PART I  THE COLLEGE
PART II  DEGREE, CERTIFICATE, AND TRANSFER INFORMATION
PART III  CORE SKILL SETS
PART IV  ANNOUNCEMENT OF COURSES
PART V  ADMINISTRATION AND FACULTY

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

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 Marco Cota o Laura Gomez, (909)384-4404.

This publication is available in alternate formats (Braille, large print, e-text) for qualified persons with disabilities. Call (909) 384-4443 or (909) 384-8277 for information or contact us by email at dsps@valleymcc.edu.
Welcome to San Bernardino Valley College and to the San Bernardino Community College District.

Valley College offers numerous opportunities to achieve your goal of transfer to a four-year university, vocational training, personal enrichment or career development. You can even complete an associate's degree online! Our faculty is top notch and committed to your success.

There are also many opportunities to become involved at Valley College. There are a variety of student clubs, athletics, student government and many other activities to enrich your experience here. I encourage you to try something different and make new friends.

As always, the faculty, staff and administration of the San Bernardino Community College District are dedicated to “enhancing your life with quality education.”

Donald F. Averill, Ed.D.
Chancellor

Welcome to San Bernardino Valley College. This catalog contains a complete listing of all of the academic courses and services that we offer to our students. Each year we fine-tune these offerings to best adapt to the needs of our students and community. Each course and program is designed to prepare you for the transfer to a four-year college or university, or to provide you with the knowledge and skills to seek a meaningful position in the job market.

The 2005-6 academic year marks Valley College’s 79th year. Nearly 700,000 students have walked our halls and filled our classrooms since we first opened our doors in 1926. We are the engine that drives higher education in the valley.

If you are new to our college or are a continuing student, you will notice that the campus is putting on a new face. Last year we dedicated and opened three new buildings as part of our ambitious construction project. Two more will open in the next year and many other projects are in the planning stages to provide high tech, state-of-the-art learning facilities.

The project has created many inconveniences with parking, noise and dust, but our students and staff are adjusting to this disruption. We thank all of you for your patience and understanding.

Most importantly, the quality of our education and services has never been better. We awarded more than 1,300 associate degrees and vocational certificates last year and 619 of our graduates plan to transfer to a university. Statistics show that community college students do better at the CSU and UC system when they get their start at a California Community College like SBVC.

You have made an excellent choice by joining the Valley College family. We are committed to your success.

Denise Whittaker, M.A.
President
### TABLE OF CONTENTS

**ACADEMIC CALENDAR** ........................................................................................................ 4

**PART I – THE COLLEGE** ........................................................................................................ 5
General Information .................................................................................................................. 5
Admission Regulations .............................................................................................................. 7
Enrollment .................................................................................................................................. 9
Academic Standards and Policies ................................................................................................ 11
Student Awards and Honors ...................................................................................................... 17
Services for Students .................................................................................................................. 19
Financial Aid Programs ........................................................................................................... 22
Campus Safety ............................................................................................................................ 24
Student Rights and Responsibilities ............................................................................................. 26

**PART II – DEGREE, CERTIFICATE, AND TRANSFER INFORMATION** .................................. 29
Associate Degree (Graduation) Requirements .......................................................................... 29
Vocational Certificate Programs .................................................................................................. 31
Requirements for Transfer to Four-Year Colleges and Universities ......................................... 31
Degree and Certificate Listing .................................................................................................... 37

**PART III – CORE SKILL SETS** ............................................................................................... 38

**PART IV– ANNOUNCEMENT OF COURSES** ........................................................................ 39

**PART V – ADMINISTRATION AND FACULTY** ................................................................... 207
Administration ............................................................................................................................ 207
Faculty ....................................................................................................................................... 208
Professors Emeriti ....................................................................................................................... 211
Administrative Emeriti .................................................................................................................. 212
San Bernardino Valley College Foundation .................................................................................... 213
CALENDAR FOR THE 2005-2006 ACADEMIC YEAR

FALL SEMESTER 2005
August 15  First Day of Fall Semester Instruction
September 5  Labor Day – Holiday
October 1  Deadline - Last Day to apply for Fall 2005 graduation
November 11  Veteran's Day – Holiday
November 24-26  Thanksgiving Recess
December 10  Last Day of Instruction, Day and Evening
December 12-17  Final Examinations
December 24 – January 8  Winter Recess

SPRING SEMESTER 2006
January 9  First Day of Spring Semester Instruction
January 16  Martin Luther King Day – Holiday
February 10  Lincoln's Birthday – Holiday
February 20  Washington's Birthday – Holiday
March 1  Deadline - Last Day to apply for Spring 2006 graduation
March 20-25  Spring Recess
May 9  Last Day of Instruction, Day and Evening
May 10-16  Final Examinations
May 17  Commencement

SUMMER SESSION 2006
Start dates will be available during the Spring 2006 semester.

Check the fall, spring or summer Schedule of Classes as well as www.valleycollege.edu 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. The mission statement was reaffirmed by the college in December 2004.

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.

Educational Philosophy
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, culturally diverse 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.

- That institutional effectiveness must be verified annually by using empirical data as demonstrated through each standing committee in the collegial consultation process.
- That students learn best on a campus that is student-centered and aesthetically pleasing.
- That we must be responsible stewards of campus resources.

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. The vision statement was reaffirmed by the college in December 2004.

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 160 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 fulltime. 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.

High School Students
In accordance with Board Policy 6020, any pupil enrolled in grades 9-12 from a public school district may apply for admission to the 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.

The three categories of high school students listed below may be admitted to San Bernardino Valley College. All high school students must complete an admission application and take the College Assessment Test before registering for classes:

High School Juniors and Seniors enrolling in Transfer Level Courses (courses numbered 100-200)
- Must have an overall 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 an instructor currently teaching the student in an academic course.
- Must submit a completed application for admission to the college.
- Must submit a Special Student Attendance Approval form signed by parent/guardian and high school principal or designee.
- Must register in transfer level courses.
- Must submit official high school transcript each semester while attending SBVC.
- Courses cannot duplicate courses currently available in their high school.

High School Vocational Education Students, Grades Nine Through Twelve
- Must have an overall 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 a Special Student Attendance Approval form signed by parent/guardian and high school principal or designee.
- Must register in Vocational Education courses only.
- Must submit official high school transcript each semester while attending SBVC.
- Courses cannot duplicate courses currently available in their high school.

Students Below Grade Eleven
- Parents must petition in writing to the Vice President of Student Services or designee.
- The public school district of residence must grant approval in writing.
- Student must have proof of an overall high school 3.0 GPA or better as verified by an official transcript (except for students enrolling in Vocational Education courses, as described above).
- Must submit a Special Student Attendance Approval form.
- Must register in transfer level courses only (courses numbered 100-200).
- Must submit official high school transcript each semester while attending SBVC.
- Courses cannot duplicate courses currently available in their high school.

Residence Requirements
Residence determination must be made each semester for nonresident 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 only for educational purposes 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, Student Development 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 Bureau of Citizenship and Immigration Services (BCIS) to admit non-immigrant international students who are taking lower division work for transfer to four-year institutions or who are taking coursework 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 nonrefundable processing fee of $25.
• A minimum score of 450 on the paper-based Test of English as a Foreign Language (TOEFL) or 133 on the computer-based TOEFL.
• Official transcripts of high school and college records, accompanied by a notarized verification of funds and affidavit of support, sufficient to cover all expenses while in this country.
• Two recent passport sized photographs.
• F1 students must purchase International Health Insurance by the first week of classes.

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 the Counseling Center (Administration/Student Services Building, Room 103).

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 Admissions & Records Office (Administration/Student Services Building). 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 BCIS 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. 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. 

8
ENROLLMENT

Application Procedures

1. Filing an Application for Admission to the College
You must have attended last semester for your file to be current. All new students who have never attended San Bernardino Valley College and all returning students who did not attend San Bernardino Valley College last semester must complete an application for admission before registering for classes. New student applications may be submitted online at the San Bernardino Valley College website www.valleycollege.edu or in person at the Admissions & Records Office (Administration/Student Services Building). The signature page and statement of residency may be submitted in person or by U.S. Mail. Both the signature page and the statement of residency must be submitted before a student can be admitted. Note: Returning students must submit their applications at the Admissions & Records Office.

2. Transcripts of Prior Work
Students must have official transcripts of all high school and college work (all work not done at San Bernardino Valley College) sent to the Admissions & Records Office (Administration/Student Services Building) if they are planning to attend. If the student does not apply, transcript will be destroyed.

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. New students are required to participate in assessment unless specifically exempted from this process.

If you mail your application, or submit it online, you may come to the Admissions & Records Office (Administration/Student Services Building) to receive an appointment card or call, 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 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 California community 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.

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.

Here are questions students most often ask about Assessment:

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.

How long will the Assessment take?
Approximately 3 hours.

What if I need disability-related 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 Administration/Student Services, Room 105.

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 results?
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 12 for other options.

4. Registration
The eSchedule on the Valley College website or the Schedule of Classes provides detailed instructions on the procedures involved in registering for classes. Students may register either by telephone, online, 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 incomplete application, dismissal or probationary issues, or 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. Keep in mind that 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. Students who are added to classes must bring the web authorization code or add slip to the Admissions & Records Office immediately. Students will not be enrolled into a class if the deadline date for admissions has passed; a petition for academic exception must be completed.

8. Change of Program
Registered students may change their programs during a designated period at the beginning of each semester. Once the telephone/web 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 & Records Office (Administration / Student Services Building). 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. All fees are due at time of service.

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, and Student Center fees. 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, and Student Center fees. 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:

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

* 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 & Records Office (Administration/Student Services Building) or the website. 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 grating 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 drop one or more classes but continue enrollment in other classes should complete an add/drop/web authorization form. The completed form can be returned to the Admissions & Records Office immediately or entered online. 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, 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.valleycollege.edu

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/Student Services Building). 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 met before a course is taken. 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 a course that must be taken during the same semester as another 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 discriminatory or is being applied in a 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, contact the Matriculation Coordinator.

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 coursework
students, more information about the waiver process. 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/Student Services Building). 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. (Note: All students, including those with Board of Governor fee waivers, must pay the processing fee and enrollment fee based on units when applying for credit by exam.) 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 29 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 two semester units of credit for the Physical and Health Education requirement for graduation. One unit is allowed toward CSU GE-Breadth in area A. A DD-214 is required. Petition forms may be obtained in the Records Office (Administration/Student Services Building). Documentary evidence must be submitted.

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. Transfer universities re-evaluate AP. 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. Students request credit for AP through the Records Office. (See Associate Degree Graduation Requirements on page 29 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 for CLEP Examinations. Credit will not be granted for courses in which equivalent or more advanced course work has been completed. Students will receive appropriate credit for CLEP Examinations, for which faculty have determined equivalent to SBVC courses. Students should be aware of the following:

1. University of California does not accept CLEP Examinations.
2. The California State University is only obligated to accept the following CLEP Examinations:
   - College Algebra/Trigonometry (score 49) applicable toward CSU GE-Breadth Area B4.
   - Calculus with Elementary Functions (score 51) applicable toward CSU GE-Breadth Area B4.
   - General Chemistry (score 48) applicable toward CSU-GE Breadth Area B1.
3. Students should be aware that acceptance of CLEP at the various campuses of the CSU varies. CLEP Examinations get re-evaluated at transfer universities.
4. SBVC Departmental approval is required for degree ad/or certificate requirements.
5. CLEP is evaluated on a credit basis only; no letter grades are assigned.
6. At the time of publication of this catalog, CLEP is under review at SBVC. CLEP scores other than those listed below will be evaluated on an individual basis.

Please refer to the table on page 14.

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/Student Services Building). All religious courses taken at a denominational college need to be equated with courses 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/Student Services Building).

International Baccalaureate
A student must be enrolled at San Bernardino Valley College to receive course credit for the International Baccalaureate diploma or certificates. At the time of catalog publication, policy for acceptance of the International Baccalaureate diploma or certificates is under review for only the higher levels (HL). Scores below 4 for English A1 and 5 for Mathematics will require that students complete assessment at SBVC. The International Baccalaureate is re-evaluated by the CSU and UC. Please refer to the table on page 15. Any questions may be directed to the Articulation Officer in the Counseling Center, Administration/Student Services Building, Room 103.

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 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 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 by letter. A student may appeal his/her disqualification status.

<table>
<thead>
<tr>
<th>CLEP EXAMINATION</th>
<th>SBVC REQUIRED SCORE</th>
<th>SBVC UNITS</th>
<th>SBVC EQUIVALENT COURSE (to clear prerequisite requirements)</th>
<th>SBVC Graduation Requirement</th>
<th>CSU GE-Breadth Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting Principles</td>
<td>50</td>
<td>6</td>
<td>ACCT 200 &amp; 201</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Algebra, College</td>
<td>50</td>
<td>3</td>
<td>MATH 102</td>
<td>Category IV</td>
<td>No credit</td>
</tr>
<tr>
<td>Algebra – Trigonometry, College</td>
<td>50</td>
<td>4</td>
<td>MATH 151</td>
<td>Category IV</td>
<td>B4</td>
</tr>
<tr>
<td>American Government</td>
<td>under review</td>
<td>under review</td>
<td>under review</td>
<td>under review</td>
<td>under review</td>
</tr>
<tr>
<td>Biology</td>
<td>46</td>
<td>3</td>
<td>N/A</td>
<td>Category I (no lab credit)</td>
<td>No credit</td>
</tr>
<tr>
<td>Calculus</td>
<td>50</td>
<td>4</td>
<td>MATH 250</td>
<td>Category IV</td>
<td>B4</td>
</tr>
<tr>
<td>Chemistry</td>
<td>48</td>
<td>3</td>
<td>N/A</td>
<td>Natural Science (no lab credit)</td>
<td>B1</td>
</tr>
<tr>
<td>English – Freshman Comp</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>No credit</td>
<td>No credit</td>
</tr>
<tr>
<td>Humanities</td>
<td>420</td>
<td>3</td>
<td>N/A</td>
<td>Category III</td>
<td>No credit</td>
</tr>
<tr>
<td>Literature – Analyzing &amp; Interpreting</td>
<td>under review</td>
<td>under review</td>
<td>under review</td>
<td>under review</td>
<td>No credit</td>
</tr>
<tr>
<td>Marketing Principles</td>
<td>under review</td>
<td>under review</td>
<td>under review</td>
<td>under review</td>
<td>No credit</td>
</tr>
<tr>
<td>Mathematics, College</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>No credit</td>
<td>No credit</td>
</tr>
<tr>
<td>Psychology - Introductory</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>No credit</td>
<td>No credit</td>
</tr>
<tr>
<td>Sociology</td>
<td>50</td>
<td>3</td>
<td>SOC 100</td>
<td>Category II</td>
<td>No credit</td>
</tr>
<tr>
<td>Spanish Language</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>No credit</td>
<td>No credit</td>
</tr>
<tr>
<td>Trigonometry</td>
<td>50</td>
<td>3</td>
<td>MATH 103</td>
<td>Category IV</td>
<td>No credit</td>
</tr>
</tbody>
</table>
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 reflects their current level of academic performance may petition 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, 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. The petition may be obtained and reviewed by a counselor to determine if the criteria has been satisfied and submitted to Records (Administration/Student Services Building).

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.

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 W.G. Garland, Vice President of Student Services, Campus Center. He can also be reached by calling (909) 384-8297.

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.)

