUTO BODY** 9 UNITS

**PREREQUISITE:** None.  
**LECTURE:** 4 hours per week and  
**LABORATORY:** 15 hours per week.

Theory and practical experience in auto collision damage repair and shop safety, with a focus on automotive construction, hand and power tools, laws and regulations, oxy-acetylene welding and brazing. This course may be taken three times.

*Associate Degree Applicable*

**AUTO 039x3**  
**SECONDARY AUTO BODY** 9 UNITS

**PREREQUISITE:** AUTO 038x3.  
**LECTURE:** 4 hours per week and  
**LABORATORY:** 15 hours per week.

Theory and practical experience in auto collision repair and shop safety, with a focus on MIG welding, (minor damage repair), painting equipment and refinishing materials, E.P.A. and S.C.A.Q.M.D. requirements. This course may be taken three times.

*Associate Degree Applicable*

**AUTO 044x3**  
**AUTOMOTIVE BODY REPAIRING AND REFINISHING** 4 UNITS

**PREREQUISITE:** None.  
**LECTURE:** 2 hours per week and  
**LABORATORY:** 4 hours per week.

Theory and practical experience in auto collision damage repair and shop safety, with a focus on automotive construction; hand and power tools; laws and regulations, surface preparation, masking, basic spray painting on complete vehicles, and detailing with an introduction to oxyacetylene welding and brazing. This course may be taken three times.

*Associate Degree Applicable*

**AUTO 048x3**  
**INTERMEDIATE AUTO BODY** 9 UNITS

**PREREQUISITE:** AUTO 039x3.  
**LECTURE:** 4 hours per week and  
**LABORATORY:** 15 hours per week.

Theory and practical experience in minor uni-body frame repair and small parts replacement and single stage refinishing. This course may be taken three times.

*Associate Degree Applicable*

**AUTO 049**  
**SHOP MANAGEMENT AND ESTIMATING** 4 UNITS

**PREREQUISITE:** AUTO 038x3 or equivalent experience.  
**LECTURE:** 2 hours per week and  
**LABORATORY:** 6 hours per week.

Theory and practical experience in shop management, estimating, inventory control and sales techniques.

*Associate Degree Applicable*

**AUTO 050x3**  
**WHEEL ALIGNMENT AND BRAKES** 4 UNITS

**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week and  
**LABORATORY:** 3 hours per week.

Theory and practical experience in the use of wheel alignment, wheel balancing, and brake reconditioning equipment, including procedures for adjusting and servicing of steering systems and brakes. This course may be used in preparation for the Automotive Service Excellence National Test (ASE). This course may be taken three times.

*Associate Degree Applicable*

**AUTO 051x3**  
**ADVANCED WHEEL ALIGNMENT AND BRAKES** 4 UNITS

**PREREQUISITE:** AUTO 050x3.  
**LECTURE:** 3 hours per week and  
**LABORATORY:** 3 hours per week.

Advanced trouble diagnosis and repair on power steering gear boxes, rack and pinion systems, computer controlled steering systems, and anti-lock brakes. Including procedures for diagnosing and repairing these systems. This course may be used in preparation for the Automotive Service Excellence National Test (ASE). This course may be taken three times.

*Associate Degree Applicable*

**AUTO 052x3**  
**BRAKES, SUSPENSION AND WHEEL ALIGNMENT** 6 UNITS

**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week and  
**LABORATORY:** 9 hours per week.

Theory and hands-on experience in the repair and maintenance of brakes, suspension, steering, and wheel alignment systems. Including brake system overview, front and rear suspension, wheel alignment, wheel and tire diagnosis, and miscellaneous service. This course may be used in preparation for the Automotive Service Excellence (ASE) National Test. This course may be taken three times.

*Associate Degree Applicable*

**AUTO 053x3**  
**ADVANCED BRAKES, SUSPENSION AND WHEEL ALIGNMENT** 6 UNITS

**PREREQUISITE:** None.  
**DEPARTMENTAL ADVISORY:** AUTO 052x3.  
**LECTURE:** 3 hours per week and  
**LABORATORY:** 9 hours per week.

This course is designed for students and current technicians to advance and update their knowledge and skills in automotive brakes (standard and anti-lock) systems, suspension, and wheel alignment. Including but not limited to disc, drum, hydraulics, power boosters, conventional and computerized alignment. Suspension systems including long /short arm and McPherson strut. Steering and recirculating ball type. Emphasis on diagnosing trouble-shooting, repairing, replacing, and adjusting. This course may be used in preparation for the Automotive Service Excellence (ASE) National Test. This course may be taken three times.

*Associate Degree Applicable*

**AUTO 055**  
**ADVANCED AUTO BODY** 5 UNITS

**PREREQUISITE:** AUTO 039x3.  
**LECTURE:** 1 hour per week and  
**LABORATORY:** 12 hours per week.

Theory and practical experience in plastic welding, SMC (sheet molded compounds), fiberglass and lead applications, urethane bumper repair and refinishing, headlight adjustment, spot repairing/blending, polishing and detailing, pre-delivery servicing, fine-line masking and pinstriping.

*Associate Degree Applicable*

AUTO 056x3  
AUTOMOTIVE AIR CONDITIONING 4 UNITS

**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week and  
**LABORATORY:** 3 hours per week.

Development of the fundamentals of automotive air conditioning from basic air conditioning operation to automotive temperature control. To develop theory and experience in automotive air conditioning to component repair and current technical development. This course may be taken three times.

*Associate Degree Applicable*

AUTO 058x3  
AUTOMOTIVE ELECTRICITY LABORATORY 3 UNITS

**PREREQUISITE:** None.  
**COREQUISITE:** AUTO 060x3.  
**LABORATORY:** 9 hours per week.

Practical work in the operation and repair of batteries, starters, generators, alternators, and voltage regulators. Includes trouble diagnosis and the use of test equipment. This course may be taken three times.

*Associate Degree Applicable*

AUTO 059x3  
AUTOMOTIVE ELECTRICAL AND ELECTRONIC LABORATORY 3 UNITS

**PREREQUISITE:** None.  
**COREQUISITE:** AUTO 061x3.  
**LABORATORY:** 9 hours per week.

Practical work on automotive electrical systems, including meter usage, wiring diagrams, soldering, circuit repair, instrument panel and accessories diagnosis and repair, and body computer diagnosis and repair. This course may be taken three times.

*Associate Degree Applicable*

AUTO 060x3  
AUTOMOTIVE ELECTRICITY 3 UNITS

**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week.

Principles of electricity, batteries, starters, generators, alternators, and voltage regulators. Fundamentals of procedures used in repair, testing, and trouble diagnosis. This course may be taken three times.

*Associate Degree Applicable*

AUTO 061x3  
AUTOMOTIVE ELECTRICAL AND ELECTRONIC SYSTEMS 3 UNITS

**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week.

Principles of electricity, semiconductors and solid-state electronics, electrical test instruments, wiring diagrams, wiring repair methods, instrument panel and gauges, lighting systems, miscellaneous accessories, and computer operations. This course may be taken three times.

*Associate Degree Applicable*

AUTO 064  
AUTOMOTIVE ELECTRICAL SYSTEMS I 4 UNITS

**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week and  
**LABORATORY:** 3 hours per week.

Introduction to the automotive electrical system, including electron theory and an overview of electronic control units. Course includes practical, hands-on work with electrical meters as well as the operation, trouble diagnosis, and servicing of batteries and alternators.

*Associate Degree Applicable*

AUTO 065  
AUTOMOTIVE ELECTRICAL SYSTEMS II 4 UNITS

**PREREQUISITE:** AUTO 064.  
**LECTURE:** 3 hours per week and  
**LABORATORY:** 3 hours per week.

Advanced study of the automotive electrical system including the operation, trouble diagnosis, and servicing of ignition systems, electronic carbureted fuel systems, fuel injection systems, and lighting circuits.

*Associate Degree Applicable*

AUTO 067x3  
AUTOMOTIVE SMOG CONTROLS 4 UNITS

**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week and  
**LABORATORY:** 3 hours per week.

This class is an 80-hour Clean Air Car Course (CAC). It is designed to prepare students to take the Bureau of Automotive Repair Smog Check Licensing Exam. **ONE YEAR OF TRADE EXPERIENCE IN EMISSIONS/TUNE-UP OR EQUIVALENT FORMAL EDUCATION REQUIRED.** This course may be taken three times.

*Associate Degree Applicable*

AUTO 068x3  
AUTOMOTIVE CARBURETION, IGNITION AND TUNE-UP 4 UNITS

**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week and  
**LABORATORY:** 3 hours per week.

Theory and hands-on experience of ignition, carburetion, and emissions systems including basic computer operation and diagnostics. This course may be taken three times.

*Associate Degree Applicable*

AUTO 069x3  
AUTOMOTIVE CARBURETION AND IGNITION 4 UNITS

**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week and  
**LABORATORY:** 3 hours per week.

The diagnosis and repair of carburetion and ignition systems of late-model engines. This course may be taken three times.

*Associate Degree Applicable*

AUTO 070x4  
AUTOMOTIVE IGNITION SYSTEMS LABORATORY 3 UNITS

**PREREQUISITE:** None.  
**COREQUISITE:** AUTO 072x4.  
**LABORATORY:** 9 hours per week.

Practical work in the operation and tune-up of automotive gasoline engines and ignition systems including use of diagnostic equipment. This course may be taken four times.

*Associate Degree Applicable*

AUTO 071x4  
AUTOMOTIVE FUEL SYSTEMS LABORATORY 3 UNITS

**PREREQUISITE:** None.  
**COREQUISITE:** AUTO 073x4.  
**LABORATORY:** 9 hours per week.

Practical work in the operation and tune-up of automotive gasoline engines. Includes carburetor repair, electronic fuel injection, use of associated test equipment, and introduction to emission control. This course may be taken four times.