International Baccalaureate Grid

<table>
<thead>
<tr>
<th>Examination</th>
<th>Score</th>
<th>Units</th>
<th>SBVC Equivalent</th>
<th>CSU GE-Breadth</th>
<th>IGETC</th>
</tr>
</thead>
<tbody>
<tr>
<td>English A1 (HL)</td>
<td>5</td>
<td>4</td>
<td>ENGL 101</td>
<td>A2</td>
<td>Area 1A</td>
</tr>
<tr>
<td>English A1 (HL)</td>
<td>4</td>
<td>4</td>
<td>Placement into ENGL 101; credit for ENGL 015</td>
<td>No credit</td>
<td>No credit</td>
</tr>
<tr>
<td>French B (HL)</td>
<td>5</td>
<td>5</td>
<td>FRENCH 102</td>
<td>C2</td>
<td>Language other than English</td>
</tr>
<tr>
<td>Mathematics and Computer Science(HL)</td>
<td>5</td>
<td>4</td>
<td>MATH 250</td>
<td>B4</td>
<td>Area 2</td>
</tr>
<tr>
<td>Spanish B (HL)</td>
<td>5</td>
<td>5</td>
<td>SPAN 102</td>
<td>C2</td>
<td>Language other than English</td>
</tr>
<tr>
<td>Advanced Placement Exam with Score of 3, 4, or 5</td>
<td>SBVC Units Awarded</td>
<td>SBVC Prerequisite Course</td>
<td>SBVC General Education Graduation Credit</td>
<td>CSU General Education Credit</td>
<td>IGETC Credit</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>--------------------</td>
<td>--------------------------</td>
<td>----------------------------------------</td>
<td>-----------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Art: History of Art</td>
<td>3</td>
<td>ART 100 or 102</td>
<td>Category III, 1 course</td>
<td>Area C1</td>
<td>Area 3A</td>
</tr>
<tr>
<td>Art: Studio</td>
<td>3</td>
<td>ART 120</td>
<td>Category III, 1 course</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Biology</td>
<td>4</td>
<td>BIOL 100</td>
<td>Category I, 1 course</td>
<td>(no lab)</td>
<td>Area 3B</td>
</tr>
<tr>
<td>Chemistry</td>
<td>5</td>
<td>CHEM 150 or CHEM 150H</td>
<td>Category I, 1 course</td>
<td>Areas B1 and B3</td>
<td>Area 3B</td>
</tr>
<tr>
<td>Computer Science A</td>
<td>3</td>
<td>(CS 110 + (CS 120 or CS 190))</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Computer Science AB</td>
<td>3</td>
<td>CS 190 + CS 265</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Economics: Macroeconomics</td>
<td>3</td>
<td>ECON 200 or 200H</td>
<td>Category II, 1 course</td>
<td>Area D2</td>
<td>Area 3B</td>
</tr>
<tr>
<td>Economics: Microeconomics</td>
<td>3</td>
<td>ECON 201</td>
<td>Category II, 1 course</td>
<td>Area D2</td>
<td>Area 3B</td>
</tr>
<tr>
<td>English: Language &amp; Composition</td>
<td>3</td>
<td>ENGL 101 or ENGL 101H</td>
<td>Competency in English</td>
<td>Area A2</td>
<td>Area 3B</td>
</tr>
<tr>
<td>English: Literature &amp; Composition</td>
<td>6</td>
<td>(ENGL 101 or ENGL 101H) + ENGL 151</td>
<td>Competency in English</td>
<td>Areas A2, C2</td>
<td>Area 3B</td>
</tr>
<tr>
<td>Environmental Science</td>
<td>3</td>
<td>BIOL 104</td>
<td>Category I, 1 course</td>
<td>Area B2</td>
<td>Area 3B</td>
</tr>
<tr>
<td>French Language</td>
<td>6</td>
<td>Score 3=FRENCH 102</td>
<td>Category III, 1 course</td>
<td>Area C2</td>
<td>Language Other than English</td>
</tr>
<tr>
<td>German Language</td>
<td>6</td>
<td>No equivalent</td>
<td>Category III, 1 course</td>
<td>Area C2</td>
<td>Language Other than English</td>
</tr>
<tr>
<td>Government and Politics: Comparative</td>
<td>3</td>
<td>No equivalent</td>
<td>Category II, 1 course</td>
<td>Area D8</td>
<td>Area 3B</td>
</tr>
<tr>
<td>Government and Politics: US</td>
<td>3</td>
<td>No equivalent</td>
<td>Category II, 1 course</td>
<td>Area D8</td>
<td>Area 3B</td>
</tr>
<tr>
<td>History: European</td>
<td>3</td>
<td>No equivalent</td>
<td>Category II, 1 course</td>
<td>Area D6</td>
<td>Area 3B</td>
</tr>
<tr>
<td>History: U.S.</td>
<td>3</td>
<td>No equivalent</td>
<td>Category II, 1 course</td>
<td>Area D6</td>
<td>Area 3B</td>
</tr>
<tr>
<td>History: World</td>
<td>3</td>
<td>No equivalent</td>
<td>Category II, 1 course</td>
<td>Area D6</td>
<td>Area 3B</td>
</tr>
<tr>
<td>Human Geography</td>
<td>3</td>
<td>No equivalent</td>
<td>Category II, 1 course</td>
<td>Area D5</td>
<td>Area 3B</td>
</tr>
<tr>
<td>Latin: Vergil</td>
<td>3</td>
<td>No equivalent</td>
<td>Category III, 1 course</td>
<td>Area C2</td>
<td>Area 3B</td>
</tr>
<tr>
<td>Latin: Latin Literature</td>
<td>3</td>
<td>No equivalent</td>
<td>Category III, 1 course</td>
<td>Area C2</td>
<td>Area 3B</td>
</tr>
<tr>
<td>Mathematics - Calculus AB</td>
<td>3</td>
<td>MATH 250</td>
<td>Competency in Math</td>
<td>Area B4</td>
<td>Area 3B</td>
</tr>
<tr>
<td>Mathematics - Calculus BC</td>
<td>3</td>
<td>MATH 251</td>
<td>Competency in Math</td>
<td>Area B4</td>
<td>Area 3B</td>
</tr>
<tr>
<td>Music Theory</td>
<td>3</td>
<td>MUS 101 + 102</td>
<td>Category III, 1 course</td>
<td>Area C1</td>
<td>Area 3B</td>
</tr>
<tr>
<td>Physics B</td>
<td>6</td>
<td>PHYSIC 150A + 150B</td>
<td>Category I, 1 course</td>
<td>Areas B1 and B3</td>
<td>Area 3B</td>
</tr>
<tr>
<td>Physics C (Electricity/Mechanics Magnetism)</td>
<td>5</td>
<td>PHYSIC 200 + 201</td>
<td>Category I, 1 course</td>
<td>Areas B1 and B3</td>
<td>Area 3B</td>
</tr>
<tr>
<td>Psychology</td>
<td>3</td>
<td>PSYCH 100</td>
<td>Category II, 1 course</td>
<td>Area D9</td>
<td>Area 3B</td>
</tr>
<tr>
<td>Spanish Language</td>
<td>6</td>
<td>Score 3=SPAN 102</td>
<td>Category III, 1 course</td>
<td>Area C2</td>
<td>Language Other than English</td>
</tr>
<tr>
<td>Spanish Literature</td>
<td>6</td>
<td>Score 4=SPAN 103</td>
<td>Category III, 1 course</td>
<td>Area C2</td>
<td>Area 3B</td>
</tr>
<tr>
<td>Statistics</td>
<td>4</td>
<td>MATH 108</td>
<td>Competency in Math</td>
<td>Area B4</td>
<td>Area 3B</td>
</tr>
</tbody>
</table>
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.

Students completing their associate degrees with an overall GPA of 3.0 are eligible to wear a sash at graduation. Students completing their vocational certificates with an overall GPA of 3.0 or above are eligible to wear a cord at graduation.

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.

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
• CHEM 150H, 151H, 212H, 213H
• ECON 285
• ENGL 101H, ENGL 102H
• GEOG 285
• MATH 285, 286
• MUS 285
• PHIL 101H
• POLIT 110H
• RELIG 100H
• SOC 100H
• SOC 285
• SPAN 103H
• SPEECH 100H

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

Academic Advancement Lab & Tutorial Center
The Academic Advancement Lab and Tutorial Center (AALTC) houses self-paced, open entry basic skills classes and the Tutoring Center. It is located in the Liberal Arts Building (Room 206). The AALTC also serves as an overflow open computer lab when the computers in the new campus library are all in use. During the fall semester, the AALTC is open Monday-Thursday, 8:00 a.m. – 9:45 p.m., and Friday-Saturday, 8:00 a.m. - 4:45 p.m.

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 held annually in the spring and interested persons should contact the Athletic Directors.

Associated Students/Student Life
The Associated Students (AS) is the official Student Government Organization of San Bernardino Valley College. The AS represents all SBVC students. The primary responsibility of AS members is to represent student interests on college, district and statewide committees. In addition they plan and manage various AS accounts, including the Student Center Fee Account, the Student Representation Fee Account and the General Account. Funds from these accounts are used to support various activities. Students can become active in AS either by running for office during the spring semester or by requesting an appointment during the fall semester. Appointments are at the discretion of the AS President. All students interested in participating in student government should visit the AS Office (Campus Center) or should call (909) 384-8939 for additional information.

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 Directors at (909) 384-8510 (Men's) or (909) 384-8654 (Women's).

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 Directors.

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 or visit our website at www.sbvcbookstore.com for additional information.

Campus Child Development Center
The SBVC Child Development Center (CDC) is a licensed facility designed to meet the developmental needs of children from age one through pre-Kindergarten. The Center is open from 7:30 a.m. to 4:00 p.m., Monday-Friday. In addition, parents must enroll in a parent education class (CD 101). Preference is given to full-time students (12 units) who are on campus daily. Fees are assessed on a sliding scale, and can range from $0 to $48 per day, depending on the income of the parent(s). For further eligibility and enrollment information, call (909) 384-4440.

Clubs/Organizations
Students are invited to join one of the various campus clubs – or to start one of their own! For more information on campus clubs, please visit the Student Activities Office (Campus Center) or call (909) 384-8692.

Counseling Center
The Counseling Center staff and counselors (Administration/Student Services Building, Room 103) 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 associate degrees, certificates, and transfer. 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 drop-in basis (first-come, first-served), but are encouraged to make an appointment in advance to spend more time with a counselor. A variety of services are available through the Counseling Center:

- **Educational and career planning**, including development of a student education plan.
- **Personal counseling** to meet the short-term needs of students with personal concerns.
- **International student counseling** to meet the specialized enrollment and counseling needs of F-1 Visa students.

To make an appointment or for additional information, please call (909) 384-4404.

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 in the Administration/Student Services Building, room 105 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. Contact the Office of Distributed Education (909) 384-4325. The Internet site is:
http://learnonline.sbccd.cc.ca.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.

For more information, visit the Administration/Student Services Building, Room 202, 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, 7:00 a.m. - 8:00 p.m. and Friday 7:00 a.m. - 1:30 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.

**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 Crafton Hills College Libraries. The catalog may be accessed on the Internet at http://lr.valley.sbccd.cc.ca.us/libhome.htm. One or more copies of most textbooks used at SBVC are available for in-Library use through the “Textbook Bank.” In addition, there are 300 current print magazine subscriptions and an extensive backfile of magazine volumes. A 16-workstation database network provides access to thousands of newspapers, magazines, journals and other materials supporting research. Enrolled students may request a password so that they can access these databases from their home computers. The Library also houses the campus’ open computer laboratory, with over 40 personal computers, audio and video cassette players, and other multi-media equipment available for student use in completing class assignments. Librarians are available to help students find materials for term papers and other research assignments. Library cards are free and will be issued upon proof of attendance. During the fall semester, the Library is open Monday-Thursday, 8:00 a.m. – 9:45 p.m. and Friday-Saturday, 8:00 a.m. – 4:45 p.m.

**Puente**
The mission of the Puente Project is to increase the number of educationally underrepresented student who enroll in four-year colleges and universities to obtain their bachelor’s degree, and return to the community as leaders and mentors. Puente has been at SBVC since 1984. Puente is a successful statewide transfer program consisting of counseling, mentoring and writing components. Students take two consecutive writing classes: English 015 (fall) and English 101 (spring). Students build confidence in their writing skills through an exploration of Mexican/American/Latino literature. Classes are linked with a one-unit class, Student Development 015 and 101. Puente is open to all students. For more information on this program, contact the Puente Office at (909) 384-8255 or (909) 385-8635.

**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 (in the Campus Center) 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 (Administration/Student Services Building, Room 202) 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 Assistance Program (SAP)**
The Student Assistance Program (SAP) is designed to help students and their families deal with unforeseen problems and circumstances that they may encounter during their studies at San Bernardino Valley College. It is operated by students that are trained in the areas of listening, assessing and referral. The MOTTO is “For Students, By Students.” Hours of operation are Monday through Thursday, 8:00 a.m. – 6:00 p.m. and Friday, 8:00 a.m. – 4:00 p.m. Call (909) 384-8233 or visit us in the Campus Center, Room 107.

**Student Health Center**
The Student Health Center (Women’s Gym, Room 9) is open Monday and Wednesday, 8:00 a.m. – 6:30 p.m., Tuesday and Thursday, 9:00 a.m. – 7:30 p.m. and Friday, 8:00 a.m. – 12:00 noon. Summer hours and services vary. The Center offers first aid, health education, nursing advice 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, STD screening 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 an international insurance through the Counseling Center which covers re-patriation and medical evacuation expenses in addition to medical coverage. They must also 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. Legislative changes are pending which may change this exemption in 2006.

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 and Career Services**
Transfer and Career Services (TCS) (Administration/Student Services Building, Room 203) is open to students planning to transfer to any four-year college or university and/or seeking career exploration. Transfer and Career Services operates Monday - Thursday from 8:00 a.m. - 7:00 p.m. and Friday from 8:00 a.m. - 4:00 p.m. TCS highlights the following services each semester: scholarship and financial aid information; Honors Program; preparation for CBEST exam and various college workshops; community speakers; transfer orientation sessions; credit evaluations; monthly calendar of events; career testing; library of college catalogs; career/job fair; videos and CD-ROMs; college applications; articulation agreements; college fairs; transfer honors reception; and workshops(resume writing, job interview, internship, job application). Transfer materials may be requested from Transfer and Career Services, and students may make an appointment to see a four-year college or university representative. The TCS also houses 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, assessment scores, the Internet, their e-mail, and other pertinent transfer information. For career exploration, TCS provides off-campus placement (which includes referrals and on-campus interviewing), the Eureka and SIGI career exploration programs, and WorkAbility III for placement of students with disabilities. Students may also do a job search via the Internet using CalJOBS or other websites. Call (909) 384-4410 or (909) 384-4407 for additional information.

**Tutorial Center**
The Tutorial Center (Liberal Arts, Room 206) provides individual and small group tutoring sessions free of cost for enrolled students. Tutoring is available in accounting, art history, biology, business administration, chemistry, computer systems, economics, English, ESL, geography, history, math, music, oceanography, orientation, philosophy, physics, psychology, Spanish, and a growing number of other subjects. Tutoring is available Monday – Friday, 8:00 a.m. – 5:00 p.m., and by appointment at selected other times. Please call (909) 384-8566 for additional information.
Veteran's Services
Veteran's Services (Administration/Student Services Building) provides assistance with paperwork and academic support to any veteran. For additional information, call (909) 384-8948.

Web Home Page/Internet Information
The college home page on the World Wide Web can be accessed at: www.valleycollege.edu

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 through 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.

Workforce Development Office and Career College/CalWORKs
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) 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.

In less than six months, the Career College at San Bernardino Valley College can help you move into a new profession. Tuition, waivers, financial aide and other support services are available for qualified low-income applicants. For more information, contact Zelma Russ (program director) at (909) 384-8670 or Carolyn Lindsey (program counselor) at (909) 384-8282.
FINANCIAL AID PROGRAMS

If a student needs financial help to pay for the costs of attending San Bernardino Valley College, the Financial Aid Office (Administration/Student Services, Room 106) 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) 384-4403.

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, or can be accessed at www.fafsa.ed.gov.

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 Cal Grant 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 and September 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 and or September 2 to be considered for the Cal Grant programs.

Federal Pell Grant Program:
The Federal Pell Grant program provides federal grants up to a maximum of $4,050 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 2nd 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. Attendance at a loan counseling workshop is required prior to borrowing. See Financial Aid for details.

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 San Bernardino Community College Police Department office at (909) 384-4491. This number would be the number 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 San Bernardino Community College District Police Department at (909) 384-4491 or use any of the emergency telephones located in all campus buildings to connect directly to the Valley College Police Department.

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 Department and on the Valley College website under College Police.

Parking Regulations
A parking permit or a daily pass is required to park in all college streets and lots. Faculty and Staff semester and annual parking permits are purchased directly from the SBVC College Police Department (Campus Center, Room 106). Student semester and annual parking permits can be purchased directly from the Valley College Admissions and Records Department located in the Administration/Student Services Building.

At this time, daily permits may be purchased from dispensers located in Lots 7, 8 and 9. Individuals with disabilities must display a valid DMV Handicap Permit placard 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!

Parking permit fees are as follows:
Annual (includes Spring, Summer and Fall) $35.00
One Semester (Spring or Fall) $20.00
Summer Session $15.00
Daily Permit $ 1.00

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 San Bernardino Community College District Police Department, valley College campus.

Brochures are available in the Valley College Police Department 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 and 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 system 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) 825-700/825-9216

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 Hotline
1-800-COCAINE - Cocaine Hotline
1-800-NCA-CALL - National Council on Alcoholism
1-800-322-3363 - The Resource Center
1-800-662-HELP - National Institute on Drug Abuse Hotline
ACADEMIC RECORDS

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, Student Development, 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, Student Support, 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

Academic Dishonesty

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 plagiarism, cheating and/or fabrication that occur in the classroom. Examples of academic dishonesty include (but are not limited to) the following:

Plagiarism: Plagiarism is the act of presenting someone else’s work as one’s own. Examples include:
- Copying and pasting text from websites or other electronic sources and presenting it in an assignment as your own original work.
- Copying and pasting text from printed sources (including books, magazines, encyclopedias or newspapers) and presenting it in an assignment as your own original work.
- Using another student’s work and claiming it as your own original work (even if you have the permission of the other student).

Cheating: Cheating is the act of pretending (or helping others to pretend) to have mastered course material through misrepresentation. Examples include:
- Copying from another student’s test or assignment.
- Allowing another student to copy from your test or assignment.
- Using the textbook, course handouts, or notes during a test without instructor permission.
- Stealing, buying or otherwise obtaining all or part of a test before it is administered.
- Selling or giving away all or part of a test before it is administered.
- Having someone else attend a course or take a test in your place.
- Attending a course or taking a test for someone else.
- Failing to follow test-taking procedures, including talking during the test, ignoring starting and stopping times, or other disruptive activity.

Fabrication: Fabrication is the intentional use of invented information. Examples include:
- Signing a roll sheet for another student.
- Giving false information to college personnel.
- Answering verbal or written questions in an untruthful manner.
- Inventing data or sources of information for research papers or other assignments.

As members of the San Bernardino Valley College learning community, students are not to engage in any form of academic dishonesty. Any act of academic dishonesty will be considered a very serious offense that is subject to disciplinary action. The consequences of
academic dishonesty may include receiving a grade of “F” for a class or possible expulsion from the college.

**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.

**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 of that department. If necessary, complaints beyond the Dean’s level should go to the Vice President of Instruction.

**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.

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 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:
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 6090, 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:

- **Level I**: Informal Discussion
- **Level II**: Review of Request for Student Grievance Committee Hearing
- **Level III**: Student Grievance Committee Hearing
- **Level IV**: Recommendation of Grievance Committee/Action by College President

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.
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 an educational plan in order to meet 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 31 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. Note: you must declare a major in order to receive a degree. A list of more than 60 majors can be found on page 37 of this catalog. For students who want a general Associate of Arts Degree that reflects broad-based interests rather than the more narrow focus of other majors, may be suggest that you consider the Liberal Arts major that is described on page 133 of this catalog. If you do not declare a major, you will be classified as “undecided.” For help selecting a major, you may see a counselor.