*Associate Degree Applicable*

AUTO 072x4  
AUTOMOTIVE IGNITION SYSTEMS 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

Theory of basic engine operation and automotive ignition systems. Includes point-type, electronic, distributorless, and computer controlled ignition systems. Also includes principle of oscilloscope operation. This course may be taken four times.

*Associate Degree Applicable*

AUTO 073x4  
AUTOMOTIVE FUEL SYSTEMS 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

Theory of basic engine operation and automotive fuel systems. Includes fuel pumps, carburetors, electronic fuel injection, and computer controlled fuel injection. Also includes principles of four-gas infrared exhaust gas analyzers and basic emission control systems. This course may be taken four times.

*Associate Degree Applicable*

AUTO 075x4  
HYDRAULIC AND AUTOMATIC TRANSMISSIONS:  
CHRYSLER 3 SPEED AND OVERDRIVE 2-6 UNITS

**PREREQUISITE:** None.

**LECTURE:** 1-3 hours per week and

**LABORATORY:** 3-9 hours per week.

Theory and practical work on various types of Chrysler automatic and torque conversion systems as applied to automotive transmissions and other power units. Includes both automotive and light truck transmissions. This course may be taken four times.

*Associate Degree Applicable*

AUTO 076x4  
HYDRAULIC AND AUTOMATIC TRANSMISSIONS:  
FORD C-5 AND OVERDRIVE AUTOMATIC UNITS 2-6 UNITS

**PREREQUISITE:** None.

**LECTURE:** 1-3 hours per week and

**LABORATORY:** 3-9 hours per week.

Theory and practical work on various types of Ford automatic and torque conversion systems as applied to automotive transmissions and other power units. Includes both automotive and light truck transmissions. This course may be taken four times.

*Associate Degree Applicable*

AUTO 079x4  
HYDRAULIC AND AUTOMATIC UNITS:  
GM REAR WHEEL DRIVE 4 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week and

**LABORATORY:** 3 hours per week.

Theory and practical shop work on GM rear wheel drive automatic transmissions. This course may be taken four times.

*Associate Degree Applicable*

AUTO 080x4  
HYDRAULIC AND AUTOMATIC UNITS:  
GM FRONT WHEEL DRIVE 4 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week and

**LABORATORY:** 3 hours per week.

Theory and practical shop work on GM front wheel drive automatic transmissions. This course may be taken four times.

*Associate Degree Applicable*

AUTO 084x4  
GENERAL AUTOMOTIVE TECHNOLOGY 4 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week and

**LABORATORY:** 3 hours per week.

General theory, principles and service procedures relating to an introduction to automotive maintenance with emphasis on component identification, basic functions, minor maintenance and service. This course may be taken four times.

*Associate Degree Applicable*

AUTO 088  
AIR-COOLED AND SMALL ENGINES 4 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week and

**LABORATORY:** 3 hours per week.

Practical experience in the repair and maintenance of small air-cooled and outboard engines, including engine overhaul, testing and troubleshooting. These courses may be taken three times each.

*Associate Degree Applicable*

AUTO 089x3  
AIR-COOLED AND SMALL ENGINES 4 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week and

**LABORATORY:** 3 hours per week.

Practical experience in the repair and maintenance of small air-cooled and outboard engines, including engine overhaul, testing and troubleshooting. These courses may be taken three times each.

*Associate Degree Applicable*

AUTO 090x4  
ENGINES LABORATORY 3 UNITS

**PREREQUISITE:** None.

**DEPARTMENTAL ADVISORY:** AUTO 091.

**LABORATORY:** 9 hours per week.

The laboratory companion to AUTO 091 with focus on the repair and maintenance of compact, liquid and air-cooled outboard, import, and motorcycle engines, including engine overhaul, testing and troubleshooting. This course may be taken four times.

*Associate Degree Applicable*

AUTO 198  
AUTOMOTIVE-DIESEL TECHNOLOGY  
WORK EXPERIENCE 1-4 UNITS

**PREREQUISITE:** None.

Supervised training in the form of on-the-job employment that will enhance the student's educational goals. The student's major and job must match. Students work 5-20 hours per week, with 5 hours each week equal to one unit. Students may earn a total of 16 units toward graduation in work experience courses.

*Associate Degree Applicable*

AUTOIN 010  
BASIC CUSTOM AUTO INTERIORS 4 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week and

**LABORATORY:** 3 hours per week.

Basic information and practical experience in design, creation and installation of complete custom and hot rod automotive interiors. Includes instruction in safe work practices, using trimmers, hand and power tools and common covering materials. Cut, sew and fit techniques are stressed.

*Associate Degree Applicable*

AUTOIN 011x3  
BASIC CUSTOM AUTO INTERIORS LABORATORY 1 UNIT

**PREREQUISITE:** AUTOIN 010.

**LABORATORY:** 3 hours per week.

Basic practical experience in design, creation and installation of complete custom and hot rod automotive interiors. Includes instruction in safe work practices, using trimmers, hand and power tools and common covering materials. Cut, sew and fit techniques are stressed.

*Associate Degree Applicable*

AUTOIN 012  
ADVANCED CUSTOM AUTO INTERIORS 4 UNITS

**PREREQUISITE:** AUTOIN 010.

**LECTURE:** 3 hours per week and

**LABORATORY:** 3 hours per week.

Information and practical experience in design, creation and installation of complex custom and hot rod automotive interiors. Instruction builds on prior basic skills in safe work practices, pattern making, using trimmers, working with hand and power tools and applying common covering materials.

*Associate Degree Applicable*

AUTOIN 013x3  
ADVANCED CUSTOM AUTO INTERIORS LABORATORY 1 UNIT

**PREREQUISITE:** AUTOIN 012.

**LABORATORY:** 3 hours per week.

Practical experience in design, creation and installation of complex custom and hot rod automotive interiors. Instruction builds on prior basic skills in safe work practices, pattern making, using trimmers, working with hand and power tools and applying common covering materials. Cut, sew and fit techniques on elaborate designs are stressed.

*Associate Degree Applicable*

AUTORS 010  
BASIC VEHICLE RESTORATION 4 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week and

**LABORATORY:** 3 hours per week.

Theory and practical experience in restoring a vehicle to appropriate and safe running conditions which includes instruction in safe work practices, disassembly, cleaning, refinishing of vehicle parts. Design and construction of frame and chassis components will be covered. Body repair and welding will also be included.

*Associate Degree Applicable*

AUTORS 011x3  
BASIC VEHICLE RESTORATION LABORATORY 1 UNIT

**PREREQUISITE:** AUTORS 010.

**LABORATORY:** 3 hours per week.

Practical experience in restoring a vehicle to appropriate and safe running condition. Includes instruction in safe work practices, disassembly, cleaning, refinishing of vehicle parts. Design and construction of frame and chassis components will be covered.

*Associate Degree Applicable*

AUTOST 010  
BEGINNING STREET ROD CONSTRUCTION 4 UNITS

**PREREQUISITE:** None.

**DEPARTMENTAL ADVISORY:** AUTO 084x4 or AUTORS 010.

**LECTURE:** 3 hours per week and

**LABORATORY:** 3 hours per week.

Theory and practical experience in building a street rod vehicle, includes instruction in safe work practices, design and construction of frame and chassis systems and components. Body repair, paint preparation, refinishing and welding are also included.

*Associate Degree Applicable*

AUTOST 011x3  
STREET ROD CONSTRUCTION LABORATORY 1 UNIT

**PREREQUISITE:** AUTOST 010.

**LABORATORY:** 3 hours per week.

Practical experience in building a street rod vehicle. Includes instruction in safe work practices, design and construction of frame and chassis systems and components. Body repair, paint, preparation, refinishing and welding are also included.

*Associate Degree Applicable*

## AVIATION

See courses within the AERONAUTICS DEPARTMENT

## BIOLOGY

DIVISION:	Science and Math
DIVISION DEAN:	W. William Hughes, Ph.D.
DEPARTMENT HEAD:	David Bastedo, M.S. Life Science 207 (909) 384-8564
OTHER FACULTY:	Carol Cook, M.S. Glenn Drewes, M.A. Darlene Gamboa, Ph.D. Cin Greyraven, M.S. Mark Ikeda, M.S. Ken Michaelis, M.A. John Olson, M.S.
DIVISION SECRETARY:	Rose Garcia
DIVISION OFFICE:	Chemistry 121 (909) 384-8645
LIAISON COUNSELOR:	Diana Rodriguez, M.A. (909) 384-8950 (909) 384-8234

The courses offered in the Biology Department are designed to meet the demands of science and non-science majors. For non-majors, the department's goal is to educate students so they can make informed choices about key environmental and personal issues. Public awakening to environmental issues emphasizes the increasing need to appreciate various life forms, their interactions with each other, and the human impact on our finite resources. This public is increasingly asked to make decisions on issues concerning the environment and to make choices about personal habits in their daily lives that effect the earth and future generations.

For majors, the courses provide a strong background in the biological sciences for students transferring to four-year institutions who are interested in careers such as teaching, biological research, or the health sciences. Students planning to transfer to a four-year institution and major in biology or a related field should consult with a counselor regarding the transfer process and lower division requirements.

## ASSOCIATE OF SCIENCE DEGREE

An Associate of Science degree with a specialization in the Biological Sciences can be earned by completing the following required courses in addition to fulfilling the breadth requirements for the associate degree (minimum 60 semester units).

REQUIRED COURSES:	UNITS
BIOL 201 Cell and Molecular Biology	4
CHEM 212 Organic Chemistry	4
Twelve units from the list of RECOMMENDED COURSES	12
<b>TOTAL UNITS</b>	<b>20</b>

RECOMMENDED COURSES:	UNITS
BIOL 104 Human Ecology	3
BIOL 202 Organismal Biology and Ecology	4
BIOL 240 General Botany	4
BIOL 250 Human Anatomy and Physiology I	4
BIOL 251 Human Anatomy and Physiology II	4
BIOL 260 Human Anatomy	4
BIOL 261 Human Physiology	4
BIOL 270 General Microbiology	5

## COURSES OFFERED BY THE DEPARTMENT OF BIOLOGY:

BIOL 050  
ANATOMY AND PHYSIOLOGY 4 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 4 hours per week.