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, or a higher level course in mathematics with a grade of C or higher, or a course from another college with a minimum of three semester units, 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.
30

c. Competency in reading as demonstrated by:
(1) Completion of READ 015 with a grade of C or higher, or assessment into READ 100, 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 120, 123, 125
BIOL 050, 100, 102, 104, 108, 109, 123, 201, 203, 250, 260, 261, 270
CHEM 101, 104, 110, 150, 150H
FCS 162
GEOG 110, 111, 114, 285
GEOL 100, 101, 111, 112, 122, 250, 251
OCEAN 100, 101, 111
PHYSIC 101, 150A, 150B, 200
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 100, 102, 107
CD 105, 105H
ECON 100, 200, 200H, 201, 285
GEOG 102, 106, 120
HIST 100, 101, 107, 110, 124, 126, 135, 137, 138, 139, 140, 145, 150, 153, 160, 161, 180
POLIT 100, 110, 110H
PSYCH 052, 100, 100H, 102, 103, 110, 111, 112, 118
SOC 100, 100H, 110, 130, 141, 145, 150, 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 as identified below). Courses in the following subjects carry credit for Humanities:

ANTHRO 109, 110
ARCH 145, 146
ART 100, 102, 103, 105, 107, 108, 109, 110, 111, 285
ASL 109, 110, 111, 112
CD 140
DANCE 200, 203
ENGL 055, 063, 065, 151, 153, 155, 161, 163, 165, 175, 232, 260, 261, 270, 271, 275, 280, 281
FRENCH 101, 102
HIST 170, 171
MUS 100, 101, 102, 104, 105, 106, 107, 121, 122, 201, 202, 285
PHIL 101, 101H, 105, 112, 180
RELIG 100, 100H, 101, 110, 135, 150, 175, 176, 180
RTVF 100
SPAN 101, 102, 103, 103H, 104, 140, 157, 158

SPEECH 110, 120
THART 100, 110

Applied Courses (Humanities)
ART 120, 124X4, 126X4, 132X4, 145, 148, 149, 150, 158X4, 161, 164X4, 175X4, 180, 212X4, 240X4, 270X4
MUS 101L, 102L, 103, 117X4, 126, 130, 131, 133, 134, 136, 141X4, 150X4, 152X4, 154X4, 156X4, 158X4, 160X2, 162X4, 168X4, 170X4, 171X4, 174X4, 176X4, 178X4, 201L, 202L
THART 114X4, 120, 135, 160X4, 165

Category IV: Communication and Analytical Thinking (minimum: 6 semester units).

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

BUSCAL 200, 208
ECON 208
ENGL 102, 102H
MATH 095 and above
PHIL 102, 103
READ 100, 102
SPEECH 100, 100H, 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, 102X4, 103X4, 105X2, 106X4, 107X4, 114X4
FCS 162
HEALTH 101, 103
PE 236
PE-I (all courses)
PE-T (all activities)
PE-V (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 002 (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 37 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.

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 may elect to meet graduation requirements listed in the catalog:

1. At the time the student began attendance at SBVC or
2. Any catalog that the student has remained in continuous attendance (continuous attendance is defined as attendance in at least one semester of each catalog year) or
3. The catalog in effect at the time the graduation petition is submitted.

Note that summer session course requirements are included in the catalog of the previous academic year.

**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/Student Services Building, 103). The Scholastic Standards Committee will consider each petition on the basis of its overall individual merit.

**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 37 of this catalog for a complete list of certificates, and to the individual programs described in Part IV 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. 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:

<table>
<thead>
<tr>
<th>Semester</th>
<th>Deadline Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>October 1</td>
</tr>
<tr>
<td>Spring</td>
<td>March 1</td>
</tr>
<tr>
<td>Summer</td>
<td>July 1</td>
</tr>
</tbody>
</table>

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 Head. 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.

**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 IGETC is not an admission requirement for transfer to UC or CSU, nor is it the only way to fulfill prior preparation 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
- ENGL 102H
- PHIL 102

Group C: Oral Communication (CSU only)
1 course, 3 semester units / 4-5 quarter units. Select from:
- SPEECH 100, 100H, 111, 130, 140

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 - Arts 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:
- ART 100, 102, 103**, 105, 107, 108, 110, 111, 285
- DANCE 200
- MUS 100, 101, 104, 105, 106, 107, 121, 122
- THART 100
- Humanities:
  - ANTHRO 110* (same as RELIG 110)
  - ENGL 151, 153, 155, 161, 163, 165, 175 (same as RELIG 175), 260, 261, 270, 271, 275, 280, 281
  - HIST 100, 101, 107*, 124, 126, 135 (same as RELIG 135), 137, 138, 139, 140, 145, 150, 153, 160, 161, 170, 171, 180*
  - MUS 285
  - PHIL 101**, 101H**, 105, 112
  - RELIG 100**, 100H**, 101, 110* (same as ANTHRO 110), 135 (same as HIST 135), 150, 175 (same as ENGL 175), 176
  - SPAN 103**, 103H**, 104, 158

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*, 110* (same as RELIG 110)
- ECON 100**, 200**, 200H**, 201, 285
- GEOG 102, 106, 120
- HIST 110, 180*
- POLIT 100**, 110**, 110H**
- PSYCH 100**, 100H**, 102, 103, 110, 111**, 112**, 118
- RELIG 110* (same as ANTHRO 110)
- SOC 100**, 100H**, 110, 130, 141, 145, 150, 285
- SPEECH 135, 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**
  - 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:

Language Other Than English (UC Requirement Only)
Proficiency equivalent to two (2) years of high school study in the same language or one of the following:
- ASL 109
- FRENCH 101
- SPAN 101

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

Group 1:
- POLIT 100*

Group 2:
- HIST 100*, 101*, 137*

NOTE:
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 should 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. 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 completed at colleges and universities outside of the U.S.A. will not be permitted for IGETC certification, except for the Language Other than English requirement.
5. Courses on this list are approved for fall 2005 and beyond. SBVC courses not listed above may not be used for IGETC, except for courses that were on the IGETC list for the year in which they were completed.

The University of California
The University of California has nine major campuses: Berkeley, Davis, Irvine, Los Angeles, Merced, Riverside, San Diego, Santa Barbara, and Santa Cruz. A tenth campus in San Francisco offers graduate and professional programs in the Health Sciences. With the exception of Berkeley and Merced, 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. If you were eligible for admission to the University when you graduated from high school – meaning you satisfied the Subject, Scholarship and examination Requirements, or were identified by the University during your senior year in high school as eligible under the Eligibility in the Local context (ELC) program – you are eligible to transfer if you have a C (2.) average in your transferable coursework.

2. If you met the Scholarship Requirement but did not satisfy the Subject Requirement, you must take transferable college courses in the missing subjects, earning a C or better in each required course, and have an overall C average in all transferable coursework to be eligible to transfer.

3. If you were not eligible for admission to the University when you graduated from high school because you did not meet the Scholarship Requirement, you must:
   a. Complete 60 semester units or 90 quarter units of transferable college credit with a grade point average of 2.4 (no more than 14 semester/21 quarter units may be taken Pass/Not Pass), and;
   b. Completed the following course pattern requirement, earning a grade of C or better in each course:
      • two transferable college courses (3 semester or 4-5 quarter units each) in English composition, and;
      • one transferable college course (3 semester or 4-5 quarter units) in mathematical concepts and quantitative reasoning, and;
      • four transferable college courses (3 semester or 4-5 quarter units each) chosen from at least two of the following subject areas: the arts and humanities, the social and behavioral science.

Students who satisfy the Intersegmental General Education Transfer Curriculum (IGETC) prior to transferring to UC may satisfy Option 3B of the transfer admission requirements.

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

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

2. **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.

3. **Transfer Admission Agreement (TAA)** is an agreement between UC Davis and San Bernardino Valley College providing guaranteed admission to students who satisfactorily complete all requirements for this program. See Transfer Center for details.

4. **University-Link Program** is an agreement between the University of California and San Bernardino Valley College for eligible students meeting transfer requirements. See Transfer Center for details.

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 23 campuses, ranging in location from San Diego to Humboldt. The admission cycle for the fall term of each year begins on October 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. Beginning fall 2005, ALL upper division transfer applicants must have completed 60 or more transferable units, or 90 quarter units.

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 and a Dual Admissions Program are 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.

The California State University 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 in accordance with CSU Executive Order 595. (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:

Area 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.

A1 Oral Communication. Select from:
SPEECH 100, 100H, 111, 130, 140

A2 Written Communication
ENGL 101, 101H

A3 Critical Thinking. Select from:
ENGL 102, ENGL 102H
PHIL 102, 103
READ 102
SPEECH 125

Area B: Physical Universe and its Life Forms
Minimum of 9 semester units / 12 quarter units. One course from B1 (Physical Science), one course from B2 (Life Science), one course from B4 (Mathematics / Quantitative Reasoning). One of the three courses taken must be a laboratory course. Laboratory courses are underlined. Select from:

B1 Physical Science
ASTRON 120, 123
CHEM 101, 104, 110, 150, 150H, 151, 151H, 212, 212H, 213, 213H
GEOG 110, 114
GEOL 100, 101, 112, 122, 250, 251
OCEAN 100, 101
PHYSIC 101, 150A, 150B, 200, 201
PS 101

B2 Life Science
ANTHRO 106
BIOL 100, 102, 104, 108, 109, 123, 201, 202, 203, 240, 250, 251, 260, 261, 270

B3 Laboratory Activity
ASTRON 123, 125
BIOL 100, 102, 201, 202, 203, 240, 250, 251, 260, 261, 270
CHEM 101, 104, 150, 151, 212, 213
GEOG 111, 285
GEOL 100, 111
OCEAN 100, 111
PHYSIC 101, 150A, 150B, 200, 201

B4 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

Area 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. Select from:

C1 Arts (Art, Dance, Music, Theatre)
ANTHRO 109
ARCH 145, 146
ART 100, 102, 103, 105, 107, 108, 110, 111, 164x4*, 285
DANCE 200, 203
MUS 100, 101, 102, 104, 105, 106, 107, 121, 122, 285
THART 100

*Note: only three (3) units may be counted toward Area C.

C2 Humanities (Foreign Language, Literature, Philosophy)
ANTHRO 110 (same as RELIG 110)
ASL 109, 110, 111, 112
ENGL 151, 153, 155, 161, 163, 165, 175, 232, 260, 261, 270, 271, 275, 280, 281
FRENCH 101, 102
HIST 100, 101, 107, 124, 126, 135 (same as RELIG 135), 137, 138, 139, 140, 145, 150, 153, 160, 161, 170, 171, 180
PHIL 101, 101H, 105, 112, 180 (same as RELIG 180)
RELG 100, 100H, 101, 110 (same as ANTHRO 110), 135 (same as HIST 135), 150, 175, 176, 180 (same as PHIL 180)
SPAN 101, 102, 103, 103H, 104, 157, 158

Area D: Social, Political and Economic Institutions and Behavior; Historical Background
Minimum of 9 semester units / 12 quarter units. Select from:

D1 Anthropology and Archaeology
ANTHRO 100, 102, 106, 107, 109, 110 (same as RELIG 110)
RELIG 110 (same as ANTHRO 110)

D2 Economics
ECON 100, 200, 200H, 201, 285

D3 Ethnic Studies
ANTHRO 107; HIST 107, 110, 137, 138, 139, 140; SOC 141

D4 Gender Studies
SOC 145; SPEECH 176

D5 Geography
GEOG 102, 106, 120

D6 History
ANTHRO 107, HIST 100, 101, 107, 124, 126, 135 (same as RELIG 135), 137, 138, 139, 140, 145, 150, 153, 160, 161, 170, 171, 180
RELIG 135 (same as HIST 135)

D7 Interdisciplinary Social or Behavioral Science
CD 105, 105H
SPEECH 135, 174

D8 Political Science, Government, and Legal Institutions
POLIT 100, 110, 110H

D9 Psychology
PSYCH 100, 100H, 102, 103, 110, 111, 112, 118

D0 Sociology and Criminology
SOC 100, 100H, 110, 130, 141, 145, 150, 285
Area E: Lifelong Understanding and Self-Development
Minimum of 3 semester units / 4 quarter units. One unit of credit is allowed for former military personnel with a DD-214. Select from:
- BIOL 140
- CD 101, 105, 105H
- FCS 162
- GEOG 106
- HEALTH 101, 103
- PE 236
- PSYCH 100, 100H, 102, 103, 111, 118
- SDEV 102

Activity Courses (only 1 semester unit / 1.5 quarter units allowed toward Area E)
- DANCE 101x2, 102x4, 103x4, 105x2, 106x4, 107x4, 114x4
- PE-I 103X4, 105X4, 107x4, 108X4, 110X4, 111x4, 115X4, 116x4, 127X4, 138x4, 143X4, 144x4, 148X4, 164x4, 168x4, 173x4, 184X4, 185X4, 186X4, 187X4, 188X4, 189X4
- PE-T 100x4, 104x4, 108x4, 116x4, 120x4, 124x4

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:
- Group 1: HIST 100, 101, 137
- Group 2: POLIT 100

NOTE:
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 Areas A and B4 early. 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. Course work from other California Community 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. Courses from foreign institutions may not be certified. 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 2005 and beyond. SBVC courses not on this list may not be used for CSU GE-Breadth requirements, except for courses that were on the CSU GE-Breadth list for the year in which they were completed.

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

- Alliant International University
- American Academy of Dramatic Arts
- 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
- Charles K. Drew University of Medicine & Science
- Christian Heritage College
- Claremont McKenna College
- Cogswell Polytechnical College
- 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
- Loyola Marymount University
- The Master’s College
- Menlo College
- Mills College
- Mount St. Mary’s College
- National University
- New College of California
- Notre Dame de Namur University
- Occidental College
- Otis College of Art and Design
- Pacific Oaks College
- Pacific Union College
The California Articulation Number 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 may 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 for specific information on course agreements. Counselors will help students interpret information.
**PROGRAM** | **DEGREE** | **CERT** | **PG** | **PROGRAM** | **DEGREE** | **CERT** | **PG**
---|---|---|---|---|---|---|---
Accounting | AA | • | 40 | Escrow | AA | • | 185
Bookkeeping | • | • | 40 | Family & Consumer Science | • | • | 115
Governmental & Non-Profit Accounting | • | • | 41 | Dietetic Aide | • | • | 115
Tax Preparer | • | • | 41 | Dietetic Service Supervisor | • | • | 115
Administration of Justice | AA | • | 43 | Geography | AS | • | 120
Aeronautics | | | | Geographic Information Systems | • | • | 118
Airframe Maintenance Technician | • | • | 46 | Geology | AS | • | 121
Aviation Maintenance Technician | AS | • | 45 | General Railway Operations | • | • | 182
Avionics Technology | • | • | 47 | General Warehousing | • | • | 201
Flight Operations | • | • | 46 | Human Services | AA | • | 126
Flight Operations & Management | AS | 45 | Alcohol/Drug Studies | • | • | 126
Powerplant Maintenance Technician | • | • | 46 | Career Specialist | • | • | 126
Air Travel Careers | | | | Case Management | • | • | 127
Flight | AS | • | 51 | Eating Disorders Studies | • | • | 127
Ground | AS | • | 51 | Inspection Technology | AS | • | 132
Travel | AS | • | 51 | Liberal Arts* | AA | • | 133
Architecture & Environmental Design | AA | 56 | Library Science | AA | • | 134
Computer-Aided Drafting Technician | • | 56 | Machinist Technology | AS | • | 136
Art | AA | 58 | Basic Operations Computer Numerical Control (CNC) | • | • | 137
Graphic Design | AA | • | 58 | Computer Numerical Control: CAD/CAM | AS | • | 136
Web and Multimedia Design | • | 59 | Machinist Standard | AS | • | 136
Astronomy | AS | 166 | Mechanical Hydraulics/Pneumatics | • | • | 137
Automotive Technology | | | | Tool and Die | AS | • | 136
Advanced Automotive Body & Paint Tech | AS | • | 63 | Mathematics | AS | • | 141
Automotive Technician | AS | • | 64 | Music | AA | • | 144
Automatic Transmission | AS | • | 63 | Electronic Music | • | • | 145
Basic Automotive Body & Paint Tech | AS | • | 63 | Nursing | AS | • | 150
Engine Performance | AS | • | 64 | Paralegal Studies | AA | • | 155
Wheel Alignment & Brakes | AS | • | 64 | Pharmacy Technology | AS | • | 157
Biology | AS | 68 | Physics | AS | • | 165
Business Administration | AA | • | 72 | Police Science | • | • | 168
Retail Management | • | 72 | Basic Law Enforcement | • | • | 168
Chemistry | AS | 76 | Psychiatric Technology | AS | • | 176
Child Development | AA | 78 | Radio, Television & Film | AA | • | 179
Associate Teacher | • | 78 | Digital Film Production | AA | • | 179
Family Child Care | • | 81 | Radio | AA | • | 179
Infant Development | • | 80 | Television | AA | • | 179
Master Teacher | • | 79 | Real Estate | AA | • | 185
Preschool | • | 80 | Refrigeration & Air Conditioning | AS | • | 187
School-Age | • | 80 | Restaurant Management | AA | • | 190
Site Supervisor | • | 80 | Dining Room Service | • | • | 191
Teacher | • | 79 | Food Preparation | • | • | 191
Computer Information Technology (CIT) – Management Information Systems | AA | • | 86 | Food Service | • | • | 191
Computer Information Technology (CIT) – Office Information Systems | AA | • | 86 | Water Supply Engineering | AS | • | 202
Administrative Assistant | • | 86 | Welding | • | • | 203
Clerical Assistant | • | 86 | Consolidated Welding | AS | • | 203
Information Processing Specialist | • | 87 | Flux Core Arc Welding (FCAW) | • | • | 204
Computer Science | AS | • | 92 | Gas Metal Arc Welding (GMAW) | • | • | 204
Criminal Justice | | | | Gas Tungsten Arc Welding (GTAW) | • | • | 204
Crime Scene Investigation | • | 95 | General Welding | AS | • | 203
Diesel | | | | Shielded Metal Arc Welding (SMAW) | • | • | 204
Heavy-Duty Diesel Technician | • | 101 | Welding Inspection Technology | • | • | 204
Electricity/Electronics | Avionics Technology | AS | • | 105
Communication Engineering Technology | AS | • | 104
Computer Engineering Technology | AS | • | 105
Electric Power Technology | AS | • | 105
Electronics Technology | AS | • | 104

*LIBERAL ARTS - ASSOCIATE OF ARTS DEGREE*

The Liberal Arts major is an interdisciplinary major that exposes students to various academic disciplines and includes courses from the Sciences, Social Sciences and Humanities. The major is intended for students who want to transfer to a university, or for students who want a general Associate of Arts Degree that reflects broad-based interests rather than the more narrow focus of other majors. Students may obtain an Associate of Arts Degree in Liberal Arts by completing a minimum of 60 semester units of coursework (of these 60 units, a minimum of 12 units must be taken at SBVC) in addition to meeting one of the following criteria:

1. Completion of all CSU General Education-Breadth requirements, as described on page 34 of the college catalog; or
2. Completion of all IGETC requirements for either the University of California or the California State University systems, as described on page 31 of the college catalog; or
3. Completion of the requirements for Associate Degree Option 2, as described on page 29 of the college catalog, plus a combined total of 18 additional units selected from Category I (Natural Science), Category II (Social and Behavioral Science) and Category III (Humanities).
PART III – CORE SKILL SETS

The six competencies (and their subsets) listed below describe the core skill sets a student should be able to demonstrate after completing the requirements for an associate degree at San Bernardino Valley College. These core skill sets are embedded in our established pattern of general education courses, in our more advanced major-preparation courses, and in student service learning experiences we provide over the span of a student’s enrollment at the college. In addition, assignments that lead to the acquisition of these core skill sets are embedded in the coursework required for vocational certificates.

The core skill sets are:

1. **Communication**
   Students learn to communicate effectively when they:
   1.1. Read, retain, and apply published ideas
   1.2. Write clearly and accurately in a variety of contexts and formats
   1.3. Speak clearly and coherently in both formal and informal settings
   1.4. Employ the vocabulary of the subject being studied
   1.5. Demonstrate active listening skills and effective interpersonal communication

2. **Information Competency**
   Students develop information competency skills when they:
   2.1. Find and interpret information from text, tables, graphs, maps, media, personal communication, observation, and electronic resources
   2.2. Evaluate authority, veracity and bias of information
   2.3. Utilize technology to organize, and present information effectively
   2.4. Demonstrate a working knowledge of basic computer function, software application, and problem solving.

3. **Critical Thinking**
   Students develop critical thinking skills when they:
   3.1. Evaluate strengths, weaknesses, and fallacies of logic in arguments and information
   3.2. Locate, evaluate and select appropriate evidence to support or discredit an argument or position
   3.3. Construct a persuasive argument that is based on sound reasoning and evidence
   3.4. Apply lessons from the past or learned knowledge and skills to new and varied situations
   3.5. Apply the principles of scientific and/or quantitative reasoning to solve problems
   3.6. Devise and defend a logical hypothesis to explain observed phenomenon.

4. **Ethics**
   Students develop a sense of personal and professional ethics when they:
   4.1. Accept responsibility for their own actions
   4.2. Demonstrate respect for a diversity of ideas and the rights of others
   4.3. Exhibit personal, professional, and academic honesty
   4.4. Display behavior consistent with the ethical standards within a discipline or profession
   4.5. Apply lessons learned from the past to ethical issues faced in the present
   4.6. Evaluate their own ethical beliefs in relationship to moral dilemmas
   4.7. Assume civic, political, or social responsibilities

5. **Creative Expression and Self Awareness**
   Students learn creative expression and self awareness when they:
   5.1. Recognize their own strengths and weaknesses
   5.2. Recognize their own biases and values
   5.3. Recognize their learning style and make adjustments as necessary to improve their ability to receive and process information
   5.4. Demonstrate the ability to give and receive constructive feedback
   5.5. Develop time management skills
   5.6. Develop stress management skills and/or other skills to maintain health and wellness
   5.7. Set goals and develop strategies for educational, personal, and professional development
   5.8. Set goals and develop strategies to create balance in their personal and professional lives
   5.9. Evaluate diverse artistic works in varied media
   5.10. Demonstrate creative thought in academic, artistic, or technical fields

6. **Social Interaction and Cultural Diversity**
   Students learn effective social interaction and cultural diversity skills when they:
   6.1. Demonstrate etiquette both in face-to-face and written interactions and communications
   6.2. Work effectively as a leader and/or participant in group settings
   6.3. Utilize conflict resolution skills when appropriate
   6.4. Demonstrate knowledge of and respect for the history and culture of those who do not share the same race, gender, religion, age, sexual orientation, linguistic background or physical abilities
   6.5. Demonstrate knowledge of and respect for one’s own history and culture
PART IV – 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.

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

DIVISION: Learning Resources
DIVISION DEAN: Marie Mestas, M.L.S.
DEPARTMENT HEAD: Odette C. Salvaggio, Ph.D.
OFFICE ASSISTANT: Robyn Wicklund
(909) 384-8588
LIAISON COUNSELOR: Ailsa Aguilar-Kitibutr, Psy.D.
(909) 384-4404

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.

Core competencies emphasized by courses in this department:
• Read and retain information.
• Write clearly.
• Employ vocabulary of the subject studied.
• Demonstrate active listening skills.
• Find and interpret information.
• Apply learned knowledge to new situations.
• Apply principles of scientific reasoning to solve problems.
• Accept responsibility for own actions.
• Demonstrate respect for a diversity of ideas and the rights of others.
• Exhibit personal, professional and academic honesty.
• Recognize own strengths and weaknesses.
• Recognize own learning style.
• Develop time management skills.
• Demonstrate etiquette in face-to-face and written interactions.

ACAD 100
STRATEGIES FOR COLLEGE SUCCESS            1 UNIT
PREREQUISITE: None.
LECTURE: 1 hour per week.
Introduces students 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 for elective credit only.

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, and 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 for elective credit only.

ACAD 600A-Ix4
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 & 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: Marco Cota, M.A. (909) 384-4404

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.

Within the mission of the college, the Accounting Department has several objectives:
1) Provide high quality accounting and business programs, which will prepare our students for successful careers in business and government;
2) Provide students with a broad-base understanding of the concepts of Accounting, Business and Management;
3) Provide transfer to four-year institutions.

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.

Core competencies emphasized by courses in this department:
• Read and retain information.
• Find and interpret information.
• Apply learned knowledge to new situations.

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
This certificate is designed to prepare students for entry-level positions updating and maintaining accounting records, tabulating expenditures and receipts, tracking accounts payable and receivable, and tabulating profit and loss. 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
ACCT 200 Principles of Accounting I (4)
(or ACCT 100 & 101)
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 Introduction to Macroeconomics (3)
ECON 201 Principles of Microeconomics (3)
MATH 095 Intermediate Algebra (4)
BUSCAL 091 Beginning Algebra for Business (4)
MATH 090 Elementary Algebra (4)
Ten Units from the list of RECOMMENDED COURSES 10
TOTAL UNITS: 45

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)
MATH 102 Introduction to College Algebra (4)
CIT 101 Introduction to Computer Literacy (3)
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)
CIT 033 Machine Calculations (3)
TOTAL UNITS: 15-16
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
TOTAL UNITS: | 15

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
CIT 033 Machine Calculations | 3
TOTAL UNITS: | 15

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 030 FEDERAL AND STATE TAXATION | 4 UNITS
PREREQUISITE: None. LECTURE: 4 hours per week.
A comprehensive course of study and practical application of basic federal and state income taxes. Includes history and objectives of the tax, research and analysis of current tax issues, along with the tax treatment of various types of entities, types of income, types of deductions and types of credits. Emphasis is on the individual as a taxpayer. Actual tax forms are studied and returns prepared.
Associate Degree Applicable
Course credit transfers to CSU.

ACCT 047 COMPUTERIZED ACCOUNTING | 3 UNITS
PREREQUISITE: None. LECTURE: 3 hours per week.
Provides a comprehensive overview of accounting software. 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. Also includes the solution of accounting problems using spreadsheet software and creating spreadsheets using formulas and graphics.
Associate Degree Applicable
Course credit transfers to CSU.

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 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.

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.

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.

ACCT 201
PRINCIPLES OF ACCOUNTING II 4 UNITS
PREREQUISITES: ACCT 200 or ACCT 100 and ACCT 200.
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.

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.

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.

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.

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 nonprofit 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.

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.
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
ADMINISTRATIVE 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: Joyce Smith, M.A.
(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.

The Administration of Justice courses listed may not be offered every semester due to instructor availability. Please refer to the college semester schedule of class offerings.

Core competencies emphasized by courses in this department:
- Read and retain information.
- Write clearly.
- Speak clearly.
- Employ vocabulary of the subject studied.
- Find and interpret information.
- Evaluate strengths, weaknesses and fallacies of logic.
- Locate, evaluate and select evidence to support or discredit an argument.
- Apply learned knowledge to new situations.
- Accept responsibility for own actions.
- Demonstrate respect for a diversity of ideas and the rights of others.
- Exhibit personal, professional and academic honesty.
- Display behavior consistent with ethical standards within a discipline.
- Demonstrate etiquette in face-to-face and written interactions.
- Work effectively in group settings.
- Utilize conflict resolution skills.
- Demonstrate knowledge of and respect for other cultures.

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
The Administration of Justice certificate is designed to prepare students for entry-level positions in a wide range of law enforcement services, including the courts, corrections, law enforcement, and private security. 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
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
Six (6) units of electives chosen from the following list: 6
ADJUS 106 Principles of Investigation (3)
ADJUS 107 Concepts of Enforcement Services (3)
ADJUS 108 Juvenile Procedures (3)
CORREC 101 Introduction to Corrections (3)
CORREC 102 Correctional Interviewing and Counseling (3)
CORREC 104 Control and Supervision in Corrections (3)
CORREC 105 Legal Aspects of Corrections (3)
TOTAL UNITS: 21
RECOMMENDED COURSES:  
- ENGL 101 Freshman Composition 4 units
- ENGL 102 Intermediate Composition and Critical Thinking 4 units
- HIST 101 US History: 1865 to Present 3 units
- MATH 102 Introduction to College Algebra 4 units
  or MATH 108 Introduction to Probability and Statistics (4 units)
  or MATH 115 Ideas of Mathematics (3 units)
- PSYCH 100 General Psychology 3 units
- SOC 100 Introduction to Sociology 3 units
- SPEECH 100 Public Speaking 3 units
  or SPEECH 111 Interpersonal Communication (3 units)

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.  
Philosophy and history of the criminal justice system, including the roles, function of the local, state and federal jurisdictions. The roles, functions and interrelationships among law enforcement agencies, courts and corrections. Crime causation, correctional theory, analysis, and the social impact of crime.  
Associate Degree Applicable  
Course credit transfers to CSU and UC.  
CAN (California Articulation Number): AJ 2

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.  
History, philosophy and the development of U.S. criminal law. Introduction to common law, legal concepts and codes.  
Associate Degree Applicable  
Course credit transfers to CSU and UC.

ADJUS 104  
LEGAL ASPECTS OF EVIDENCE 3 UNITS  
PREREQUISITE: None.  
LECTURE: 3 hours per week.  
Origin, development, philosophy, and constitutional basis of the use of evidence; constitutional and procedural considerations affecting arrest, search and seizure; types of evidence, and rules governing admissibility; interpretation of 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.  
Relationship and awareness of criminal justice agencies to diverse populations such as gender, racial, and sexual orientation: including discrimination and hate crimes.  
Associate Degree Applicable  
Course credit transfers to CSU and UC.

ADJUS 106  
PRINCIPLES OF INVESTIGATION 3 UNITS  
PREREQUISITE: None.  
LECTURE: 3 hours per week.  
Principles of various types of investigations utilized in the justice system, including concepts of investigation, and the analysis, evaluation, preservation and documentation of evidence. 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 relationships 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 status and court procedures.  
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. Students work 5-20 hours per week to earn units using the following formula: For paid work, 75 hours = 1 unit; for volunteer work, 60 hours = 1 unit. Students may earn a total of 16 units toward graduation in Work Experience 198 courses. Students MUST be working for pay or volunteer before registering for a Work Experience class. NOTE: Only one section of Work Experience may be taken during a semester. Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

AERONAUTICS
DIVISION:  Applied Technology & Transportation
DIVISION DEAN:  Thomas Bauman, M.S., P.E.
DEPARTMENT HEAD:  Allen Moore, A.A.
Technical 108
(909) 384-8270
OTHER FACULTY:  Kevin Kammer, A.A.
DIVISION SECRETARY:  Patsy Martinez
(909) 384-8902
DIVISION OFFICE:  Technical 108
(909) 384-4451
LIAISON COUNSELOR:  Jennifer Mendoza, M.S.
(909) 384-4404

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.

Core competencies emphasized by courses in this department:
- Read and retain information.
- Write clearly.
- Employ vocabulary of the subject studied.
- Find and interpret information.
- Locate, evaluate and select evidence to support or discredit an argument.
- Exhibit personal, professional and academic honesty.
- Display behavior consistent with ethical standards within a discipline.

AERONAUTICS ASSOCIATE OF SCIENCE DEGREE
The Aeronautics Department offers these areas of specialization for the Associate of Science degree: Airframe and Powerplant Technology, and 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. AVIATION MAINTENANCE TECHNICIAN
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
TOTAL UNITS: 58

2. FLIGHT OPERATIONS AND MANAGEMENT

REQUIRED COURSES: UNITS
AERO 121 Aviation Fundamentals 3
*AERO 122C 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 140C Instrument Ground School and Flight Simulators 4
AERO 144 Aviation Weather 3
BUSAD 100 Introduction to Business (3-4)
PHYSICS 101 Basic Physics 4
TOTAL UNITS: 37-38

*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 is designed to prepare students to qualify for the airframe and powerplant certificate issued by the Federal Aviation Administration, which 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. 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. 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:
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
TOTAL UNITS: 58

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. 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:
AERO 121 Aviation Fundamentals 3
AERO 122C* 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 140C Instrument Ground School and Flight Simulators 4
AERO 144 Aviation Weather 3
TOTAL UNITS: 24

*Will be waived if students have taken equivalent course.
**Pending approval from the California Community College Chancellor’s Office

3. POWERPLANT MAINTENANCE TECHNICIAN
This certificate is designed to prepare students to qualify for the powerplant certificate issued by the Federal Aviation Administration, which enables the holder to perform 100 hour and annual inspections on aircraft and annual inspections on aircraft ranging from small aircraft used in general aviation through jets utilized by commercial airlines. 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. 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:
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 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
TOTAL UNITS: 36

4. AIRFRAME MAINTENANCE TECHNICIAN
This certificate is designed to prepare students to qualify for the airframe certificate issued by the Federal Aviation Administration, which enables the holder to perform 100 and annual inspections on aircraft and annual inspections on aircraft ranging from small aircraft used in general aviation through jets utilized by commercial airlines. 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. 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:
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 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
TOTAL UNITS: 36

Continued on next page…
4. AIRFRAME MAINTENANCE TECHNICIAN

Continued...

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
TOTAL UNITS: 36

5. AVIONICS TECHNOLOGY

Complete the CORE REQUIRED COURSES for the ELECTRONICS TECHNOLOGY CERTIFICATE, plus:

REQUIRED COURSES:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AERO 121* Aviation Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>AERO 140C* Instrument Ground School &amp; Flight Simulator</td>
<td>4</td>
</tr>
<tr>
<td>ELECTR 220A FCC Rules and Regulations</td>
<td>3</td>
</tr>
<tr>
<td>ELECTR 250A Radio Transmitters, Receivers, &amp; Antennas</td>
<td>4</td>
</tr>
<tr>
<td>ELECTR 257A Navigation &amp; Communication Systems</td>
<td>4</td>
</tr>
</tbody>
</table>
TOTAL UNITS: 52

* AERO 102 & 103 can be substituted for AERO 121 & 140

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. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
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. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
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 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 122C
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. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
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 140C
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. Students work 5-20 hours per week to earn units using the following formula: For paid work, 75 hours = 1 unit; for volunteer work, 60 hours = 1 unit. Students may earn a total of 16 units toward graduation in Work Experience 198 courses. Students MUST be working for pay or volunteer before registering for a Work Experience class. NOTE: Only one section of Work Experience may be taken during a semester.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

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.

CORE REQUIRED COURSES: UNITS
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 CPR 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
CIT 010 Beginning Keyboarding  3.0
ENGL 101 Freshman Composition  4.0
SPEECH 100 Elements of Public Speaking  3.0

1. Air Travel Careers - Flight
This certificate is designed to prepare students for entry-level work as flight attendants. Students completing this certificate are also qualified to perform the tasks associated with the Ground certificate.

REQUIRED COURSES:  UNITS
Air Travel Careers Core Requirements  24.5
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
*Pending approval from the California Community College Chancellor's Office

2. Air Travel Careers - Ground
This certificate is designed to prepare students for entry-level work as ground support/ticket agents for the aviation industry.

REQUIRED COURSES:  UNITS
Air Travel Careers Core Requirements  24.5
Total Units for Air Travel Careers - Ground Certificate  24.5
*Pending approval from the California Community College Chancellor's Office

3. Air Travel Careers - Travel
This is an advanced certificate designed to prepare students to be certified Travel Agents.

REQUIRED COURSES:  UNITS
Air Travel Careers Core Requirements  24.5
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
Total Units for Air Travel Careers - Travel Specialized Courses  10.5
Total Units For Air Travel Careers - Travel Certificate  35.0
*Pending approval from the California Community College Chancellor's Office

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. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
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. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
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. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
Associate Degree Applicable
Course credit transfers to CSU.

AIRTVL 197
INTERNSHIP SEMINAR/WORK EXPERIENCE 3 UNITS

PREREQUISITES: 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.
AIR TVL 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. Students work 5-20 hours per week to earn units using the following formula: For paid work, 75 hours = 1 unit; for volunteer work, 60 hours = 1 unit. Students may earn a total of 16 units toward graduation in Work Experience 198 courses. Students MUST be working for pay or volunteer before registering for a Work Experience class. NOTE: Only one section of Work Experience may be taken during a semester.

Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

ALCOHOL/DRUG STUDIES
See courses within the HUMAN SERVICES DEPARTMENT

AMERICAN SIGN LANGUAGE

DIVISION: Humanities
DIVISION DEAN: Margorie Price, M.A., M.Ed.
DEPARTMENT HEAD: Nori Sogomonian, M.A.
North Hall 221-222
(909) 384-8544
OTHER FACULTY: Bert Reins, B.A.
DIVISION SECRETARIES: Kelly Adcock
(909) 384-8906
Cheryl Benner
(909) 384-8633
DIVISION OFFICE: North Hall 236
(909) 384-4445
LIAISON COUNSELOR: Juan Zepeda, M.S.
(909) 384-4404

Core competencies emphasized by courses in this department:
• Read and retain information.
• Write clearly.
• Speak clearly.
• Employ vocabulary of the subject studied.
• Demonstrate active listening skills.
• Apply learned knowledge to new situations.
• Work effectively in group settings.
• Demonstrate knowledge of and respect for other cultures.