Introduction to the elementary principles of human anatomy and physiology. The course is specifically designed for non-majors and students entering the Psychiatric Technology Certificate Program.

*Associate Degree Applicable*

BIOL 100  
GENERAL BIOLOGY 4 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week and  
**LABORATORY:** 3 hours per week.

Introductory course for non-majors emphasizing basic biological concepts and scientific processes. Topics include origins and comparative characteristics of living organisms, reproduction, metabolism, evolution, and ecological interactions.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

*Limited transfer to UC; contact a counselor for details.*

BIOL 102  
HUMAN BIOLOGY 4 UNITS  
**PREREQUISITE:** None  
**LECTURE:** 3 hours per week and  
**LABORATORY:** 3 hours per week.

An introduction to biological principles for students interested in allied health careers, emphasizing science as a process and the molecular and cellular basis for the functions of the human body. Topics include the structure and function of important biological molecules, cell anatomy and physiology, human tissue types, cellular energy pathways, genome replication and expression, and reproductive and developmental processes.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

BIOL 104  
HUMAN ECOLOGY 3 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week.

Discussion of the ecological consequences of human resource use and population growth. Emphasis is on the earth's life support systems and current environmental problems threatening human health and species survival.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

BIOL 108  
EVOLUTION: MOLECULES TO MAMMALS 3 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week.

An investigation of the origins and development of life on earth including major lines of evidence for evolution (biogeography, paleontology, and comparative anatomy and physiology); sources of genetic variation; and mechanisms of natural selection and adaptation.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

BIOL 123  
ECOLOGY AND ENVIRONMENT 3 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week.

Survey of the basic concepts of ecology including energy flow in ecosystems, predation, symbiosis, population biology, local biological communities, the human population explosion, and environmental topics including air and water pollution, nuclear reactors, pesticides, and solid waste. Legal, political, and economic solutions to problems are considered.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

BIOL 140  
BIOLOGY OF SEXUALLY TRANSMITTED DISEASES 2 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 2 hours per week.

The pathogenesis, biology, treatment and diagnosis of prominent sexually transmitted diseases including the impact of current biotechnology in vaccine development, experimental treatments, and improved diagnostics and screening. This course qualifies for continuing education credit for nurses. Provider approved by the California Board of Registered Nursing, provider number 01480, for 30 contact hours.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

**BIOL 201**  
**CELL AND MOLECULAR BIOLOGY** 4 UNITS

**PREREQUISITE:** *None.*

**LECTURE:** *3 hours per week and*

**LABORATORY:** *3 hours per week.*

A one-semester introduction to cellular and molecular aspects of biology. Experimental design concepts and application are included in the laboratory section. This course is designed primarily for the pre-professional and biology major as well as for other students interested in an in-depth study of biology.

*Associate Degree Applicable*

*Course credit transfers to CSU, and UC.*

*CAN (California Articulation Number): BIOL2*

**BIOL 202**  
**ORGANISMAL BIOLOGY AND ECOLOGY** 4 UNITS

**PREREQUISITE:** *BIOL 100 or BIOL 201.*

**LECTURE:** *3 hours per week and*

**LABORATORY:** *3 hours per week.*

A one-semester introduction to the ecological and organismal aspects of biology. This course is designed primarily for the pre-professional and biology major as well as for other students interested in an in-depth study of biology. This course requires participation in and completion of a field project.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

**BIOL 203**  
**BIOLOGY OF ANIMALS: INVERTEBRATES** 4 UNITS

**PREREQUISITE:** *None.*

**LECTURE:** *3 hours per week and*

**LABORATORY:** *3 hours per week.*

Survey of the structure, function and phylogeny of the invertebrates, followed by a brief introduction to the vertebrate classes.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

**BIOL 220**  
**LABORATORY PREPARATION IN BIOLOGY** 1 UNIT

**PREREQUISITE:** *BIOL 100 or BIOL 201.*

**LABORATORY:** *3 hours per week.*

Practical laboratory techniques designed to acquaint students with methods of collection and preparation of common materials used in the biology laboratory. Students are required to devote three hours per week to the laboratory throughout the semester. Prior to registration, a contract must be prepared. See instructor for details.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

**BIOL 221**  
**LABORATORY PREPARATION IN BIOLOGY** 2 UNITS

**PREREQUISITE:** *BIOL 100 or BIOL 201.*

**LABORATORY:** *6 hours per week.*

Practical laboratory techniques designed to acquaint students with methods of collection and preparation of common materials used in the biology laboratory. Students are required to devote six hours per week to the laboratory throughout the semester. Prior to registration, a contract must be prepared. See instructor for details.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

**BIOL 222**  
**INDEPENDENT STUDY IN BIOLOGY** 1-3 UNITS

**PREREQUISITE:** *None.*

**INDEPENDENT STUDY:** *3-9 hours per week.*

Assigned problems involving research, laboratory work, or directed study for selected students who are interested in furthering their knowledge of biology on an independent study basis. For each unit earned, students are required to devote three hours per week throughout the semester. Enrollment limited to those who meet independent study criteria. Prior to registration, a contract must be prepared. See instructor for details.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

*Limited transfer to UC; contact a counselor for details.*

**BIOL 240**  
**GENERAL BOTANY** 4 UNITS

**PREREQUISITE:** *BIOL 100 or BIOL 201.*

**LECTURE:** *3 hours per week and*

**LABORATORY:** *3 hours per week.*

A survey of plant biology with an emphasis on the structure, function and development of vascular plants, plant classifications, evolution, and general ecology.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

*CAN (California Articulation Number): BIOL6*

**BIOL 250**  
**HUMAN ANATOMY AND PHYSIOLOGY I** 4 UNITS

**PREREQUISITE:** *None.*

**DEPARTMENTAL ADVISORY:** *A high-school course in chemistry.*

**LECTURE:** *3 hours per week and*

**LABORATORY:** *3 hours per week.*

BIOL 250 is the first semester of a two-semester presentation of anatomy and physiology. Introductory topics include cytology, histology, and basic and organic chemistry. Includes the structure, function, and homeostatic interrelationships of the following organ systems: integumentary, skeletal, cardio-vascular, lymphatic, immune, and respiratory.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

*Limited transfer to UC; contact a counselor for details.*

**BIOL 251**  
**HUMAN ANATOMY AND PHYSIOLOGY II** 4 UNITS

**PREREQUISITE:** *BIOL 250.*

**LECTURE:** *3 hours per week and*

**LABORATORY:** *3 hours per week.*

BIOL 251 is the second semester of a two-semester presentation of anatomy and physiology. Topics include the urinary system, nerve and muscle physiology, muscular system, nervous system, endocrine regulation, digestion, metabolism and reproduction. Emphasis is on body homeostasis, human musculature, and gross anatomy, using the cat as a dissection model.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

*Limited transfer to UC; contact a counselor for details.*

BIOL 255  
INDEPENDENT STUDY IN ANATOMY AND PHYSIOLOGY  
1-3 UNITS

**PREREQUISITE:** BIOL 250 or BIOL 260.

**INDEPENDENT STUDY:** 3-9 hours per week.

Assigned projects involving research, laboratory work, or directed study for selected students who are interested in furthering their knowledge of anatomy and physiology on an independent study basis. For each unit earned, students are required to devote three hours per week throughout the semester. Enrollment limited to those who meet independent study criteria. Prior to registration, a contract must be prepared. See instructor for details.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

BIOL 256  
LABORATORY PREPARATION IN ANATOMY AND  
PHYSIOLOGY 2 UNITS

**PREREQUISITE:** BIOL 250 or BIOL 260.

**LABORATORY:** 6 hours per week.

Practical laboratory techniques designed to acquaint students with the methods of preserving and preparing anatomic materials used in the anatomy laboratory. Students are required to devote six hours per week to the laboratory throughout the semester. Prior to registration, a contract must be prepared. See instructor for details.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

BIOL 260  
HUMAN ANATOMY 4 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week and

**LABORATORY:** 3 hours per week.

This is a comprehensive laboratory course in human anatomy. It is organized to explore the body regionally and systemically. It is primarily oriented toward gross anatomy with extensive dissection of the cat. Histological and cellular anatomy are included as they apply to various structures.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

*Limited transfer to UC; contact a counselor for details.*

BIOL 261  
HUMAN PHYSIOLOGY 4 UNITS

**PREREQUISITES:** BIOL 260 and CHEM 101.

**LECTURE:** 3 hours per week and

**LABORATORY:** 3 hours per week.

Introductory study of the vital processes and functions of the human body. Emphasis is on control mechanisms, maintenance of homeostasis and selected examples of pathophysiology of the major organ systems. Includes a laboratory which involves observations, physiological recordings, and analysis of body functions.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

*Limited transfer to UC; contact a counselor for details.*

BIOL 270  
MICROBIOLOGY 5 UNITS  
**PREREQUISITES:** BIOL 250 or BIOL 261 or BIOL 201 or BIOL 102; and CHEM 101.

**DEPARTMENTAL ADVISORY:** Reading skills at the 12th grade level and ENGL 101 entry-level writing skills.

**LECTURE:** 3 hours per week and

**LABORATORY:** 6 hours per week.

A formal introduction to the fundamental principles of microbiology. Attention is given to the morphology, control, metabolism and genetics of microorganisms. Emphasis is placed on the pathogenesis immunity to infectious diseases.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

*CAN (California Articulation Number): BIOL14*

BIOL 275  
INDEPENDENT STUDY IN MICROBIOLOGY 1-3 UNITS

**PREREQUISITE:** BIOL 270.

**INDEPENDENT STUDY:** 3-9 hours per week.

Assigned problems involving research, laboratory work, or directed study for selected students who are interested in furthering their knowledge of microbiology on an independent study basis. For each unit earned, students are required to devote three hours per week throughout the semester. Enrollment limited to those who meet independent study criteria. Prior to registration, a contract must be prepared. See instructor for details.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

BIOL 276  
LABORATORY PREPARATION IN MICROBIOLOGY 2 UNITS  
**PREREQUISITE:** BIOL 270.