COURSES OFFERED BY THE DEPARTMENT OF AMERICAN SIGN LANGUAGE:

ASL 109
AMERICAN SIGN LANGUAGE I 4 UNITS
PREREQUISITE: None.
LECTURE: 4 hours per week.
Develops communication skills in American Sign Language. Presents basic vocabulary and grammar of ASL with a review of the characteristics of the deaf community. Primary emphasis is on comprehension abilities.

Associate Degree Applicable
Course credit transfers to CSU and UC.

ASL 110
AMERICAN SIGN LANGUAGE II 4 UNITS
PREREQUISITE: ASL 109.
LECTURE: 4 hours per week.
As part of the American Sign Language course sequence, ASL 110 is second in a series of four ASL courses designed for the student to develop proficiency in ASL usage. The course continues to stress the development of basic conversational skills with emphasis on expanding vocabulary and comprehension/production skills. Course content for ASL 110 is comprised of four basic categories: cultural awareness, grammatical features, vocabulary development, and conversational skills.

Associate Degree Applicable
Course credit transfers to CSU and UC.

ASL 111
AMERICAN SIGN LANGUAGE III 4 UNITS
PREREQUISITE: ASL 110.
LECTURE: 4 hours per week.
Develops conversational skills in American Sign Language. Presents expanded vocabulary and grammar of ASL with a review of primary issues in deaf culture. Emphasis is on idiomatic constructions as well as comprehension and production skills.

Associate Degree Applicable
Course credit transfers to CSU and UC.

ASL 112
AMERICAN SIGN LANGUAGE IV 4 UNITS
PREREQUISITE: ASL 111.
LECTURE: 4 hours per week.
The fourth course in a series designed to help students acquire communicative competency in American Sign Language, both comprehension and production skills within the contexts of literature and story telling. Emphasis is on cultural awareness, grammatical features, vocabulary development, and conversational skills.

Associate Degree Applicable
Course credit transfers to CSU and UC.

ANATOMY
See courses within the BIOLOGY DEPARTMENT

ANTHROPOLOGY

DIVISION: Social Science & Human Development
DIVISION DEAN: Janice Noble M.Ed.
DEPARTMENT HEAD: Janet Pielke Brennecke, M.A.
FACULTY: Gary Olson, M.A.
DIVISION SECRETARY: To Be Announced
DIVISION OFFICE: Liberal Arts Building, Room 122
(909) 384-8603
LIAISON COUNSELOR: Laura Gomez, M.A.
(909) 384-4404

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.

Core competencies emphasized by courses in this department:
- Read and retain information.
- Write clearly.
- Find and interpret information.

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.*
*CAN (California Articulation Number): ANTH 6*

**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.
*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.
*Associate Degree Applicable*
*Course credit transfers to CSU and UC.*
*CAN (California Articulation Number): ANTH 2*

**ANTHRO 107**
**THE NORTH AMERICAN INDIANS** 3 UNITS
*PREREQUISITE:* None.
*Lecture:* 3 hours per week.
*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.
*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**
**INDEPENDENT STUDY IN ANTHROPOLOGY** 1-3 UNITS
*PREREQUISITES: ANTHRO 100 or ANTHRO 102 or ANTHRO 106.*
*INDEPENDENT STUDY:* 3-9 hours per week.
Assigned projects involving research and analysis of selected topics or directed study for students who are interested in furthering their knowledge of Anthropology 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.*
*Limited transfer to UC; credit determined after transfer to UC.*
ARCHITECTURE & ENVIRONMENTAL DESIGN

DIVISION: Science and Math
DIVISION DEAN: Haragewen Kinde, Ed.D.
DEPARTMENT HEAD: John Stanskas, Ph.D.
Chemistry 114
(909) 384-8268

DEPARTMENT SECRETARY: Rose Garcia
DEPARTMENT OFFICE: Chemistry 121
(909) 384-8645

LIAISON COUNSELOR: Rafael Herrera, M.S.
DIVISION DEAN: Haragewen Kinde, Ed.D.
DIVISION: Science and Math
DIVISION OFFICE: Chemistry 121
(909) 384-8645

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.

Core competencies emphasized by courses in this department:

- Read and retain information.
- Employ vocabulary of the subject studied.
- Utilize technology to organize and present information.
- Demonstrate working knowledge of basic computer function.
- Apply learned knowledge to new situations.
- Evaluate diverse artistic works.
- Demonstrate creative thought through original expression.

ARCHITECTURE & ENVIRONMENTAL DESIGN
ASSOCIATE OF ARTS DEGREE

To graduate with a specialization in Architectural Design Studies, a student must complete the following courses in addition to the general breadth requirements for an Associate’s Degree. For transfer students, these courses will provide students with the tools needed to construct a portfolio that will be required to transfer into Architecture Programs at 4-year institutions. Along with a successful portfolio, these courses should also constitute the first two years of an Architecture Program. In addition, these courses should help students interested in transferring to 4-year institutions as Environmental Design, Landscape Architecture, Interior Design and Urban Planning majors.

REQUIRED COURSES: UNITS
ARCH 100 Environmental Design I 3
ARCH 101 Environmental Design II 3
ARCH 145 History of Architecture: Ancient to Gothic 3
ARCH 146 History of Architecture: Renaissance to Modern 3
ARCH 200 Architectural Design I 4
ARCH 201 Architectural Design II 4
ARCH 220 Architectural CAD I 4
ARCH 250 Materials and Construction 4
ARCH 270 Portfolio Design 1
PHYSIC 150A or PHYSIC 200 General Physics 5-6
ART 132x4 Life Drawing 3
TOTAL UNITS: 37-38

RECOMMENDED COURSES: UNITS
Students are encouraged to take these courses as part of their General Education program:
CS 110 Introduction to Computer Science 3
ART 120 Two-Dimensional Design 3
ART 145 Graphic Design 3
MATH 093 Plane Geometry 3
MATH 103 Trigonometry 4

ARCHITECTURE 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.

COMPUTER-AIDED DRAFTING TECHNICIAN CERTIFICATE

This certificate is designed to prepare students for entry-level work in the fields of architecture, urban planning, interior design, electronics design and manufacturing design. Computer Aided Drafting, CAD, is the primary tool used to produce and present work completed in these fields. Students completing this certificate will most likely work for a licensed architect, structural engineer, mechanical engineer or for local, state or federal governmental agencies or urban planning commissions.

REQUIRED COURSES: UNITS
ARCH 120 Intro to Computer-Aided Drafting 4
ARCH 146 History of Architecture: Renaissance To Modern 3
ARCH 220 Architectural CAD I 4
ARCH 221 Architectural CAD II 4
ARCH 250 Materials and Construction 4
MATH 093 Plane Geometry 3
ENGL 015 Preparation for College Writing 4
ART 132x4 Life Drawing 3
TOTAL UNITS: 29

RECOMMENDED COURSES: UNITS
Students are encouraged, but not required, to enroll in the following:
CS 110 Instruction to Computer Science 3
INSPEC 010 Funds. of Construction Inspection I 3
INSPEC 011 Funds. of Construction Inspection II 3
INSPEC 012 Funds. of Construction Inspection III 3
*Pending approval from the California Community College Chancellor’s Office

COURSES OFFERED BY THE DEPARTMENT OF ARCHITECTURE & ENVIRONMENTAL DESIGN:
ARCH 100
ENVIRONMENTAL DESIGN I 3 UNITS
PREREQUISITE: None.
LECTURE: 2 hours per week and
LABORATORY: 3 hours per week.
An introduction to the design process, to the vocabulary of
design and the basic principles of environmental design,
landscape design, and urban planning.
Associate Degree Applicable
Course credit transfers to CSU.

ARCH 101
ENVIRONMENTAL DESIGN II 3 UNITS
PREREQUISITE: ARCH 100.
LECTURE: 2 hours per week and
LABORATORY: 3 hours per week.
A continuation of ARCH 100, with an emphasis on
composition and basic design as applied to both
architecture and art. A series of projects will introduce
students to the use of line, color, form and materials, and
will promote awareness of environmental concerns.
Associate Degree Applicable
Course credit transfers to CSU.

ARCH 120
INTRODUCTION TO COMPUTER AIDED DRAFTING 4 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: CS 110.
LECTURE: 2 hours per week and
LABORATORY: 6 hours per week.
An introduction to the theories and principles of computer-
aided design/drafting (CAD) using AutoCAD and to its
principal applications in the fields of architecture, design,
manufacturing, construction, and planning are explored.
The technical aspects of generating, evaluating, modeling,
drafting, and rendering design solutions will be introduced.
Associate Degree Applicable
Course credit transfers to CSU.

ARCH 145
HISTORY OF ARCHITECTURE: EARLY DESIGN TO GOTHIC 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
A survey of Western architectural history from the early
Egyptians to the Gothic Period, including a comparative
study of architecture and architects with emphasis on the
people, locations, structures, materials, and methods of
construction.
Associate Degree Applicable
Course credit transfers to CSU and UC.

ARCH 146
HISTORY OF ARCHITECTURE: RENAISSANCE TO MODERN 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Survey of Western architectural history, including a
comparative study of architecture and architects, with
emphasis on the people, locations, structures, materials,
and methods of construction. Includes Renaissance,
Mannerist, Baroque, Rococo, Native American, American
Colonial, Neoclassicism, Romantic Revival, 19th Century
Industrialization, Ecole des Beaux Arts, Late 19th Century,
Chicago School, Sullivanesque, Arts and Crafts,
International Style, Art Nouveau, Art Deco, Art Moderne,
German Expressionism, Neo-Expressionism, Late
Modernism, and Postmodernism.

ARCH 200
ARCHITECTURAL DESIGN I 4 UNITS
PREREQUISITE: ARCH 101.
LECTURE: 3 hour per week and
LABORATORY: 3 hours per week.
An Introduction to design skills and problem-solving
techniques as they apply to the architectural profession.
Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; contact a counselor for details.

ARCH 201
ARCHITECTURAL DESIGN II 4 UNITS
PREREQUISITE: ARCH 200.
LECTURE: 1 hour per week and
LABORATORY: 8 hours per week.
A continuation of ARCH 200. Architectural design
processes are explored, including advanced problem-
solving in spatial relationships, structures and human
requirements. Includes advanced model building.
Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; contact a counselor for details.

ARCH 220
ARCHITECTURAL COMPUTER AIDED DRAFTING I 3 UNITS
PREREQUISITE: ARCH 120.
LECTURE: 2 hours per week and
LABORATORY: 3 hours per week.
An introduction to the theories and principles of computer-
aided design/drafting (CAD) using AutoCAD and to its
principal applications in the field of architecture by
generating, evaluating, modeling, drafting and rendering
design solutions. (Formerly ARCH 141)
Associate Degree Applicable
Course credit transfers to CSU.

ARCH 221
ARCHITECTURAL COMPUTER AIDED DRAFTING II 4 UNITS
PREREQUISITES: ARCH 220.
LECTURE: 2 hour per week and
LABORATORY: 6 hours per week.
An introduction to the theories and principles of computer
aided design/drafting (CAD) using AutoCAD and to its
principal applications in the field of architecture by
generating, evaluating, modeling, drafting and rendering
design solutions. (Formerly ARCH 230)
Associate Degree Applicable
Course credit transfers to CSU.
ARCH 250
MATERIALS AND CONSTRUCTION  4 UNITS
PREREQUISITE: ARCH 146.
LECTURE: 3 hours per week and
LABORATORY: 3 hours per week.
A survey of 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. Construction projects will give students knowledge
and experience in building construction as it relates to
architecture.
Associate Degree Applicable
Course credit transfers to CSU.

ARCH 270
PORTFOLIO DESIGN  1 UNIT
PREREQUISITE: ARCH 200.
LABORATORY: 3 hours per week.
This course is designed to assist architecture students in
the preparation of their portfolio. The design portfolio is
required to transfer to most four-year/five-year
Architecture programs. Students should be enrolled in
their last semester at Valley College before enrolling in
this course.
Associate Degree Applicable
Course credit transfers to CSU.

ART
DIVISION: Humanities
DIVISION DEAN: Marjorie Price, M.A., M.Ed.
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.
DEPARTMENT ASST': Diane Metz
Art Gallery
(909) 384-8939
DIVISION SECRETARIES: Kelly Adcock
Cheryl Benner
(909) 384-8633
(909) 384-8633
DIVISION OFFICE: North Hall 236
LIAISON COUNSELOR: Juan Zepeda, M.S.
(909) 384-4404
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, filmmaking, life drawing, computer
 graphics, graphic design, computer animation, web &
 multimedia design, digital photography, basic photography
design in glass, sculpture, and glassblowing. In addition to
an associate degree in fine arts, the department offers two
certificates in graphic design and web+multimedia design,
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.

Core competencies emphasized by courses in this
department:
• Read and retain information.
• Employ vocabulary of the subject studied.
• Demonstrate active listening skills.
• Find and interpret information.
• Utilize technology to organize and present
  information.
• Demonstrate working knowledge of basic computer
  function.
• Evaluate diverse artistic works.
• Demonstrate creative thought through original
  expression.

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 to the Present 3
ART 120  Two Dimensional 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
TOTAL UNITS:   21

2.  GRAPHIC DESIGN

REQUIRED COURSES:        UNITS
ART 100  Art History: The Stone Age to the
Middle Ages     3
ART 102  Art History: The Renaissance to the Present 3
ART 120  Two Dimensional 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
TOTAL UNITS:   24

RECOMMENDED COURSES:        UNITS
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. This certificate is designed to prepare students for entry-level work using a variety of print, electronic, and film media to create designs that meet clients' commercial needs. 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 Present (3)
or
ART 105 History of Modern Art (3)
or
ART 120 Two-Dimensional 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 Beginning Web and Multimedia Design 3
TOTAL UNITS: 25

WEB AND MULTIMEDIA DESIGN CERTIFICATE

This certificate is designed to prepare students for entry-level work in a variety of occupations related to web site design, development, creation, and maintenance. 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 Present (3)
or
ART 105 History of Modern Art (3)
or
ART 120 Two-Dimensional Design 3
ART 148 Beginning Computer Graphics 3
ART 149 Intermediate Computer Graphics 3
ART 161 Digital Photography 3
ART 185 Beginning Web and Multimedia Design 3
ART 186 Intermediate Web and Multimedia Design 3
TOTAL UNITS: 25

COURSES OFFERED BY THE DEPARTMENT OF ART:

ART 100
ART HISTORY: THE STONE AGE TO THE MIDDLE AGES 3 UNITS
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 PRESENT 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Presents a survey of Western art from the Renaissance through the 20th Century. Topics covered include 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 MODERN 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 107
ART HISTORY: AFRICA, ASIA, THE AMERICAS, AND OCEANIA 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
The survey of art from Africa, Asia, the Americas, and Oceania. Includes examination of the religious and social factors influencing art, artifacts, and architecture.
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 pre-columbian times through
the 20th century muralists.
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.
Covers the history and cultural influences of the American
Cinema, including the origins of the motion picture, the
rise and dominance of Hollywood, the decline of the
Studio Era, and the emergence of the independent film.
Topics include the historical context of the motion picture
industry and its relevance to the contemporary viewer, the
aesthetics of film, the director, and the studio system.
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 120
TWO-DIMENSIONAL DESIGN  3 UNITS
PREREQUISITE: None.
LECTURE: 2 hours per week and
LABORATORY: 3 hours per week.
A progressive study of the elements and principles of two-
dimensional design. Focus on the concepts, tools, and
techniques intrinsic to visual communication. Included are
color theory and the use of color to manipulate the illusion
of space on a two-dimensional plane.
Associate Degree Applicable
Course credit transfers to CSU and UC.

ART 124x4
DRAWING  3 UNITS
PREREQUISITE: None.
LECTURE: 2 hours per week and
LABORATORY: 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.

ART 126x4
PAINTING  3 UNITS
PREREQUISITE: None.
LECTURE: 2 hours per week and
LABORATORY: 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  3 UNITS
PREREQUISITE: None.
LECTURE: 2 hours per week and
LABORATORY: 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): ART 24

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

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.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): ART 14

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.
Associate Degree Applicable
Course credit transfers to CSU and UC.
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.
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.
CAN (California Articulation Number): ART 18

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 3 UNITS
PREREQUISITE: None.
LECTURE: 2 hours per week and
LABORATORY: 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): ART 12

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. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
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: FLASH 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: ART 185.
LECTURE: 2 hours per week and LABORATORY: 3 hours per week.
Focus on interactive motion graphics for web site and disk distribution, using applications such as Macromedia Flash. Emphasis will be given to design concept well as an understanding of structure and impact web media and CD-ROM.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

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. Note: it is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
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 to earn units using the following formula: For paid work, 75 hours = 1 unit; for volunteer work, 60 hours = 1 unit. Students may earn a total of 16 units toward graduation in Work Experience 198 courses. Students MUST be working for pay or volunteer before registering for a Work Experience class. NOTE: Only one section of Work Experience may be taken during a semester.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

ART 212x4
CERAMICS 3 UNITS
PREREQUISITE: None.
LECTURE: 2 hours per week and LABORATORY: 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): ART 6

ART 240x4
GLASSBLOWING 3 UNITS
PREREQUISITE: None.
LECTURE: 2 hours per week and LABORATORY: 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 3 UNITS
PREREQUISITE: None.
LECTURE: 2 hours per week and LABORATORY: 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 Postmodernist 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: Applied Technology & Transportation
DIVISION DEAN: Thomas Bauman, M.S., P.E.
DEPARTMENT HEAD: Richard Jaramillo, A.A.
(909) 384-8505
OTHER FACULTY: Guy M. Hinrichs, Sr., A.A.
Manuel Loera, A.S.
Mark Williams, B.S.
Donald Wilson
DIVISION SECRETARY: Patsy Martinez
(909) 384-8902
DIVISION OFFICE: Technical 108
(909) 384-4451
LIAISON COUNSELOR: Jennifer Mendoza, M.S.
(909) 384-4404

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 is designed to prepare students for entry-level work as an automatic transmission specialist. 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:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 066</td>
<td>4</td>
</tr>
<tr>
<td>Or</td>
<td></td>
</tr>
<tr>
<td>AUTO 065</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 075</td>
<td>2-6</td>
</tr>
<tr>
<td>AUTO 076</td>
<td>2-6</td>
</tr>
<tr>
<td>Or</td>
<td></td>
</tr>
<tr>
<td>AUTO 077</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 084</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 090</td>
<td>6</td>
</tr>
<tr>
<td>TECALC 950</td>
<td>3</td>
</tr>
<tr>
<td>MATH 942</td>
<td></td>
</tr>
<tr>
<td>Or</td>
<td></td>
</tr>
<tr>
<td>Higher-level math course</td>
<td></td>
</tr>
<tr>
<td>TOTAL UNITS:</td>
<td>25-33</td>
</tr>
</tbody>
</table>

2. BASIC AUTOMOTIVE BODY AND PAINT TECHNICIAN
This certificate is designed to prepare students for entry-level work 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. 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:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 038</td>
<td>9</td>
</tr>
<tr>
<td>AUTO 039</td>
<td>9</td>
</tr>
<tr>
<td>AUTO 048</td>
<td>9</td>
</tr>
<tr>
<td>AUTO 055</td>
<td>5</td>
</tr>
<tr>
<td>TECALC 950</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL UNITS:</td>
<td>35</td>
</tr>
</tbody>
</table>

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 is designed to prepare students for entry-level work as an auto body repair apprentice and an auto painter apprentice beyond the Basic Automotive Body and Paint Technician Certificate, and to prepare students for Automotive Service Excellence (ASE) certification. 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:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 038</td>
<td>9</td>
</tr>
<tr>
<td>AUTO 039</td>
<td>9</td>
</tr>
<tr>
<td>AUTO 048</td>
<td>9</td>
</tr>
<tr>
<td>AUTO 055</td>
<td>5</td>
</tr>
<tr>
<td>AUTO 056</td>
<td>4</td>
</tr>
</tbody>
</table>

Must complete one subject from each category:

Category #1
<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 052</td>
<td>4</td>
</tr>
</tbody>
</table>
4. AUTOMOTIVE TECHNICIAN CERTIFICATE

This certificate is designed to prepare students for entry-level work as automotive technicians working in areas such as new car preps, engine performance diagnoses, automotive maintenance, and automotive service. 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
AUTO 050 Automotive Brake 4
AUTO 052 Automotive Suspension and Steering 4
AUTO 056 Automotive Heating and Air Conditioning 4
AUTO 064 Automotive Electrical: Battery, Starting & Charging Systems 4
AUTO 065 Electrical Accessory Diagnostic 4
AUTO 068 Engine Performance-Ignition Systems 4
AUTO 069 Engine Performance-Fuel and Exhaust Systems 4
AUTO 075x3 Automatic Transmissions Rear Wheel Drive 2-6
Or
AUTO 076x3 Automatic Transaxles Front Wheel Drive (2-6)
AUTO 077 Manual Transmissions and Transaxles 4
AUTO 084 General Automotive Technology 4
AUTO 090x3 Engine Repair 6
TECALC 950 Shop Calculations 3
Or
MATH 942 Arithmetic (3)
Or
Higher-level math course

TOTAL UNITS: 47-51

5. ENGINE PERFORMANCE CERTIFICATE

This certificate is designed to prepare students for entry-level work as engine performance specialists in areas such as computer systems, electrical systems, engine fuel and exhaust systems, and basic engine diagnosis. 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
AUTO 064 Automotive Electrical: Battery, Starting & Charging Systems 4
AUTO 065 Electrical Accessory Diagnostic 4
AUTO 066 ASE Alternative A-6, A-8, L-1 Prep Or Certificate 4
AUTO 067 Automotive Emissions 4
AUTO 068 Engine Performance-Ignition Systems 4
AUTO 069 Engine Performance-Fuel and Exhaust Systems 4
AUTO 084 General Automotive Technology 4
AUTO 090x3 Engine Repair 6
TECALC 950 Shop Calculations 3
Or
MATH 942 Arithmetic (3)
Or
Higher-level math course

TOTAL UNITS: 37
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 050
AUTOMOTIVE BRAKES 4 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week and
LABORATORY: 3 hours per week.
This course is based upon NATEF standards and designed for students and current technicians to gain knowledge and skills in automotive brakes (standard and anti-lock) systems. Included but not limited to disc, drum, hydraulics, power boosters, and traction control. Emphasis on diagnosing, trouble-shooting, repairing, replacing, and adjusting. This course may be used in preparation for the Automotive Service Excellence (ASE) National Test (A-5). Theory and practical work in the repair of brake system. Shop instruction to include safety, machinery, procedures for trouble-shooting and reconditioning of brake systems.
Associate Degree Applicable

AUTO 051
ADVANCED AUTOMOTIVE BRAKES 4 UNITS
PREREQUISITE: AUTO 050.
LECTURE: 3 hours per week and
LABORATORY: 3 hours per week.
This course is based on NATEF standards and is designed for students and current technicians to gain advanced knowledge and skills in automotive brakes. Advanced study of disc, drum, hydraulics, and power boosters systems. Emphasis on antilock brakes, traction control, and machining. Advanced theory and practical work in the repair of brake system. Shop instruction to include safety, reconditioning, machinery, procedures for trouble-shooting and reconditioning of brake systems.
Associate Degree Applicable

AUTO 052
AUTOMOTIVE SUSPENSION AND STEERING 4 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week and
LABORATORY: 3 hours per week.
This course is based upon NATEF standards and designed for students and current technicians to gain knowledge and skills in automotive chassis and suspension systems. Included but not limited to suspension design, advanced geometry, alignment angles, four-wheel alignment using computerized methods. Emphasis on diagnosing, trouble-shooting, repairing, replacing, and adjusting. Advanced theory and practical work in the repair of chassis and suspension systems. Shop instruction to include safety, rebuilding, replacing, and alignment procedures for trouble-shooting of suspension systems.
Associate Degree Applicable

AUTO 053
ADVANCED AUTOMOTIVE SUSPENSION AND STEERING 4 UNITS
PREREQUISITE: AUTO 052.
LECTURE: 3 hours per week and
LABORATORY: 3 hours per week.
This course is designed for students and current technicians to gain advanced knowledge and skills in automotive chassis and suspension systems. Included but not limited to suspension design, advanced geometry, alignment angles, four-wheel alignment using computerized methods. Emphasis on diagnosing, trouble-shooting, repairing, replacing, and adjusting. Advanced theory and practical work in the repair of chassis and suspension systems. Shop instruction to include safety, rebuilding, replacing, and alignment procedures for trouble-shooting of suspension systems.
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 pin striping. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
Associate Degree Applicable

AUTO 056
AUTOMOTIVE HEATING AND AIR CONDITIONING 4 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week and
LABORATORY: 3 hours per week.
Principles of automotive air conditioning and heating systems. Detail topics include repairing and replacing all components, diagnosis of both manual and automatic heater and air conditioning systems.
Associate Degree Applicable
AUTO 064  AUTOMOTIVE ELECTRICAL: BATTERY, STARTING & CHARGING SYSTEMS  4 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week and
LABORATORY: 3 hours per week.
Principles of automotive electricity and electronics systems covering batteries, charging, and starting systems. Detail topics include the use of a digital multi-meter for the analysis of series, parallel, and series-parallel circuits. This course along with AUTO 065 will prepare students for ASE A-6 certification test.
Associate Degree Applicable

AUTO 065  ELECTRICAL ACCESSORY DIAGNOSTIC  4 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week and
LABORATORY: 3 hours per week.
Principles of automotive electricity and electronics systems covering the use of a digital multi-meter, lighting, gauges, accessories, electronics, automotive body computers and solid-state devices, and communication systems. This course along with AUTO 064 will prepare students for ASE A-6 certification test.
Associate Degree Applicable

AUTO 066  ASE ALTERNATIVE A-6, A-8, L-1 PREP OR CERTIFICATE  4 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week and
LABORATORY: 3 hours per week.
Course provides students with the opportunity to either use this course as a prep course or an alternative for taking ASE A-6 Electrical, ASE A-8 Engine Performance, ASE L-1 Advanced Engine Performance tests. Student wishing to secure alternative ASE certificate will be asked to pay for each test taken. Test certificate will be the same as securing an ASE certificate. STUDENTS ENTERING THE COURSE MUST HAVE ONE-YEAR EXPERIENCE/EDUCATION IN THE AUTOMOTIVE ENGINE PERFORMANCE AREA.
Associate Degree Applicable

AUTO 067  AUTOMOTIVE EMISSIONS  4 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week and
LABORATORY: 3 hours per week.
All technicians wishing to become state licensed smog inspection technician must take the Basic Area Clean Air Car Course (68 Hours) and Enhanced Clean Air Car Course (28 Hours). STUDENT ENTERING THE COURSE MUST HAVE ONE-YEAR EXPERIENCE / EDUCATION IN THE AUTOMOTIVE ENGINE PERFORMANCE AREA.
Associate Degree Applicable

AUTO 068  ENGINE PERFORMANCE – IGNITION SYSTEMS  4 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week and
LABORATORY: 3 hours per week.
Principles of automotive engine performance covering general engine diagnosis, ignition system diagnosis and repair, and ignition related computerized engine controls. This course along with AUTO 069 will prepare students for ASE A-8 certification test.
Associate Degree Applicable

AUTO 069  ENGINE PERFORMANCE – FUEL AND EXHAUST SYSTEMS  4 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week and
LABORATORY: 3 hours per week.
Introduction to emission controls diagnosis and repair, fuel and emission related computerized engine controls, and fuel and exhaust systems. This course along with AUTO 068 will prepare students for ASE A-8 certification test.
Associate Degree Applicable

AUTO 075x3  AUTOMATIC TRANSMISSION REAR WHEEL DRIVE  2-6 UNITS
PREREQUISITE: None.
LECTURE: 1-3 hours per week and
LABORATORY: 3-9 hours per week.
Theory and practical work on rear wheel drive automatic transmissions in automobile and light truck applications. Course offers preparation information for the Automotive Service Excellence (ASE) A2 certification test. This course may be taken three times.
Associate Degree Applicable

AUTO 076x3  AUTOMATIC TRANSAXLES FRONT WHEEL DRIVE  2-6 UNITS
PREREQUISITE: None.
LECTURE: 1-3 hours per week and
LABORATORY: 3-9 hours per week.
Theory and practical work on front-wheel drive automatic transaxles in automobile applications. Course offers preparation information for the Automotive Service Excellence (ASE) A2 certification test. This course may be taken three times.
Associate Degree Applicable

AUTO 077  MANUAL TRANSMISSIONS AND TRANSAXLES  4 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week and
LABORATORY: 3 hours per week.
Theory and practical work on front wheel drive manual transaxles and rear wheel drive manual transmissions in automobile and light truck applications including transfer cases, axle assemblies, and clutches.
Associate Degree Applicable

AUTO 084  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.
Associate Degree Applicable
AUTO 088x3
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. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
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. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
Associate Degree Applicable

AUTO 090x3
ENGINE REPAIR  6 UNITS

PREREQUISITE: None.
DEPARTMENTAL ADVISORY: AUTO 091.
LECTURE: 3 hours per week
LABORATORY: 9 hours per week.
This course is based on NATEF standards and designed for students and current technicians to gain knowledge and skills in automotive engine repair. Instruction in removal, disassembly, inspection, reconditioning and reassembling of engines; rebuilding of components using automotive machine shop equipment; study progressing to the operation of automotive machine shop equipment; theory and instruction of gasoline, diesel and rotary engines; theory and practical work in the repair and rebuilding of automotive gasoline, diesel, and rotary engines. Shop instruction to include safety, engine reconditioning, auto shop machinery, and failure analysis of components. This course may be used in preparation for the Automotive Service Excellence (ASE) National Test A-1. This course may be taken three 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 to earn units using the following formula: For paid work, 75 hours = 1 unit; for volunteer work, 60 hours = 1 unit. Students may earn a total of 16 units toward graduation in Work Experience 198 courses. Students MUST be working for pay or volunteer before registering for a Work Experience class. NOTE: Only one section of Work Experience may be taken during a semester.
Course credit transfers to CSU for elective credit only.

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: Haragewen Kinde, Ed.D.
DEPARTMENT HEAD: David Bastedo, M.S.
Health & Life Science 227
(909) 384-8564
OTHER FACULTY: Carol Cook, M.S.
Glenn Drewes, M.A.
Darlene Gamboa, Ph.D.
C.R. Greyraven, M.S.
Mark Ikeda, M.S.
Ken Michaelis, M.A.
John Olsen, M.S.
DIVISION SECRETARY: Rose Garcia
DIVISION OFFICE: Chemistry 121
(909) 384-8646
LIAISON COUNSELOR: Rachel Herrera, M.S.
(909) 384-4404

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.

Core competencies emphasized by courses in this department:

• Employ vocabulary of the subject studied.
• Find and interpret information.
• Apply learned knowledge to new situations.
• Apply principles of scientific reasoning to solve problems.

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
TOTAL UNITS: 20

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 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 109
HISTORY OF LIFE  
4 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week and
LABORATORY: 3 hours per week.
An introductory course exploring the history of life on Earth. The role of natural selection and evidence from geology, biogeography, and paleontology will be combined with fossils and recent organisms to interpret the clues of life’s history on Earth.
Associate Degree Applicable
Course credit transfers to CSU.

BIOL 123
ECOLOGY AND ENVIRONMENT  
3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Study of the basic concepts of ecology including the physical environment, ecosystems, energy production and transfer, and the impact of humans on ecosystems. Environmental considerations include renewable and non-renewable energy, food resources, pest control, waste management, maintenance of air and water quality, sustaining the biodiversity of ecosystems, global climate, and political and economic considerations.
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.
Social, economic, psychological, medical and legal issues surrounding the sexually transmitted diseases. The pathogenesis, diagnosis and treatment of prominent sexually transmitted diseases including the impact of current biotechnology on vaccine development, treatment and diagnostics. Historical coverage of changing attitudes and measures toward control of the sexually transmitted diseases.
Associate Degree Applicable
Course credit transfers to CSU and UC.

BIOL 201
CELL AND MOLECULAR BIOLOGY  
4 UNITS
PREREQUISITE/COREQUISITE: CHEM 150 or CHEM 150H.
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): BIOL 2

BIOL 202
ORGANISMAL BIOLOGY AND ECOLOGY  
4 UNITS
PREREQUISITE: 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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
</table>
| BIOL 203   | INVERTEBRATE BIOLOGY                             | 4     | **PREREQUISITE:** BIOL 201.  
**LECTURE:** 3 hours per week and  
**LABORATORY:** 3 hours per week.  
An introduction to the biology of invertebrate organisms emphasizing comparative anatomy, systematics, ecology, and evolutionary relationships among the major invertebrate phyla. This course is designed primarily for pre-professional and biology majors or others with an interest in an in-depth study of biology. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.  
**Associate Degree Applicable**  
Course credit transfers to CSU and UC. |
| BIOL 220   | LABORATORY PREPARATION IN BIOLOGY                | 1     | **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 for elective credit only. |
| BIOL 221   | LABORATORY PREPARATION IN BIOLOGY                | 2     | **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 for elective credit only. |
| BIOL 222   | INDEPENDENT STUDY IN BIOLOGY                     | 1-3   | **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; credit determined after transfer to UC. |
| BIOL 240   | GENERAL BOTANY                                   | 4     | **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. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.  
**Associate Degree Applicable**  
Course credit transfers to CSU and UC.  
CAN (California Articulation Number): BIOL 6 |
| BIOL 250   | HUMAN ANATOMY AND PHYSIOLOGY I                   | 4     | **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     | **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   | **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.  
Limited transfer to UC; credit determined after transfer to UC. |
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 for elective credit only.

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.
CAN (California Articulation Number): BIOL 10

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.
CAN (California Articulation Number): BIOL 12

BIOL 270
MICROBIOLOGY 5 UNITS
PREREQUISITES: BIOL 250 or BIOL 260 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): BIOL 14

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.
Limited transfer to UC; credit determined after transfer to UC.

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 for elective credit only.

BOTANY
See courses within the Department of BIOLOGY

BUILDING INSPECTION TECHNOLOGY
See the Department of INSPECTION TECHNOLOGY

BUSINESS ADMINISTRATION
DIVISION: Business & Information Technology
DIVISION DEAN: Margaret Ortiz, M.A.
DEPARTMENT HEAD: Roger Powell, M.S.
Business, 200E
(909) 384-8910
OTHER FACULTY: Michael Assumma, M.B.A.
Donald Schall, J.D.
Vernon Stauble, Ph.D.
DIVISION SECRETARY: Chris Williams
DIVISION OFFICE: Business 101
(909) 384-8908
LIAISON COUNSELOR: Marco Cota, M.A.
(909) 384-4404

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.
Core competencies emphasized by courses in this department:

- Read and retain information.
- Write clearly.
- Speak clearly.
- Employ vocabulary of the subject studied.
- Demonstrate active listening skills.
- Find and interpret information.
- Evaluate authority and bias of information.
- Evaluate strengths, weaknesses and fallacies of logic.
- Apply learned knowledge to new situations.
- Accept responsibility for own actions.
- Exhibit personal, professional and academic honesty.
- Apply lessons from the past to ethical issues faced in the present.
- Give and receive constructive feedback.
- Develop time management skills.
- Demonstrate creative thought through original expression.
- Demonstrate etiquette in face-to-face and written interactions.
- Work effectively in group settings.
- Utilize conflict resolution skills.
- Demonstrate knowledge of and respect for other cultures.