**LABORATORY:** 6 hours per week.

Practical laboratory techniques designed to acquaint students with the methods of preserving and preparing materials used in the microbiology laboratory. Students are required to devote six hours per week to the laboratory throughout the semester. Prior to registration, a contract must be prepared. See instructor for details.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

## BOTANY

See courses within the Department of BIOLOGY

## BUILDING INSPECTION TECHNOLOGY

See the Department of INSPECTION TECHNOLOGY



## BUSINESS ADMINISTRATION

DIVISION:	Business and Information Technology
DIVISION DEAN:	Margaret Ortiz, M.A.
DEPARTMENT HEAD:	Vernon Stauble, Ph.D. Business 200C (909) 384-8915
OTHER FACULTY:	Daniel T. Angelo, M.H.R.O.D. Donald Schall, J.D. Chris Williams
DIVISION SECRETARY:	Chris Williams
DIVISION OFFICE:	Business 101 (909) 384-8908
LIAISON COUNSELOR:	Wilma Cochrane, M.A. (909) 384-8986

The Business Administration Department offers courses in the fundamentals of business organization and management as well as in marketing and business law.

For non-business majors, these courses offer a general view of the world of business and finance. For business majors, these courses provide a solid foundation in preparation for transfer to a four-year institution. Students planning to transfer to a four-year institution and major in business administration or a related field should consult with a counselor regarding the transfer process and lower division requirements.

### BUSINESS ADMINISTRATION ASSOCIATE OF ARTS DEGREE

To graduate with a specialization in Business Administration, students must complete the following required courses plus the general breadth requirements for the Associate Degree (total = 60 units).

REQUIRED COURSES:	UNITS
ACCT 200 Principles of Accounting I	4
ACCT 201 Principles of Accounting II	4
BUSAD 103 Marketing Principles	3
BUSAD 210 Business Law	3
ECON 200 Principles of Economics (Macro)	3
ECON 201 Principles of Economics (Micro)	3
MIS 101 Introduction to Management Information Systems	3
<b>TOTAL UNITS</b>	<b>23</b>

### BUSINESS ADMINISTRATION CERTIFICATE

Students working for certificates must have a basic knowledge of arithmetic, reading and writing in order to learn and work in the occupations they select.

REQUIRED COURSES:	UNITS
BUSAD 100 Introduction to Business	3
BUSAD 103 Marketing Principles	3
BUSCAL 050 Quantitative Methods in Business	3
MIS 101 Introduction to Management Information Systems	3
ACCT 100 Introduction to Accounting I	4
or	
BUSAD 108 Personal Finance	(3)
or	
ECON 100 Introduction to Economics	(3)
OIS 144 Business English	3
or	
ENGLISH 015 Preparation for College Writing	(4)
or	
ENGLISH 101 Freshman Composition	(4)
SPEECH 100 Elements of Public Speaking	3
ELECTIVES - choose from the list of RECOMMENDED COURSES	6
<b>TOTAL UNITS</b>	<b>28</b>

RECOMMENDED COURSES:	UNITS
BUSAD 105 Small Business Management	3
BUSAD 106 Principles of Selling	3
BUSAD 110 Human Resources Management	3
BUSAD 121 International Business	3
BUSAD 153 Introduction to Supervision	3
BUSAD 198 Business Administration Work Experience	3
BUSAD 200 Business Management	3
BUSAD 203 Marketing Management	3

### RETAIL MANAGEMENT CERTIFICATE

The Retail Management Program is designed to give students a foundation for a career in the retail management field. Some of the activities involved in retailing are selection and buying of merchandise, marketing, product displays, selling, inventory control, customer relations, and pricing. The student usually enters the retailing field as a clerk or cashier and advances to assistant manager, manager, and upper management.

**There is no required sequence of courses, but it is recommended that students structure their schedule to move through three general levels of training and experiences.** In the foundational courses the students gain exposure to foundational courses in writing, speaking, math applications, and computer literacy. The second component of course offering covers specific business and management content. Lastly, the advanced topics include the retail specific courses and human relations topics.

<u>Foundational Courses</u>	UNITS
BUSAD 207 Business Communication	3
BUSCAL 050 Quantitative Methods in Business	3
MIS 101 Introduction to Management Information Systems	3
<b>Choose one of the following</b>	
SPEECH 100 Elements of Public Speaking	3
SPEECH 111 Interpersonal Communication	(3)
SPEECH 140 Small Group Discussion	(3)
<b>Intermediate Courses</b>	
<b>Choose one of the following</b>	
ACCT 010 Bookkeeping	3
ACCT 100 Introduction to Accounting I	(4)
ACCT 200 Principles of Accounting	(4)
BUSAD 103 Marketing Principles	3
BUSAD 200 Business Management	3

<u>Advanced Courses</u>	UNITS
BUSAD 110 Human Resource Management	3
BUSAD 112 Principles of Retailing	3
BUSAD 151 Human Relations	3
<b>TOTAL UNITS</b>	<b>30-31</b>

*\*Pending approval from the California Community College Chancellor's Office*

COURSES OFFERED BY THE  
DEPARTMENT OF BUSINESS ADMINISTRATION:

BUSAD 080-099  
SPECIAL SEMINARS IN BUSINESS .25-3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 4 hours per semester per .25 unit.

Seminars on selected topics in the field of business developed to address current issues. Seminars vary from .25 to 3.0 units and will be offered as requests are made in the business community.

*Associate Degree Applicable*

BUSAD 100  
INTRODUCTION TO BUSINESS 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

For business majors and non-business majors who desire some knowledge of the fundamentals of business. Includes the basic vocabulary of business terms and a review of the structure, organization, and operating procedures of business enterprises.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

BUSAD 103  
MARKETING PRINCIPLES 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

Principles and methods of marketing as practiced by all successfully managed business firms. Course is management-oriented, covering demand analysis, forecasting, product development, price determination, distribution channels, material handling, advertising and personal selling.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

BUSAD 105  
SMALL BUSINESS MANAGEMENT 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

For business majors and non-business majors who desire a greater knowledge of the fundamentals specifically related to the opening and operating of a small business firm. Designed to provide a working knowledge of the pitfalls associated with small business operations and how to recognize and solve these problems before they happen.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

BUSAD 106  
PRINCIPLES OF SELLING 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

Problems of analyzing the sales talk, making an adequate approach, meeting objections and excuses and techniques of closing the sale, and the psychology involved in selling services, goods, ideas, and one's own personality.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

BUSAD 108  
PERSONAL FINANCE 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

Preparation for managing personal finances including budgeting, borrowing, insurance, investments and home ownership. This course is also offered as FCS 108.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

BUSAD 109  
ADVERTISING 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

Principles, purposes and practices of advertising, analysis of the channels of trade, the importance of the correct appeal, style, trademarks, headlines, typography, color, layout, ethics and other problems involved in effective advertising. No artistic abilities required.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

BUSAD 110  
HUMAN RESOURCE MANAGEMENT 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

A survey of objectives, functions and practices in the management of employee relations, and the impact of employee relations on the effective achievement of the organization's goals.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

BUSAD 112  
PRINCIPLES OF RETAILING 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

The role of retailing in serving the needs of the community with analysis of consumer needs, store locations, financial requirements and legal processes of starting a retail operation. Planning for store layout, merchandise mix, vendor negotiation, pricing, displaying, advertising, selling and controlling of merchandise.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

BUSAD 115  
OFFICE MANAGEMENT 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

A survey of office organization, functions, and management styles including methods used to select and train office personnel; office layout and work flow; selection and care of equipment and supplies; and methods designed to streamline office systems and procedures, such as automation and data processing.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

BUSAD 117  
PUBLIC RELATIONS 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

A survey of the public relations field including the need for public relations in both profit and non-profit organizations. Includes the analysis of public opinion and methods of improving public relations with employees, shareholders, dealers, suppliers, consumers, community and government.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

BUSAD 121  
INTERNATIONAL BUSINESS 3 UNITS

**PREREQUISITE:** None.

**DEPARTMENTAL ADVISORY:** BUSAD 100.

**LECTURE:** 3 hours per week.

An analysis of international trade and economic development in modern times, with an examination of business practices and emerging trends in overseas markets. Case studies illustrate methods and strategies for international operations.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

BUSAD 151  
HUMAN RELATIONS 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

A theoretical and practical approach to the impact of human dynamics in the workplace including business applications of sociological scripting and values clarification; the application of management principles to both formal and informal networks within an organization; and the employer/employee needs and motivation in work and organizational relationships.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

BUSAD 153  
INTRODUCTION TO SUPERVISION 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

This survey course introduces the major responsibilities of supervisory personnel with an emphasis on the importance of understanding employees' needs and motivations.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

BUSAD 154  
LABOR MANAGEMENT RELATIONS 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

An introduction to labor-management relations including the history of the labor movement, union contracts and current labor issues. Emphasis on the importance of viewing each issue from both the labor and management perspectives.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

BUSAD 198  
BUSINESS ADMINISTRATION WORK EXPERIENCE 1-4 UNITS

**PREREQUISITE:** None.

Supervised training in the form of on-the-job employment designed to enhance the student's educational goals. The student's major and job must match. Students work 5-20 hours per week, with 5 hours each week equal to one unit. Students may earn a total of 16 units toward graduation in work experience courses.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