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 Introduction to Macroeconomics 3
ECON 201 Principles of Economics (Micro) 3
CIT 101 Introduction to Computer Literacy 3
TOTAL UNITS: 23

BUSINESS ADMINISTRATION CERTIFICATE

This certificate is designed to prepare students for entry-level work in the business field by providing the fundamentals of business organization and management as well as in marketing and business law. 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
CIT 101 Introduction to Computer Literacy 3
ACCT 100 Introduction to Accounting I 4
or
BUSAD 108 Personal Finance (3)
or
ECON 100 Introduction to Economics (3)
CIT 031 Business English 3
or
ENGL 015 Preparation for College Writing (4)
or
ENGL 101 Freshman Composition (4)
SPEECH 100 Elements of Public Speaking 3
ELECTIVES - Choose from the list of RECOMMENDED COURSES: 6
TOTAL UNITS: 28

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 Exp 3
BUSAD 200 Business Management 3
BUSAD 203 Marketing Management 3
*Pending approval from the California Community College Chancellor's Office

RETAIL MANAGEMENT CERTIFICATE

This certificate is designed to prepare students for entry-level work in the retail management field. Beginning as a clerk or cashier, the student can advance 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. 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.

FOUNDATIONAL COURSES: UNITS
BUSAD 207 Business Communication 3
BUSCAL 050 Quantitative Methods in Business 3
CIT 101 Introduction to Computer Literacy 3
Choose one of the following:
SPEECH 100 Elements of Public Speaking 3
SPEECH 111 Interpersonal Communication (3)
SPEECH 140 Small Group Discussion (3)

INTERMEDIATE COURSES: UNITS
BUSAD 103 Marketing Principles 3
BUSAD 200 Business Management 3
Choose one of the following:
ACCT 010 Bookkeeping 3
ACCT 100 Introduction to Accounting I (4)
ACCT 200 Principles of Accounting (4)

ADVANCED COURSES: UNITS
BUSAD 110 Human Resource Management 3
BUSAD 112 Principles of Retailing 3
BUSAD 151 Human Relations 3
TOTAL UNITS: 30-31

COURSES OFFERED BY THE DEPARTMENT OF BUSINESS ADMINISTRATION:
BUSAD 039
STRATEGIES FOR SUCCESSFUL EMPLOYMENT  3 UNITS

PREREQUISITE: None.
DEPARTMENTAL ADVISORIES: CIT 010 and CIT 009.
LECTURE: 3 hours per week.
This course is designed to help students develop the skills needed to successfully seek employment, including job search strategies, career paths, cover letter and resume writing, mock interviews, job applications, and positive workplace attitudes.
Associate Degree Applicable

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.
Introduction to the fundamental concepts of business in a changing world. Includes an overview of such areas as economic systems, management, marketing, accounting, finance, ethics, ownership, organization of business, the legal aspects and regulation of business, as well as globalization.
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 for elective credit only.

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 for elective credit only.

BUSAD 108
PERSONAL FINANCE AND INVESTMENTS  3 UNITS

PREREQUISITE: None.
LECTURE: 3 hours per week.
Preparation for managing personal finances including budgeting, borrowing, insurance, investments and home ownership.
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 for elective credit only.

BUSAD 110
HUMAN RESOURCE MANAGEMENT  3 UNITS

PREREQUISITE: None.
LECTURE: 3 hours per week.
A survey of the 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 for elective credit only.

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 for elective credit only.
### 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 for elective credit only.

### BUSAD 151
**HUMAN RELATIONS**  
3 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week.  
This course provides a basic understanding of human interactions in the workplace, focusing on the roles of the individual, the group, and the organization as a whole.  
**Associate Degree Applicable**  
Course credit transfers to CSU for elective credit only.

### 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 for elective credit only.

### BUSAD 198
**BUSINESS ADMINISTRATION 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 to earn units using the following formula: For paid work, 75 hours = 1 unit; for volunteer work, 60 hours = 1 unit. Students may earn a total of 16 units toward graduation in Work Experience 198 courses. Students MUST be working for pay or volunteer before registering for a Work Experience class. NOTE: Only one section of Work Experience may be taken during a semester.  
**Associate Degree Applicable**  
Course credit transfers to CSU for elective credit only.

### BUSAD 200
**BUSINESS MANAGEMENT**  
3 UNITS  
**PREREQUISITE:** 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 for elective credit only.

### BUSAD 203
**MARKETING MANAGEMENT**  
3 UNITS  
**PREREQUISITE:** BUSAD 103.  
**LECTURE:** 3 hours per week.  
Actual marketing management practices are carefully reviewed and evaluated. Alternative principles and methods of effective marketing management are closely examined. Marketing management decision-making skills are developed via management simulation exercises.  
**Associate Degree Applicable**  
Course credit transfers to CSU for elective credit only.

### BUSAD 207
**BUSINESS COMMUNICATION**  
3 UNITS  
**PREREQUISITE:** None.  
**DEPARTMENTAL ADVISORY:** CIT 031.  
**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 for elective credit only.

### BUSAD 210
**BUSINESS LAW**  
3 UNITS  
**PREREQUISITE:** None.  
**DEPARTMENTAL ADVISORY:** Pass a standardized test of reading comprehension at or above the twelfth grade level; Eligibility for ENGL 101.  
**LECTURE:** 3 hours per week.  
Exploration of the legal environment, in which, business operates. Includes an introduction to law and legal reasoning, ethics, torts, strict and products liability, criminal law and contracts. Special emphasis is placed on acquiring a working knowledge of the rules for contracting in general and the modifications applicable under the Uniform Commercial Code for the sale of goods.  
**Associate Degree Applicable**  
Course credit transfers to CSU.  
Limited transfer to UC; contact a counselor for details.  
CAN (California Articulation Number): BUS 8

### BUSAD 211
**THE LEGAL ENVIRONMENT OF BUSINESS**  
3 UNITS  
**PREREQUISITE:** None.  
**DEPARTMENTAL ADVISORY:** Pass a standardized test of reading comprehension at or above the twelfth grade level; Eligibility for ENGL 101.  
**LECTURE:** 3 hours per week.  
A broad investigation of the legal environment in which business is required to operate in today’s world. Includes an investigation of the different governmental entities and their jurisdictions, including the forums provided by each for conflict resolution. Focuses on the regulations in the employment, consumer protection, environmental, land-use control and real property, sole proprietorships, partnerships, corporations, antitrust, securities regulation, comparative and international law areas.  
**Associate Degree Applicable**  
Course credit transfers to CSU.  
Limited transfer to UC; contact a counselor for details.
BUSAD 222
INDEPENDENT STUDENT IN BUSINESS ADMINISTRATION 1-3 UNITS
PREREQUISITE: None.
LABORATORY: 3-9 hours per week.
Assigned projects involving research and analysis of selected topics or directed study for students who are interested in furthering their knowledge of business administration 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 for elective credit only.

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.

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. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
Associate Degree Applicable
Course credit transfers to CSU.

CHEMISTRY
DIVISION: Science and Math
DIVISION DEAN: Haragewen Kinde, Ed.D.
DEPARTMENT HEAD: John Stanskas, Ph.D.
Chemistry 114
(909) 384-8268
OTHER FACULTY: Susan Bangasser, Ph.D.
Judy Okamura, Ph.D.
DIVISION SECRETARY: Rose Garcia
DIVISION OFFICE: Chemistry 121
(909) 384-8645
LIAISON COUNSELOR: Rafael Herrera, M.S.
(909) 384-4404

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
Course credit transfers to CSU.
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.

Core competencies emphasized by courses in this department:
- Read and retain information.
- Employ vocabulary of the subject studied.
- Find and interpret information.
- Utilize technology to organize and present information.
- Apply learned knowledge to new situations.
- Apply principles of scientific reasoning to solve problems.
- Defend a logical hypothesis to explain observed phenomenon.

CHEMISTRY
ASSOCIATE OF SCIENCE DEGREE
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 requirements.

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.

REQUIRED COURSES: UNITS
CHEM 150 or CHEM 150H General Chemistry I 5
CHEM 151 or CHEM 151H General Chemistry II 5
CHEM 212 or CHEM 212H Organic Chemistry I 4
CHEM 213 or CHEM 213H Organic Chemistry II 4
TOTAL UNITS: 18

RECOMMENDED COURSES: UNITS
MATH 250 Single Variable Calculus I 4
PHYSIC 150A or PHYSIC 200 General Physics I 5-6
PHYSIC 150B or PHYSIC 201 General Physics II 5-6

CHEM 085
ALGEBRA REVIEW WORKSHOP FOR CHEMISTRY .50 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 chart, 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): CHEM 6

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.
CAN (California Articulation Number): CHEM 8

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.
Limited transfer to UC; contact a counselor for details.
CAN (California Articulation Number): CHEM 2
CHEM 150H
GENERAL CHEMISTRY I – HONORS  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. Enrollment
is limited to students eligible for the Honors Program.
Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; contact a counselor for details.

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. Enrollment is limited to
students eligible for the Honors Program.
Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; contact a counselor for details.

CHEM 151H
GENERAL CHEMISTRY II – HONORS  5 UNITS
PREREQUISITES: CHEM 150 and CHEM 150H.
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. Enrollment is limited to
students eligible for the Honors Program.
Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; contact a counselor for details.

CHEM 212H
ORGANIC CHEMISTRY I – HONORS  4 UNITS
PREREQUISITES: CHEM 150 and CHEM 150H.
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 the study of
properties of organic compounds. Enrollment is limited to
students eligible for the Honors Program.
Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; contact a counselor for details.

CHEM 213H
ORGANIC CHEMISTRY II – HONORS  4 UNITS
PREREQUISITE: CHEM 212 or CHEM 212H.
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.
Limited transfer to UC; contact a counselor for details.

CHEM 222
SPECIAL PROBLEMS IN CHEMISTRY I  1 UNIT
PREREQUISITE: CHEM 150 or CHEM 150H.
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; credit determined after transfer to UC.
CHEM 223
SPECIAL PROBLEMS IN CHEMISTRY II 2 UNITS
PREREQUISITE: CHEM 150 or CHEM 150H.
INDEPENDENT STUDY: 6 hours per week.

Assign problems involving library and/or laboratory work for selected students who are interested in pursuing 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.

Associated Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; credit determined after transfer to UC.

CHILD DEVELOPMENT

DIVISION: Social Science & Human Development
DIVISION DEAN: Janice Noble, M.Ed.
DEPARTMENT HEAD: Juliann Martin, M.A.
North Hall 244
(909) 384-4447
OTHER FACULTY: Kathryn Adams, M.S.
Kellie Barnett, M.S.
Denise Knight, B.A.
Susan Shimoff, M.A.
Debra Ward, M.S.
DIVISION SECRETARY: To Be Announced
DIVISION OFFICE: Liberal Arts, Room 122
(909) 384-8603
LIAISON COUNSELOR: Mary Beth Barrios, M.S.
(909) 384-4404

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.

Core competencies emphasized by courses in this department:
- Read and retain information.
- Write clearly.
- Speak clearly.
- Employ vocabulary of the subject studied.
- Demonstrate active listening skills.
- Apply learned knowledge to new situations.
- Demonstrate respect for a diversity of ideas and the rights of others.
- Give and receive constructive feedback.
- Work effectively in group settings.
- Utilize conflict resolution skills.
- Demonstrate knowledge of and respect for other cultures.

CHILD DEVELOPMENT
ASSOCIATE OF ARTS DEGREE

To graduate with a specialization in Child Development, students must complete the following required courses (28 units) plus the general breadth requirements for the Associate of Arts degree. (Total = 60 units)

REQUIRED COURSES:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 100</td>
<td>Introduction to Child Development</td>
</tr>
<tr>
<td>CD 105</td>
<td>Child Growth and Development</td>
</tr>
<tr>
<td>CD 112</td>
<td>Principles and Practices in Early Childhood</td>
</tr>
<tr>
<td>CD 126</td>
<td>Child, Family and the Community</td>
</tr>
</tbody>
</table>

FOUR COURSES FROM THE FOLLOWING LIST: 12

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 101</td>
<td>Parent Child Interaction</td>
</tr>
<tr>
<td>CD 130</td>
<td>Creative Music and Movement for Children</td>
</tr>
<tr>
<td>CD 133</td>
<td>Creative Science and Math Activities for Children</td>
</tr>
<tr>
<td>CD 134</td>
<td>Language, Listening and Literature for Children</td>
</tr>
<tr>
<td>CD 136</td>
<td>Creative Art Activities for Children</td>
</tr>
<tr>
<td>CD 137</td>
<td>Play and Materials for Children</td>
</tr>
<tr>
<td>CD 138</td>
<td>Cultural Diversity/Anti-Bias Curric</td>
</tr>
<tr>
<td>CD 140</td>
<td>Spanish for Child Development</td>
</tr>
<tr>
<td>CD 231</td>
<td>Health and Safety Practices for Children</td>
</tr>
<tr>
<td>CD 232</td>
<td>Nutrition for Young Children</td>
</tr>
</tbody>
</table>

EXPERIENCE WORKING WITH CHILDREN: 4

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 198</td>
<td>Child Development Work Exp</td>
</tr>
<tr>
<td>CD 205x2</td>
<td>Child Growth and Development Lab</td>
</tr>
</tbody>
</table>

TOTAL CHILD DEVELOPMENT UNITS: 28

General Breadth Requirements & Elective Units: 32
(See catalog and/or counselor.)

TOTAL UNITS: 60

1. ASSOCIATE TEACHER CERTIFICATE

This certificate is designed to prepare students for entry-level work as a childcare worker nurturing and teaching children of all ages in childcare centers, nursery schools, preschools, public schools, private households, family childcare homes, and before- and after-school programs, and meets California Title V requirements for the Child Development permit.

REQUIRED COURSES:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 100</td>
<td>Introduction to Child Development</td>
</tr>
<tr>
<td>CD 105</td>
<td>Child Growth and Development</td>
</tr>
<tr>
<td>CD 112</td>
<td>Principles and Practices in Early Childhood</td>
</tr>
<tr>
<td>CD 126</td>
<td>Child, Family and the Community</td>
</tr>
</tbody>
</table>

EXPERIENCE WORKING WITH CHILDREN: 4

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 198</td>
<td>Child Development Work Exp</td>
</tr>
<tr>
<td>CD 205x2</td>
<td>Child Growth and Development Lab</td>
</tr>
</tbody>
</table>

TOTAL UNITS: 16
ADDITIONAL RECOMMENDED COURSES:
CD 116X4 Pediatric CPR, First Aid and Safety 2
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

2. TEACHER CERTIFICATE
This certificate is designed to prepare students for the next level of instruction when working with children in a preschool or childcare setting, focusing on developing age-appropriate lesson plans for the classroom, and observation/assessment of children. Meets California Title V requirements for the Child Development permit. 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:
CD 100 Introduction to Child Development 3
CD 105 Child Growth and Development 3
CD 112 Principles and Practices in Early Childhood 3
CD 126 Child, Family and the Community 3

TWO COURSES FROM THE FOLLOWING LIST: 6
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)

TWO COURSES FROM THE FOLLOWING LIST: 6
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)

EXPERIENCE WORKING WITH CHILDREN: 4-8
CD 198 Child Development Work Exp 4-8
or
CD 205X2 Child Development Work Exp Laboratory (4-8)

GENERAL EDUCATION COURSES: 16-18
Math or Natural Science 3-4
Social and Behavioral Science *SOC 130 3
Communication and Learning Skills *ENGL 015 or ENGL 101 4
Humanities *ART 103 or MUS 121 or 122 4
Electives 2-3

*These courses are recommended selections to meet the GE requirement

TOTAL UNITS: 44-50

3. MASTER TEACHER CERTIFICATE
This certificate prepares students to supervise, mentor and assist other teachers and aides in a preschool or childcare setting. Meets California Title V requirements for the Child Development permit. 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:
CD 100 Introduction to Child Development 3
CD 105 Child Growth and Development 3
CD 112 Principles and Practices in Early Childhood 3
CD 126 Child, Family and the Community 3
CD 270 The Mentor Teacher/Adult Supervision 3

CHILD DEVELOPMENT SPECIALIZATION: 6

CD 130 Creative Music and Movement for Children 3
and
CD 136 Creative Art Activities for Children 3
or
CD 134 Language, Listening and Literature for Children 3
and
ENGL 155 Children's Literature 3
or
ENGL 055 Children's Literature (3)

or
CD 138 Cultural Diversity/Anti-Bias Curriculum 3
and
CD 140 Spanish for Child Development 3
or
CD 160 Understanding School-Age Children 3
and
CD 161 Activities for School Age Children 3
or
CD 185 Infant/Toddler Growth and Development 3
and
CD 186 Infant/Toddler Activities 3
or
CD 231 Health and Safety Practices for Children 3
and
CD 232 Nutrition for Young Children 3

TWO COURSES FROM THE FOLLOWING LIST: 6
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)

ONE COURSE FROM THE FOLLOWING LIST: 3
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)

EXPERIENCE WORKING WITH CHILDREN: 4-8
CD 198 Child Development Work Experience 4-8
or
CD 205X2 Child Growth and Development Lab (4-8)
GENERAL EDUCATION COURSES (16 units required): 16
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 4
Natural Science or Math 3-4
Elective Courses 2-3
TOTAL UNITS: 50-54
*These courses are recommended selections to meet the GE requirement

4. SITE SUPERVISOR CERTIFICATE
This certificate is designed to prepare students with the necessary knowledge and skills to be qualified as a preschool or childcare center site supervisor. Meets California Title V requirements for the Child Development permit. 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
CD 100 Introduction to Child Development 3
CD 105 Child Growth and Development 3
CD 112 Principles and Practices in Early Childhood 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

TWO COURSES FROM THE FOLLOWING LIST: 6
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)

TWO COURSES FROM THE FOLLOWING LIST: 6
CD 101 Parent Child Interaction (3)
CD 133 Creative Science and Math Activities for Children (3)
CD 138 Cultural Diversity/Anti-Bias Curriculum for Children (3)
CD 140 Spanish for Child Development (3)
CD 231 Health and Safety Practices for Children (3)
CD 232 Nutrition for Young Children (3)

EXPERIENCE WORKING WITH CHILDREN: 4-8
CD 198 Child Development Work Experience 4-8

GENERAL EDUCATION COURSES: 27
Communication and Learning Skills *ENGL 015 or ENGL 101
Social and Behavioral Sciences: *SOC 130
Humanities *ART 103 or MUS 121 or MUS 122
Natural Science or Math
Elective Courses
TOTAL UNITS: 60-64
*These courses are recommended selections to meet the GE requirement