BUSAD 200  
BUSINESS MANAGEMENT 3 UNITS

**PREREQUISITE:** None.

**DEPARTMENTAL ADVISORY:** BUSAD 100.

**LECTURE:** 3 hours per week.

Designed for business majors, this course examines the primary dimensions of the management process including planning, organizing, decision-making and controlling organizational activity.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

BUSAD 203  
MARKETING MANAGEMENT 3 UNITS

**PREREQUISITE:** None.

**DEPARTMENTAL ADVISORY:** BUSAD 103.

**LECTURE:** 3 hours per week.

A review of various marketing management practices including analysis of alternative principles and methods of effective marketing management and the development of decision-making with management simulation exercises.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

BUSAD 205  
BUSINESS AND SOCIETY 3 UNITS

**PREREQUISITE:** None.

**DEPARTMENTAL ADVISORY:** BUSAD 100.

**LECTURE:** 3 hours per week.

A review of the relationship between the American business system and society including historical milestones, the impact of current social forces on business, and the moral and ethical responsibilities of business.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

BUSAD 207  
BUSINESS COMMUNICATION 3 UNITS

**PREREQUISITE:** None.

**DEPARTMENTAL ADVISORY:** OIS 144.

**LECTURE:** 3 hours per week.

Studies the principles and role of business communication and the need for communication skills in a global marketplace. Emphasizes written communications such as standard and persuasive business letters, memorandums, and informational as well as analytical reports. Studies effective proposals, resumes, and other employment-related documents. Develops planning, organizing, and outlining skills, as well as editing proficiency. Evaluates grammar skills and improves writing style.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

BUSAD 210  
BUSINESS LAW I 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

Introduction to the development of common law and the functioning of the Judicial Branch. Exploration of the principles of law as applicable to contracts in general and to contracts for the sale of goods under the Uniform Commercial Code.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

*Limited transfer to UC; contact a counselor for details.*

BUSAD 211  
BUSINESS LAW II 3 UNITS

**PREREQUISITE:** None.

**DEPARTMENTAL ADVISORY:** BUSAD 210.

**LECTURE:** 3 hours per week.

An introduction to the formation, operation and dissolution of corporations and partnerships including the impact of government regulations and consumer protection law on business; agency employment law; the rules for the use of commercial paper; and how to form secured transactions.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

*Limited transfer to UC; contact a counselor for details.*

BUSAD 222  
SPECIAL PROBLEMS IN BUSINESS I 1 UNIT

**PREREQUISITE:** None.

**INDEPENDENT STUDY:** 3 hours per week.

Assigned problems involving library and laboratory work for selected students who are interested in furthering their knowledge of business on an independent study basis. Students are required to devote three hours per week to their project throughout the semester. Prior to registration, a contract must be prepared. See instructor for details.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

BUSAD 223  
SPECIAL PROBLEMS IN BUSINESS II 2 UNITS

**PREREQUISITE:** None.

**INDEPENDENT STUDY:** 6 hours per week.

Assigned problems involving library and laboratory work for selected students who are interested in furthering their knowledge of business on an independent study basis. Students are required to devote six hours per week to their project throughout the semester. Prior to registration, a contract must be prepared. See instructor for details.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

## BUSINESS CALCULATIONS

DIVISION:	Business and Information Technology
DIVISION DEAN:	Margaret Ortiz, M.A.
DEPARTMENT HEAD:	Nickolas Zoumbos, M.S. Business 100D (909) 384-8912
DIVISION SECRETARY:	Chris Williams
DIVISION OFFICE:	Business 101 (909) 384-8908
LIAISON COUNSELOR:	Wilma Cochrane, M.A. (909) 384-8986

Courses in Business Calculations are designed to present the fundamentals of mathematics within the context of the field of business. These courses are an important complement to courses in accounting, economics and business.

### COURSES OFFERED BY THE DEPARTMENT OF BUSINESS CALCULATIONS:

BUSCAL 050  
QUANTITATIVE METHODS IN BUSINESS 3 UNITS

**PREREQUISITE:** None.

**DEPARTMENTAL ADVISORY:** MATH 952.

**LECTURE:** 3 hours per week.

This introductory course includes business applications of fractions, decimals, and percents; the use of pocket calculator to solve business applications, such as markups, payroll, discounts, simple interest, compound interest, consumer loans; and an introduction to solving one-variable linear equations.

*Associate Degree Applicable*

BUSCAL 091  
BEGINNING ALGEBRA FOR BUSINESS 4 UNITS

**PREREQUISITE:** MATH 952 or BUSCAL 050.

**LECTURE:** 4 hours per week.

Review of operations on integers and properties of real numbers including solving linear equations and inequalities; ratio, proportion and percent, and the applications of these operations; exponents and polynomials; factoring; an introduction to quadratic equations; rational expressions; graphing linear equations; and applications in business such as markdowns, simple and compound interest, break-even analysis, and supply and demand.

*Associate Degree Applicable*

BUSCAL 200  
ALGEBRA AND FINITE METHODS IN BUSINESS 3 UNITS

**PREREQUISITE:** MATH 095.

**LECTURE:** 3 hours per week.

A course in college algebra including the study of sets and set operations, integral and rational exponents, radicals, quadratic equations, linear equations and systems of equations, linear inequalities and systems of inequalities, logarithms, sequences and series, functions. Applications of these in business including simple and compound interest, supply and demand, market equilibrium, and break-even analysis, and optimization and maximization.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

BUSCAL 208  
BUSINESS AND ECONOMICS STATISTICS 4 UNITS

**PREREQUISITE:** MATH 095.

**LECTURE:** 4 hours per week.

A review of statistical methods commonly used in business and economics including measures of central tendency; measures of dispersion and skewness; probability concepts and distributions; statistical inferences; parametric and non-parametric hypothesis testing; index numbers time series analysis, simple regression, and correlation analysis. This course is also offered as ECON 208.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

*Limited transfer to UC; contact a counselor for details.*

## CHEMISTRY

DIVISION:	Science and Math
DIVISION DEAN:	W. William Hughes, Ph.D.
DEPARTMENT HEAD:	Susan Bangasser, Ph.D.; Chemistry 118 (909) 384-8650
OTHER FACULTY:	Judy Okamura, Ph.D. Dennis Scott, M.S. John Stanskas, Ph.D.
DIVISION SECRETARY:	Rose Garcia
DIVISION OFFICE:	Chemistry 121 (909) 384-8645
LIAISON COUNSELOR:	Diana Rodriguez, M.A. (909) 384-8950 (909) 384-8234

The Chemistry program is designed to meet the diverse needs of students served by the community college: (a) students majoring in chemistry or related sciences, (b) students majoring in one of the health sciences, and (c) students fulfilling the general education science requirement.

Courses in the Chemistry Department are taught with a strong emphasis on the laboratory. In the advanced classes, students receive hands-on experience with a wide variety of instruments. Students planning to transfer to a four-year institution and major in chemistry should consult with a counselor regarding the transfer process and lower division requirements.

## CHEMISTRY ASSOCIATE OF SCIENCE DEGREE

To graduate with a specialization in Chemistry, students must complete the following required courses plus the general breadth requirements for the Associate Degree (total = 60 units).

REQUIRED COURSES:	UNITS
CHEM 150 General Chemistry I	5
CHEM 151 General Chemistry II	5
CHEM 212 Organic Chemistry I	4
CHEM 213 Organic Chemistry II	4
<b>TOTAL UNITS</b>	<b>22</b>

RECOMMENDED COURSES:	UNITS
MATH 090 Elementary Algebra	4
MATH 102 Introduction to College Algebra	4
MATH 103 Plane Trigonometry	4
MATH 151 Precalculus	4
MATH 250 Single Variable Calculus I	4
PHYSIC 150A Physics for the Life Sciences I	5
PHYSIC 150B Physics for the Life Sciences II	5

## COURSES OFFERED BY THE DEPARTMENT OF CHEMISTRY:

CHEM 085  
ALGEBRA REVIEW WORKSHOP FOR CHEMISTRY .5 UNIT

**PREREQUISITE: MATH 090.**

**COREQUISITE: CHEM 101.**

**LECTURE: .50 hour per week.**

An algebra review workshop for students in CHEM 101 with an emphasis on how to use mathematics and algebra to solve chemistry problems. Graded on Credit/No Credit basis only.

*Associate Degree Applicable*

CHEM 101  
INTRODUCTORY CHEMISTRY 4 UNITS

**PREREQUISITE: MATH 090.**

**LECTURE: 3 hours per week and**

**LABORATORY: 3 hours per week.**

A study of the physical and chemical properties of common elements and compounds, the metric system, measurement, atomic structure, the periodic table, chemical equations, gasses, solutions, ionization, and an introduction to organic and biochemistry.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

*Limited transfer to UC; contact a counselor for details.*

*CAN (California Articulation Number): CHEM6*

CHEM 104  
INTRODUCTION TO ORGANIC CHEMISTRY AND  
BIOCHEMISTRY 4 UNITS

**PREREQUISITE: CHEM 101.**

**LECTURE: 3 hours per week and**

**LABORATORY: 3 hours per week.**

An introduction to the structure, bonding and typical chemical properties of the different classes of organic compounds and biomolecules.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

*Limited transfer to UC; contact a counselor for details.*

CHEM 110  
CONSUMER AND ENVIRONMENTAL CHEMISTRY 3 UNITS

**PREREQUISITE: None.**

**LECTURE: 3 hours per week.**

A study of the role of chemistry in society that fulfills a general education requirement. These topics are included: physical and chemical properties of common elements and compounds, gases, reactions, atomic structure, simple organic and biochemical compounds, causes and possible solutions for chemical pollution, household and medical uses of chemicals.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

*Limited transfer to UC; contact a counselor for details.*

CHEM 150  
GENERAL CHEMISTRY I 5 UNITS

**PREREQUISITES: CHEM 101 and MATH 102.**

**LECTURE: 3 hours per week and**

**LABORATORY: 6 hours per week.**

An introduction to college-level chemistry with an emphasis on the mole concept, thermochemistry, atomic and molecular structure, interactions, periodic chart, organic chemistry, solids, liquids and gases.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

*CAN (California Articulation Number): CHEM 2*

CHEM 151  
GENERAL CHEMISTRY II 5 UNITS

**PREREQUISITE: CHEM 150.**

**LECTURE: 3 hours per week and**

**LABORATORY: 6 hours per week.**

The second half of a two-part sequence in chemistry with an emphasis on thermodynamics, equilibrium calculations, kinetics, and electrochemistry.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

*CAN (California Articulation Number): CHEM 4*

CHEM 212  
ORGANIC CHEMISTRY I 4 UNITS

**PREREQUISITE: CHEM 150.**

**LECTURE: 3 hours per week and**

**LABORATORY: 3 hours per week.**

First semester of organic chemistry. Carbon compounds including aliphatic, aromatic, and heterocyclic series, and modern theoretical concepts are studied. Students identify properties, synthesis, and reactions of functional groups. Mechanisms are examined in detail. Laboratory includes preparation, identification, and study of the properties of organic compounds.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

CHEM 213  
ORGANIC CHEMISTRY II 4 UNITS

**PREREQUISITE:** CHEM 212.

**LECTURE:** 3 hours per week and

**LABORATORY:** 3 hours per week.

Second semester of organic chemistry, continuing the study of carbon compounds including aliphatic, aromatic and heterocyclic series, and modern theoretical concepts. Includes modern instrumentation, mechanisms, synthesis and functional groups. Laboratory includes preparation, study of the properties, and extensive identification of organic compounds.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

CHEM 216  
ADVANCED ORGANIC CHEMISTRY LABORATORY 1 UNIT

**PREREQUISITE:** CHEM 212.

**PREREQUISITE/COREQUISITE:** CHEM 213.

**LABORATORY:** 3 hours per week.

A laboratory companion to CHEM 213 with hands-on experience in multistep organic synthesis, organic molecular structures, and reactions involving natural products.

*Associate Degree Applicable*

*Course credit transfers to CSU and UC.*

CHEM 222  
SPECIAL PROBLEMS IN CHEMISTRY I 1 UNIT

**PREREQUISITE:** CHEM 150.

**INDEPENDENT STUDY:** 3 hours per week.

Assigned problems involving library and/or laboratory work for selected students who are interested in furthering their knowledge of chemistry on an independent study basis. Students are required to devote three hours per week to their project throughout the semester. Prior to registration, a contract must be prepared. See instructor for details.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

*Limited transfer to UC; contact a counselor for details.*

CHEM 223  
SPECIAL PROBLEMS IN CHEMISTRY II 2 UNITS

**PREREQUISITE:** CHEM 150.

**INDEPENDENT STUDY:** 6 hours per week.

Assigned problems involving library and/or laboratory work for selected students who are interested in furthering their knowledge of chemistry on an independent study basis. Students are required to devote six hours per week to their project throughout the semester. Prior to registration, a contract must be prepared. See instructor for details.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

*Limited transfer to UC; contact a counselor for details.*

## CHILD DEVELOPMENT

DIVISION:	Science and Math
DIVISION DEAN:	W. William Hughes, Ph.D.
DEPARTMENT HEAD:	Juliann Martin, M.A. North Hall 244 (909) 384-4457
OTHER FACULTY:	Kathryn Adams, M.S. Helen Anderson-Cruz, Ed.D. Jing Babb, M.Ed. Denise Knight, B.A. Susan Shimoff, M.A.
DIVISION SECRETARY:	Rose Garcia
DIVISION OFFICE:	Chemistry 121 (909) 384-8645
LIAISON COUNSELOR:	Laura Gomez-Guillen, M.A. (909) 384-8979

The Child Development Department has both an academic and vocational orientation. The academic program leads students along a path toward an Associate of Arts degree that articulates with higher education and transfers into continued study suitable for a baccalaureate degree. Students planning to transfer to a four-year institution and major in child development or a related field should consult with a counselor regarding the transfer process and lower division requirements.

The vocational program, which interfaces with the academic program, prepares students for immediate employment. Certificates offered by the Child Development Department prepare students for work with specific age groups: Infant, Preschool, and School Age. The Family Child Care Provider Certificate, provides a curriculum to prepare students to establish quality family child care centers in their homes.

### CHILD DEVELOPMENT ASSOCIATE OF ARTS DEGREE

To graduate with a specialization in Child Development, students must complete the following required courses (25 units) plus the general breadth requirements for the Associate Degree. (Total = 60 units)

REQUIRED COURSES:	UNITS
CD 105 Child Growth and Development	3
CD 112 Principles and Practices of Early Childhood Education	3
CD 126 Child, Family and the Community	3

Four classes from the following course list:	12
CD 101 Parent Child Interaction	(3)
CD 130 Creative Music and Movement for Children	(3)
CD 133 Creative Science and Math Activities for Children	(3)
CD 134 Language, Listening and Literature for Children	(3)
CD 136 Creative Art Activities for Children	(3)
CD 137 Play and Materials for Children	(3)
CD 138 Cultural Diversity - Anti-Bias Curriculum	(3)
CD 140 Spanish for Child Development	(3)
CD 231 Health and Safety Practices for Children	(3)
CD 232 Nutrition for Young Children	(3)

<b>LABORATORY OR WORK EXPERIENCE with Young Children</b>	<b>4</b>
CD 198 Child Development Work Experience	(4)
Or	
CD 205x2 Child Growth and Development Laboratory	(4)
<b>TOTAL UNITS:</b>	<b>25</b>

## CHILD DEVELOPMENT CERTIFICATES

Students working for certificates must have a basic knowledge of arithmetic, reading and writing in order to learn and work in the occupations they select.

## 1. ASSOCIATE TEACHER CERTIFICATE

<b>REQUIRED COURSES:</b>	<b>UNITS</b>
CD 105 Child Growth and Development	3
CD 126 Child, Family and the Community	3
<b>Two classes from the following course list:</b>	<b>6</b>
CD 130 Creative Music and Movement for Children	(3)
CD 134 Language, Listening and Literature for Children	(3)
CD 136 Creative Art Activities for Children	(3)
CD 137 Play and Materials for Children	(3)

<b>LABORATORY OR WORK EXPERIENCE with Young Children</b>	<b>4</b>
CD 198 Child Development Work Experience	(4)
Or	
CD 205x2 Child Growth and Development Laboratory	(4)
<b>TOTAL UNITS</b>	<b>16</b>

<b>RECOMMENDED COURSE:</b>	
CD 116x4 Pediatric CPR, First Aid and Safety	(2)

## 2. TEACHER CERTIFICATE

<b>REQUIRED COURSES:</b>	
CD 105 Child Growth and Development	3
CD 112 Principles and Practices of Early Childhood Education	3
CD 126 Child, Family and the Community	3

<b>Three classes from the following course list:</b>	<b>9</b>
CD 130 Creative Music and Movement for Children	(3)
CD 134 Language, Listening and Literature for Children	(3)
CD 136 Creative Art Activities for Children	(3)
CD 137 Play and Materials for Children	(3)

<b>Two classes from the following course list:</b>	<b>6</b>
CD 101 Parent Child Interaction	(3)
CD 133 Creative Science and Math Activities for Children	(3)
CD 138 Cultural Diversity / Anti-Bias Curriculum	(3)
CD 140 Spanish for Child Development	(3)
CD 231 Health and Safety Practices for Children	(3)
CD 232 Nutrition for Young Children	(3)

<b>LABORATORY OR WORK EXPERIENCE with Young Children</b>	<b>4-8</b>
CD 198 Child Development Work Experience	(4-8)
Or	
CD 205x2 Child Growth and Development Laboratory	(4-8)

<b>GENERAL EDUCATION COURSES (Recommended):</b>	<b>16</b>
Math or Natural Science course:	(3-4)
Social or Behavioral Sciences (SOC 130)	(3)
Communication and Learning Skills (ENGL 015 or 101)	(4)
Humanities (ART 103 or MUS 121 or 122)	(3)
Electives:	(2-3)
<b>TOTAL UNITS</b>	<b>43-49</b>

## 3. MASTER TEACHER CERTIFICATE

Students must complete the following Child Development courses and General Education courses. Choose one Child Development Specialization, if either course in the specialization has already been successfully completed you must select another Child Development course to take in its place.

<b>REQUIRED CHILD DEVELOPMENT COURSES:</b>	<b>UNITS</b>
CD 105 Child Growth and Development	3
CD 112 Principles and Practices of Early Childhood Education	3
CD 126 Child, Family and the Community	3
CD 270 The Mentor Teacher / Adult Supervision	3

<b>Child Development Specialization:</b>	<b>6</b>
CD 130 Creative Music and Movement for Children	(3)
CD 136 Creative Art Activities for Children	(3)
Or	
CD 134 Language, Listening and Literature for Children	(3)
ENGL 155/055 Children's Literature	(3)
OR	
CD 138 Cultural Diversity / Anti-Bias Curriculum	(3)
CD 140 Spanish for Child Development	(3)
Or	
CD 160 Understanding School-Age Children	(3)
CD 161 Activities for School-Age Children	(3)
Or	
CD 185 Infant / Toddler Growth and Development	(3)
CD 186 Infant / Toddler Activities	(3)
Or	
CD 231 Health and Safety Practices for Children	(3)
CD 232 Nutrition for Young Children	(3)

<b>Two classes from the following course list:</b>	<b>6</b>
CD 130 Creative Music and Movement for Children	(3)
CD 134 Language, Listening and Literature for Children	(3)
CD 136 Creative Art Activities for Children	(3)
CD 137 Play and Materials for Children	(3)

<b>Three classes from the following course list:</b>	<b>9</b>
CD 101 Parent Child Interaction	(3)
CD 133 Creative Science and Math Activities for Children	(3)
CD 138 Cultural Diversity / Anti-Bias Curriculum	(3)
CD 140 Spanish for Child Development	(3)
CD 231 Health and Safety Practices for Children	(3)
CD 232 Nutrition for Young Children	(3)

<b>GENERAL EDUCATION COURSES (16 Units Required)</b>	<b>16</b>
<b>Recommended Courses:</b>	
Communication and Learning Skills: ENGL 015 or ENGL 101	(4)
Social and Behavioral Sciences: SOC 130	(3)
Humanities: ART 103 or MUS 121 or MUS 122	(3)
Natural Science or Math:	(3-4)
Elective Courses:	(2-3)
<b>TOTAL UNITS</b>	<b>48-49</b>

## 4. SITE SUPERVISOR CERTIFICATE

Education Requirement: Associate of Arts degree (or 60 units) with 24 Child Development units (including core), in addition.

REQUIRED COURSES:	UNITS
CD 105 Child Growth and Development	3
CD 112 Principles and Practices of Early Childhood Education	3
CD 126 Child, Family and the Community	3
CD 270 The Mentor Teacher / Adult Supervision	3
CD 271 Administration of Early Childhood Programs	3
CD 272 Advanced Administration of Early Childhood Programs	3

<b>Two classes from the following course list:</b>	<b>6</b>
CD 130 Creative Music and Movement for Children (3)	
CD 134 Language, Listening and Literature for Children (3)	
CD 136 Creative Art Activities for Children (3)	
CD 137 Play and Materials for Children (3)	
<b>Three classes from the following course list:</b>	<b>9</b>
CD 101 Parent Child Interaction (3)	
CD 133 Creative Science and Math Activities for Children (3)	
CD 138 Cultural Diversity / Anti-Bias Curriculum (3)	
CD 140 Spanish for Child Development (3)	
CD 231 Health and Safety Practices for Children (3)	
CD 232 Nutrition for Young Children (3)	
<b>TOTAL UNITS</b>	<b>33</b>

## 5. INFANT DEVELOPMENT CERTIFICATE

REQUIRED COURSES:	UNITS
CD 105 Child Growth and Development	3
CD 185 Infant/Toddler Growth and Development	3
CD 186 Infant/Toddler Activities	3
CD 210x2 Infant Growth and Development Laboratory (ages birth-24 months experience)	4
CD 231 Health and Safety Practices for Children	3
CD 232 Nutrition for Young Children	3
One class from the list of RECOMMENDED COURSES	3
<b>TOTAL UNITS</b>	<b>22</b>

RECOMMENDED COURSES:	UNITS
CD 101 Parent-Child Interaction	3
CD 136 Creative Art Activities for Children	3
CD 137 Play and Materials for Children	3
CD 244 Children with Special Needs	3

## 6. PRESCHOOL CERTIFICATE

REQUIRED COURSES:	UNITS
CD 105 Child Growth and Development	3
CD 112 Principles and Practices of Early Childhood Education	3
CD 116x4 Pediatric CPR, First Aid and Safety	2
CD 126 Child, Family and Community	3
CD 205x2 Child Growth and Development Laboratory	4

<b>Five classes from the following course list:</b>	<b>15</b>
CD 101 Parent Child Interaction (3)	
CD 130 Creative Music and Movement for Children (3)	
CD 133 Creative Science and Math Activities for Children (3)	
CD 134 Language, Listening and Literature for Children (3)	
CD 136 Creative Art Activities (3)	
CD 137 Play and Materials for Children (3)	
CD 138 Cultural Diversity - Anti-Bias Curriculum (3)	
CD 140 Spanish for Child Development (3)	
CD 231 Health and Safety Practices for Children (3)	
CD 232 Nutrition for Young Children (3)	
<b>TOTAL UNITS</b>	<b>30</b>

## 7. SCHOOL-AGE CERTIFICATE

REQUIRED COURSES:	UNITS
CD 105 Child Growth and Development	3
CD 160 Understanding School-Age Children	3
CD 161 Activities for School-Age Children	3
*CD 198 Child Development Work Experience	4
<b>Three classes from the following course list:</b>	<b>9</b>
CD 134 Language, Listening and Literature for Children (3)	
CD 137 Play and Materials for Children (3)	
CD 138 Cultural Diversity-Anti-Bias Curriculum (3)	
CD 231 Health and Safety Practices for Children (3)	
CD 232 Nutrition for Young Children (3)	
<b>TOTAL UNITS</b>	<b>22</b>

\*CD 198 must be completed in conjunction with children 6-12 years in age

## 8. FAMILY CHILD CARE PROVIDER CERTIFICATE

REQUIRED COURSES:	UNITS
CD 105 Child Growth and Development	3
CD 116x4 Pediatric CPR, First Aid and Safety	2
CD 136 Creative Art Activities for Children	3
CD 172 Introduction to Family Child Care	1
CD 173 Family Child Care Business Practices	1
CD 174 Family Child Care Children's Program	1
CD 161 Activities for School Age Children	3
Or	
CD 186 Infant/Toddler Activities	(3)
CD 198 Work Experience (in Family Child Care)	2-4

RECOMMENDED COURSES:	UNITS
CD 231 Health and Safety Practices for Children	(3)
BUSAD 105 Small Business Management	(3)
<b>TOTAL UNITS</b>	<b>16-24</b>

## COURSES OFFERED BY THE DEPARTMENT OF CHILD DEVELOPMENT:

CD 081 PARENTING THE INFANT 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

A focus on parenting roles and responsibilities for nurturing infants.

*Associate Degree Applicable*



CD 100  
INTRODUCTION TO CHILD DEVELOPMENT 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

Introduction to the field of children's studies designed to familiarize students with the broad aspects of the profession, philosophy and principles of caring for children in a variety of settings.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

CD 101  
PARENT-CHILD INTERACTION 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

A review of the concept of human development and its interaction within the biological, psychological, social and cultural phenomena and their relationship to children's and parent's attitudes and behavior. Family dynamic, communication and discipline are explored.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

CD 105  
CHILD GROWTH AND DEVELOPMENT 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

A survey of the growth and development of children from the prenatal period through adolescence with an emphasis on the individual needs of children in the modern world.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

*Limited transfer to UC; contact a counselor for details.*

*CAN (California Articulation Number): FCS14*

CD 112  
PRINCIPLES AND PRACTICES IN EARLY CHILDHOOD  
EDUCATION 3 UNITS

**PREREQUISITE:** None.

**DEPARTMENTAL ADVISORY:** CD 105.

**LECTURE:** 3 hours per week.

Studies the practices and principles of working with your children. Emphasis is on observation and evaluation, developing age appropriate lesson plans, guiding and understanding young children.

*Applicable to Associate Degree*

*Course credit transfers to CSU.*

CD 116x4  
PEDIATRIC CPR, FIRST AID AND SAFETY 2 UNITS

**PREREQUISITE:** None.

**LECTURE:** 1.5 hours per week and

**LABORATORY:** 1.5 hours per week.

Certification of pediatric CPR, pediatric first aid, prevention of the spread of infectious disease, immunizations, child safety and injury prevention. Meets community and state licensing recommendations for child care workers. This course may be taken four times.

*Applicable to Associate Degree*

*Course credit transfers to CSU.*

CD 120x3  
LABORATORY PREPARATION IN CHILD DEVELOPMENT 1 UNIT

**PREREQUISITE:** One course in child development.

**LABORATORY:** 3 hours per week.

Practical laboratory techniques designed to acquaint students with the preparation of materials commonly used in child education. This course may be taken three times.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

CD 126  
CHILD, FAMILY, AND THE COMMUNITY 3 UNITS

**PREREQUISITE:** None.

**DEPARTMENTAL ADVISORY:** CD 105.

**LECTURE:** 3 hours per week.

Essentials and principles of preschool programs as they relate to the child, parent and teacher with emphasis on the interactions among the child, family and the community. Includes types of preschool programs, licensing regulations, discipline and the services available to families.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

CD 128  
CREATIVE EXPERIENCES FOR CHILDREN 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

The study of children's creativity including strategies to promote creativity in art, music, movement, and drama and the uses of creative activities as a way to develop children's cognitive skills, social skills, and aesthetic appreciation.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

CD 130  
CREATIVE MUSIC AND MOVEMENT FOR CHILDREN 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

Will explore the importance of music and movement for the development of the young child. Developing creative experiences in both music and movement to bring out the child's ability to express themselves using rhythm, sounds and movement. Experiences with musical instruments to use with children in the classroom along with ways to bring music and movement ideas into the daily lesson plan.

*Applicable to Associate Degree*

*Course credit transfers to CSU.*

CD 133  
CREATIVE SCIENCE AND MATH ACTIVITIES FOR CHILDREN 3 UNITS

**PREREQUISITE:** CD 105.

**LECTURE:** 3 hours per week.

Study of basic scientific theories and practices for teaching young children simple methods and processes of science and math. Classifying, simple reasoning, observing, making hypothesis, testing, generalizing causes and effect, using energy, matter and living things are explored. Fundamental mathematical concepts such as one to one correspondence, number sense and counting sets and classifying, parts and whole, basic measurements, ordering and patterning are also explored.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

- CD 134  
LANGUAGE, LISTENING AND LITERATURE FOR CHILDREN 3 UNITS  
**PREREQUISITE:** CD 105.  
**LECTURE:** 3 hours per week.  
The study of language acquisition in children and techniques and experiences which promote language development and listening skills. Includes examination of children's literature and teaching strategies for reading picture books to children as well as presenting poetry, flannel board activities, puppetry and storytelling in the classroom.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*
- CD 136  
CREATIVE ART EXPERIENCES FOR CHILDREN 3 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week.  
The study of children's creativity including strategies to promote and value artists' development through activities using developmentally appropriate art materials and tools. Includes development of an art curriculum, which focuses on the emotional, social, physical, creative and cognitive needs of children from 2-8 years of age.  
*Applicable to Associate Degree*  
*Course credit transfers to CSU.*
- CD 137  
PLAY AND MATERIALS FOR CHILDREN 3 UNITS  
**PREREQUISITE:** None.  
**DEPARTMENTAL ADVISORY:** CD 105.  
**LECTURE:** 3 hours per week.  
In depth study of the dynamic of play and play materials for children including the rationale for play as a facilitator of learning. History and philosophy of play, current theories and their relationships to materials as they are utilized in creating and implementing play environments for children.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*
- CD 138  
CULTURAL DIVERSITY - ANTI-BIAS CURRICULUM 3 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week.  
This course is designed to help students explore and address diversity in ways that enhance their own development and the development of the children they will encounter as teachers and parents.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*
- CD 140  
SPANISH FOR CHILD DEVELOPMENT 3 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week.  
Language and listening experiences in Spanish through the use of literature, music, conversation and dramatic play. Emphasis will be placed on acquisition of basic communication skills appropriate for those students teaching or planning to teach in early childhood bilingual-bicultural learning environments. (This course is equivalent to SPAN 140)  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*
- CD 142-143-144-145-146  
ISSUES IN CHILD DEVELOPMENT 1-2 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 1-2 hours per week and/or  
**LABORATORY:** 2-3 hours per week per unit.  
Lecture on issues, principles, theories and trends in the field of early childhood development. This course is appropriate for teachers, parents, day care workers, volunteers, aides and others interested in programs serving young children. Selected topics include foster parenting, strategies of discipline, grieving, and emancipation of foster children.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*
- CD 150-151-152-153-154-155  
PARENTING ISSUES IN CHILD DEVELOPMENT 2 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 1 hour per week and  
**LABORATORY:** 3 hours per week.  
Designed for participants in the campus Child Development Center, this course provides a framework for discussing parenting and education issues that emerge while working at the Center.  
**PARTICIPATION AT THE CHILD DEVELOPMENT CENTER IS REQUIRED.**  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*
- CD 160  
UNDERSTANDING SCHOOL-AGE CHILDREN 3 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week.  
Designed to prepare students to work with children ages five years through adolescence, this course includes developmental theories and the practical implications of those theories. This course incorporates licensing regulations as required by Title 22 licensed facilities.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*
- CD 161  
ACTIVITIES FOR SCHOOL-AGE CHILDREN 3 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week.  
A survey of program and activity planning for school age children including both before- and after-school activities for groups and individuals.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*
- CD 172  
FAMILY CHILD CARE 1 UNIT  
**PREREQUISITE:** None.  
**LECTURE:** 1 hour per week.  
An introduction to in-home business practices, general development of children, and California licensing practices.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*
- CD 173  
FAMILY CHILD CARE BUSINESS PRACTICES 1 UNIT  
**PREREQUISITE:** None.  
**LECTURE:** 1 hour per week.  
Includes advertising, fees, collections, and record-keeping systems for family day care. Also includes child care food program regulations and licensing standards.  
*Associate Degree Applicable*  
*Course credit transfers to CSU.*

CD 174  
FAMILY CHILD CARE CHILDREN'S PROGRAMS 1 UNIT

**PREREQUISITE:** None.

**LECTURE:** 1 hour per week.

Strategies for organizing the child's day in family day care. Includes a review of age level development, suggested activities for each age, the importance of establishing routines, techniques for arranging the physical environment, and working with parents.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

CD 185  
INFANT/TODDLER GROWTH AND DEVELOPMENT 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

Designed for infant caregivers, this course explores the developmental, sensory, cognitive and emotional development of children from birth to age three. This course fulfills licensing requirements for Infant Center personnel and includes record-keeping, parent issues and the development of services, and daily plans of activities.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

CD 186  
INFANT/TODDLER ACTIVITIES 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

A survey of program and activity planning for infants and toddlers child care programs, emphasizing curriculum and good practice specific to infants, toddlers and two-year-old children.

*Applicable to Associate Degree*

*Course credit transfers to CSU.*

CD 198  
CHILD DEVELOPMENT WORK EXPERIENCE 1-4 UNITS

**PREREQUISITE:** None.

Supervised training in the form of on-the-job employment that will enhance the student's educational goals. The student's major and job must match. Students work 5-20 hours per week, with 5 hours each week equal to one unit. Students may earn a total of 16 units toward graduation in work experience courses.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

CD 205x2  
CHILD GROWTH AND DEVELOPMENT LABORATORY 4 UNITS

**PREREQUISITE/COREQUISITE:** CD 105.

**LECTURE:** 1.5 hour per week and

**LABORATORY:** 8.5 hours per week.

Supervised experience and participation in a group program for preschool children at the SBVC Child Development Center. Emphasis is on curriculum planning and evaluation, discipline, guidance techniques, instructional method, cooperative relationships with staff, parents, children and professional ethics.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

CD 210x2  
INFANT GROWTH AND DEVELOPMENT LABORATORY 4 UNITS

**PREREQUISITE:** None.

**PREREQUISITE/COREQUISITE:** CD 185.

**LECTURE:** 1.5 hour per week and

**LABORATORY:** 8.5 hours per week.

This course is designed to provide child development students with a supervised teaching experience in an infant care setting. The student is responsible for developing an appropriate individual program for the infants in their care. The lecture will be devoted to techniques to enhance effectiveness and a discussion of the laboratory experience.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

CD 222  
SPECIAL PROBLEMS IN CHILD DEVELOPMENT I 1 UNIT

**PREREQUISITE:** None.

**DEPARTMENTAL ADVISORY:** Complete one 3-unit course in Child Development.

**INDEPENDENT STUDY:** 3 hours per week.

Assigned problems involving library, laboratory, or conference work for selected students who are interested in furthering their knowledge of child development on an independent study basis. Students are required to devote three hours per week to their project throughout the semester. Prior to registration, a contract must be prepared. See instructor for details.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

CD 231  
HEALTH AND SAFETY PRACTICES FOR CHILDREN 3 UNITS

**PREREQUISITES:** CD 105 and CD 126.

**LECTURE:** 3 hours per week.

This course will focus on the exploration of essential aspects and concerns of health and safety for children in early education programs. Examination of relationship of preventive health care and safety measures to optimal development and education. Focus on how to provide high quality, secure environments and health, safety and educational experiences. Knowledge of basic management of accidental injuries and illness.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

CD 232  
NUTRITION FOR YOUNG CHILDREN 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

Nutrition issues relating to the basic needs of children from the prenatal period through adolescence with an emphasis on meal planning for child care facilities, and federal, state, and local regulations.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

CD 244  
CHILDREN WITH SPECIAL NEEDS 3 UNITS

**PREREQUISITE:** CD 105.

**LECTURE:** 3 hours per week.

This course is designed to introduce characteristics of children with special needs. The course will provide a means of identification of a sensitivity to the needs and feelings of children with special needs and their families. Legal requirements of educating the child with disabilities or other special needs will be identified.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

CD 270  
THE MENTOR TEACHER/ADULT SUPERVISION 3 UNITS

**PREREQUISITE:** CD 105.

**DEPARTMENTAL ADVISORY:** Two years teaching experience and possession of a Child Development Permit (or completion of 24 units in child development coursework).

**LECTURE:** 3 hours per week.

The methods and principles of supervising student teachers in early childhood classrooms. Emphasis is on the role of experienced classroom teachers who function as mentors to new teachers while simultaneously addressing the needs of children, parents and other staff.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

CD 271  
ADMINISTRATION OF EARLY CHILDHOOD PROGRAMS 3 UNITS

**PREREQUISITES:** CD 105 and CD 126.

**LECTURE:** 3 hours per week.

This course is an introduction to basic principles of administration of early childhood education programs. Specific topics include curriculum development and evaluation; licensing laws and regulations; site development; budgeting and fiscal management; working with parents, nutrition, health and safety issues and problem solving techniques.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

CD 272  
ADVANCED ADMINISTRATION OF EARLY CHILDHOOD PROGRAMS 3 UNITS

**PREREQUISITE:** None.

**DEPARTMENTAL ADVISORY:** CD 271.

**LECTURE:** 3 hours per week.

This course will address administrative skills, knowledge and techniques needed to organize and operate a child development facility. Emphasis will be on principled centered leadership, budget and fiscal management, working with a board, funding opportunities, staffing, staff development opportunities, personnel policies, working with parents, volunteers and the community, regulatory laws, problem solving techniques. This class meets state requirements for supervision of Title 22 preschool programs and the Child Development matrix for Master Teachers, Site Supervisor and Program Directors.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

CD 293  
ELEMENTARY LABORATORY: INTRODUCTION TO EARLY FIELD EXPERIENCE 3 UNITS

**PREREQUISITE:** EDU 290.

**LECTURE:** 2 hours per week and

**LABORATORY:** 2 hours per week.

This course offers supervised experience and participation in an elementary school setting for prospective elementary school teachers. Emphasis is on understanding the role of the elementary school teacher, instructional methods, aiding literacy, cooperative relationships with staff, parents, children and professional ethics of teaching. This is a required class for all Liberal Studies/Education majors transferring to CSUSB seeking a teaching credential.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

CD 295-296-297-298-299  
SPECIAL TOPICS IN CHILD DEVELOPMENT .5 UNIT

**PREREQUISITE:** None.

**LECTURE:** 8 hours per semester.

Seminars on selected topics in the field of child development developed to address current issues, such as infants born with additions; bonding with foster parents; bilingual education; discipline strategies with teenagers; and self-esteem of foster children.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

EDU 290  
INTRODUCTION TO EDUCATION 3 UNITS

**PREREQUISITE:** CD 105.

**LECTURE:** 3 hours per week.

Introduction to the field of education, designed to familiarize students with philosophies of education, history of education in America, social, political and legal foundations of education, and contemporary issues in education. The course transfers to CSUSB for students majoring in Liberal Studies/Education.

*Associate Degree Applicable*

*Course credit transfers to CSU.*