5. INFANT DEVELOPMENT CERTIFICATE
This certificate is similar to that of the Associate Teacher, and is designed to prepare students for entry-level work specializing in the care of infants (0-36 months) as an assistant to the teacher in a childcare or infant care setting. 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
CD 100 Introduction to Child Development 3
CD 105 Child Growth and Development 3
CD 112 Principles and Practices in Early Childhood 3
CD 185 Infant/Toddler Growth and Development 3
CD 186 Infant/Toddler Activities (3)
CD 126 Child, Family and Community (3)
CD 231 Health and Safety Practices for Children (3)
CD 232 Nutrition for Young Children (3)

ONE COURSE FROM THE FOLLOWING LIST: 3
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)

EXPERIENCE WORKING WITH CHILDREN: 4
(Ages birth - 24 months)
CD 210X2 Infant Growth and Development Lab 4
TOTAL UNITS: 31

6. PRESCHOOL CERTIFICATE
This certificate is similar to that of the Associate Teacher, and is designed to prepare students for entry-level work as a pre-school classroom or childcare facility assistant specializing in the care of children from 3-6 years. 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
CD 100 Introduction to Child Development 3
CD 105 Child Growth and Development 3
CD 112 Principles and Practices in Early Childhood 3
CD 116X4 Pediatric CPR, First Aid and Safety 2
CD 126 Child, Family and Community 3

FIVE COURSES FROM THE FOLLOWING LIST: 15
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 for Children (3)
CD 140 Spanish for Child Development (3)
CD 231 Health and Safety Practices for Children (3)
CD 232 Nutrition for Young Children (3)

EXPERIENCE WORKING WITH CHILDREN: 4
CD 205X2 Child Growth and Development Laboratory 4
TOTAL UNITS: 33

7. SCHOOL-AGE CERTIFICATE
This certificate is similar to that of the Associate Teacher, and is designed to prepare students for entry-level work as an assistant in after-school programs or childcare facilities that serve older children from 6-12 years of age. 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:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 100</td>
<td>Introduction to Child Development</td>
<td>3</td>
</tr>
<tr>
<td>CD 105</td>
<td>Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>CD 112</td>
<td>Principles and Practices in Early Childhood</td>
<td>3</td>
</tr>
<tr>
<td>CD 160</td>
<td>Understanding School-Age Children</td>
<td>3</td>
</tr>
<tr>
<td>CD 161</td>
<td>Activities for School-Age Children</td>
<td>3</td>
</tr>
<tr>
<td>CD 126</td>
<td>Child, Family and Community</td>
<td>3</td>
</tr>
</tbody>
</table>

**THREE COURSES FROM THE FOLLOWING LIST:** 9

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 134</td>
<td>Language, Listening and Literature for Children</td>
</tr>
<tr>
<td>CD 137</td>
<td>Play and Materials for Children</td>
</tr>
<tr>
<td>CD 138</td>
<td>Cultural Diversity/Anti-Bias Curriculum</td>
</tr>
<tr>
<td>CD 231</td>
<td>Health and Safety Practices for Children</td>
</tr>
<tr>
<td>CD 232</td>
<td>Nutrition for Young Children</td>
</tr>
</tbody>
</table>

**EXPERIENCE WORKING WITH CHILDREN:** 4

(Ages 6-12 years)

CD 198 Child Development Work Experience

**TOTAL UNITS:** 31

8. **FAMILY CHILD CARE PROVIDER CERTIFICATE**

This certificate is designed to prepare students for entry-level work in the care of children in a Family Childcare or Home Daycare program and/or facility setting. 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:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 100</td>
<td>Introduction to Child Development</td>
<td>3</td>
</tr>
<tr>
<td>CD 105</td>
<td>Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>CD 112</td>
<td>Principles and Practices in Early Childhood</td>
<td>3</td>
</tr>
<tr>
<td>CD 116X</td>
<td>Pediatric CPR, First Aid and Safety</td>
<td>2</td>
</tr>
<tr>
<td>CD 136</td>
<td>Creative Art Activities for Children</td>
<td>3</td>
</tr>
<tr>
<td>CD 172</td>
<td>Introduction to Family Child Care</td>
<td>1</td>
</tr>
<tr>
<td>CD 173</td>
<td>Family Child Care Business Practices</td>
<td>1</td>
</tr>
<tr>
<td>CD 174</td>
<td>Family Child Care Children's Program</td>
<td>1</td>
</tr>
</tbody>
</table>

**ONE COURSE FROM THE FOLLOWING LIST:** 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 161</td>
<td>Activities for School Age Children</td>
</tr>
<tr>
<td>CD 186</td>
<td>Infant/Toddler Activities</td>
</tr>
</tbody>
</table>

**EXPERIENCE WORKING WITH CHILDREN:** 4

(in Family Child Care)

CD 198 Child Development Work Experience

**TOTAL UNITS:** 24

**ADDITIONAL RECOMMENDED COURSES:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 231</td>
<td>Health and Safety Practices for Children</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 105</td>
<td>Small Business Management</td>
<td>3</td>
</tr>
</tbody>
</table>

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

**COURSES OFFERED BY THE DEPARTMENT OF CHILD DEVELOPMENT:**
CD 111
OBSERVATIONS AND METHODS IN CHILD DEVELOPMENT
2 UNITS
PREREQUISITE/COREQUISITE: CD 105.
LECTURE: 1 hour per week and
LABORATORY: 3 hours per week.
Introduction to observational methodologies and techniques used in the study of early childhood behavior including observation, recording, analysis, and interpretation as they relate to developmental principles, theories, and current research.
Associate Degree Applicable
Course credit transfers to CSU.

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 young 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 for elective credit only.

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 for elective credit only.

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 for elective credit only.

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 as elective credit only.

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 for elective credit only.

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 for elective credit only.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Prerequisite/Co-requisite</th>
<th>Lecture</th>
<th>Laboratory</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 185</td>
<td>INFANT/TODDLER GROWTH AND DEVELOPMENT</td>
<td>3</td>
<td>None</td>
<td>3 hours per week</td>
<td></td>
</tr>
<tr>
<td>CD 186</td>
<td>INFANT/TODDLER ACTIVITIES</td>
<td>3</td>
<td>None</td>
<td>3 hours per week</td>
<td></td>
</tr>
<tr>
<td>CD 198</td>
<td>CHILD DEVELOPMENT WORK EXPERIENCE</td>
<td>1-4</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CD 205x2</td>
<td>CHILD GROWTH AND DEVELOPMENT LABORATORY</td>
<td>4</td>
<td>CD 185/CD 185</td>
<td>1.5 hour per week and</td>
<td>8.5 hours per week</td>
</tr>
<tr>
<td>CD 210x2</td>
<td>INFANT GROWTH AND DEVELOPMENT LABORATORY</td>
<td>4</td>
<td>CD 185</td>
<td>1.5 hour per week and</td>
<td>8.5 hours per week</td>
</tr>
<tr>
<td>CD 222</td>
<td>SPECIAL PROBLEMS IN CHILD DEVELOPMENT I</td>
<td>1</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CD 231</td>
<td>HEALTH AND SAFETY PRACTICES FOR CHILDREN</td>
<td>3</td>
<td>CD 105 and CD 126</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CD 232</td>
<td>NUTRITION FOR YOUNG CHILDREN</td>
<td>3</td>
<td>None</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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 and UC.

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 addictions; bonding with foster parents; bilingual education; discipline strategies with teenagers; and self-esteem of foster children.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

COMPUTER INFORMATION TECHNOLOGY

DIVISION: Business & Information Technology
DIVISION DEAN: Margaret Ortiz, M.A.
DEPARTMENT HEAD: Roger Powell, M.S.
Business 200E
(909) 384-8910

OTHER FACULTY: Maha Al-Husseini, B.A.
Mona Jackson, M.A.
Barbara Saxon, B.S.I.S.
Vernon Stauble, Ph.D.
Susan Vajna, B.A.
Mary Lou Vasquez, B.A.

DIVISION SECRETARY: Chris Williams
DIVISION OFFICE: Business 101
(909) 384-8908

LIAISON COUNSELOR: Marco Cota, M.A.
(909) 384-4404

The Computer Information Technology (CIT) Department provides a program of study for students who are preparing for employment in the field of computer management in business.

The CIT Department offers a complete introduction to computers and software, specific training in selected software packages, and advanced courses dealing with networks, specialized programming techniques, and management of computer facilities.

Core competencies emphasized by courses in this department:
• Read and retain information.
• Write clearly.
• Employ vocabulary of the subject studied.
Utilize technology to organize and present information.

Demonstrate working knowledge of basic computer function.

CIT – MANAGEMENT INFORMATION SYSTEMS ASSOCIATE OF ARTS DEGREE

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

REQUIRED COURSES:           UNITS
CIT 101   Introduction to Computer Literacy    3
CIT 114   Spreadsheets: Excel     3
CIT 116   Database Management: Access    3
CIT 120   Internet       2
CIT 200   Business Programming Visual Basic 3
CIT 210   Systems Analysis and Design 3
CIT 215   Database Management Systems    3
CIT 232   Data Communications and Networks 3
TOTAL UNITS:     23

CIT – MANAGEMENT INFORMATION SYSTEMS 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. The MIS Certificate offers a complete introduction to computers, specific training in selected software packages, advanced courses dealing with networks, and management of computer facilities.

REQUIRED COURSES:           UNITS
CIT 101    Introduction to Computer Literacy  3
CIT 105    Windows    2
CIT 114    Spreadsheets: Excel     3
CIT 116    Database Management: Access    3
CIT 120    Internet       2
CIT 200    Business Programming Visual Basic 3
CIT 210    Systems Analysis and Design 3
CIT 215    Database Management Systems    3
CIT 232    Data Communications and Networks 3
CIT 031    Business English   3
Or
ENGL 015  Preparation for College Writing (4)
Or
ENGL 101  Freshman Composition (4)
Three units from the list of RECOMMENDED COURSES: 3
TOTAL UNITS:               31-32

RECOMMENDED COURSES:                  UNITS
CIT 222   Independent Study in CIT  1-3
CIT 020   Word Processing – Microsoft Word 3

CIT – OFFICE INFORMATION SYSTEMS ASSOCIATE OF ARTS DEGREE

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

REQUIRED COURSES:          UNITS
BUSAD 039 Strategies for Successful Employment 3
CIT 101   Introduction to Computer Literacy  3
CIT 105   Windows       2
CIT 016   Advanced Keyboarding   3
CIT 032   Machine Transcription 3
CIT 030   Records and Database Management  3
CIT 020   Word Processing: Microsoft Word 3
ELECTIVES – choose from the list of RECOMMENDED COURSES: 3

TOTAL UNITS:            23

RECOMMENDED COURSES:          UNITS
CIT 114   Spreadsheets: Excel     3
CIT 116   Database Management: Access    3
CIT 126   Computer Graphics 3

CIT - OFFICE INFORMATION SYSTEMS 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 Office Information Systems Certificates: Administrative Assistant, Clerical Assistant, and Information Processing Specialist. Each of these certificates requires the core courses plus specialized courses.

CORE REQUIREMENTS FOR OFFICE INFORMATION SYSTEMS CERTIFICATES:

REQUIRED COURSES:           UNITS
CIT 105    Windows    2
CIT 198    Work Experience              (1-4)
BUSAD 039 Strategies for Successful Employment   3
CIT 013    Intermediate Keyboarding 3
CIT 031    Business English   3
CIT 020    Word Processing: Microsoft Word 3
TOTAL UNITS for Office Information Core Requirements:              15-18

1.  ADMINISTRATIVE ASSISTANT

REQUIRED COURSES:           UNITS
CIT 101    Introduction to Computer Literacy  3
CIT 016    Advanced Keyboarding   3
CIT 032    Machine Transcription 3
CIT 030    Records and Database Management  3
CIT 033    Machine Calculations 3
CIT 114    Spreadsheets: Excel     3
SPAN 015   Conversational Spanish  3
CIT 126    Computer Graphics 3
ELECTIVE – Choose from the list of RECOMMENDED COURSES: 3

RECOMMENDED COURSES:               UNITS
BUSCAL 050  Quantitative Methods in Business  3
SPAN 015   Conversational Spanish  3
TOTAL UNITS:                       42-45

2.  CLERICAL ASSISTANT

REQUIRED COURSES:          UNITS
Office Information Core Requirements 15-18
CIT 101   Introduction to Computer Literacy  3
CIT 016   Advanced Keyboarding   3
CIT 030  Records and Database Management   3
CIT 033  Machine Calculations   3
ELECTIVE – Choose from the list of
RECOMMENDED COURSES:   3

RECOMMENDED COURSES:    UNITS
BUSCAL 050  Quantitative Methods in Business   3
CIT 114  Spreadsheets: Excel   3
CIT 116  Database Management: Access   3
SPAN 015  Conversational Spanish   3
TOTAL UNITS:              30-33

3.  INFORMATION PROCESSING SPECIALIST

REQUIRED COURSES:    UNITS
Office Information Core Requirements   15-18
CIT 101  Introduction to Computer Literacy   3
CIT 114  Spreadsheets: Excel   3
CIT 116  Database Management: Access   3
CIT 126  Computer Graphics   3
ELECTIVE – Choose from the list of
RECOMMENDED COURSES:   3

RECOMMENDED COURSES:    UNITS
BUSCAL 050  Quantitative Methods in Business   3
CIT 016  Advanced Keyboarding   3
CIT 032  Machine Transcription   3
CIT 030  Records and Database Management   3
SPAN 015  Conversational Spanish   3
TOTAL UNITS:              30-33

COURSES OFFERED BY THE DEPARTMENT OF
COMPUTER INFORMATION TECHNOLOGY:

CIT 008  BEGINNING KEYBOARDING, PART I   1.5 UNITS
PREREQUISITE: None.
LECTURE: 1 hour per week and
LABORATORY: 1.5 hours per week.
Keyboard mastery and correct stroking techniques leading
to maximum skill in typing. Use of speed and accuracy
drills designed to develop a keyboarding speed of at least
18 words per minute. This is a Part I course students can
complete in half a semester.
Associate Degree Applicable

CIT 009  BEGINNING KEYBOARDING, PART II  1.5 UNITS
PREREQUISITE: CIT 008.
LECTURE: 1 hour per week and
LABORATORY: 1.5 hours per week.
Instruction and practice in typing personal and business
letters, rough drafts, simple manuscripts, simple tabulation
reports and various styles of letters. Practice in
developing speed and control. Designed to develop a
minimum keyboarding speed of 30 words per minute for
five minutes. This is a Part II course students can
complete in half a semester.
Associate Degree Applicable

CIT 010  BEGINNING KEYBOARDING  3 UNITS
PREREQUISITE: None.
LECTURE: 2 hours per week and
LABORATORY: 3 hours per week.
Fundamentals of keyboarding including operation of a
standard keyboard by touch. Instruction and practice in
formatting a variety of personal and business documents,
such as letters, reports, and tables. Use of speed and
accuracy drills designed to develop a keyboarding speed
of 30 words per minute for five minutes. This is a
combined Part I and Part II course students can complete
in one semester.
Associate Degree Applicable

CIT 013  INTERMEDIATE KEYBOARDING  3 UNITS
PREREQUISITE: CIT 010 or CIT 009.
LECTURE: 2 hours per week and
LABORATORY: 3 hours per week.
Procedures for arranging and tabulating materials and
preparing letters and business forms with an emphasis on
accuracy and speed. Designed to develop a keyboarding
speed of 45 words per minute for five minutes.
Associate Degree Applicable

CIT 016  ADVANCED KEYBOARDING  3 UNITS
PREREQUISITE: CIT 013.
DEPARTMENTAL ADVISORY: CIT 020.
LECTURE: 2 hours per week and
LABORATORY: 3 hours per week.
Presents advanced applications of document processing
that occur in modern offices including preparation of legal
papers, financial reports, statistical materials, introductory
desktop applications, and advanced letter production.
Emphasis on skill building; producing documents with a
computer; following directions; and the use of judgment
and initiative in preparing documents.
Associate Degree Applicable

CIT 020  WORD PROCESSING: MICROSOFT WORD  3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: CIT 010 or CIT 009.
LECTURE: 3 hours per week.
The production of professional quality documents using
Microsoft Word software including the use and design of
macros, and special features such as merging, preparing
labels, and making columns and tables.
Associate Degree Applicable

CIT 021  WORD PROCESSING: ADVANCED MICROSOFT WORD  3 UNITS
PREREQUISITE: CIT 020.
LECTURE: 3 hours per week.
The production of professional quality documents using
Microsoft Word's advanced features with bookmarks,
annotations, macros, borders, frames, WordArt, Equation
Editor, newspaper columns, styles, form templates, tables
of contents, indexes, table of figures, table of authorities,
charts, and hyperlinks, and preparation for Microsoft
Certification exams.
Associate Degree Applicable
CIT 030
RECORDS AND DATABASE MANAGEMENT 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
The course provides an introduction to manual and computerized filing systems. The principles governing records storage, and how to locate when needed, and how to apply the criteria for determining their disposition or retention are thoroughly explored.
Associate Degree Applicable

CIT 031
BUSINESS ENGLISH 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Review of basic grammar, punctuation, capitalization and spelling. Emphasis on grammar, vocabulary building for effective business communication, and writing common business letters and memos.
Associate Degree Applicable

CIT 032
MACHINE TRANSCRIPTION 3 UNITS
PREREQUISITE: CIT 020.
DEPARTMENTAL ADVISORY: CIT 031.
LECTURE: 2 hours per week and LABORATORY: 3 hours per week.
The course provides instruction and practice in document formatting, editing, proofreading, and listening as well as the preparation of industry-specific documents for transcription.
Associate Degree Applicable

CIT 033
MACHINE CALCULATIONS 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: BUSCAL 050 or MATH 952.
LECTURE: 2 hours per week and LABORATORY: 3 hours per week.
Instruction and practice on electronic desk calculators with application of skills to problems and mathematical computation for business and industry.
Associate Degree Applicable

CIT 043
LEGAL OFFICE PROCEDURES 3 UNITS
PREREQUISITE: CIT 010 or CIT 009.
LECTURE: 3 hours per week.
Specialized training for the legal office assistant including legal terminology; legal correspondence; professional relations with employers and clients; California Codes and court rules; and preparation and handling of legal forms.
Associate Degree Applicable

CIT 044
MEDICAL OFFICE TERMINOLOGY 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
The course covers the origin, correct spelling, pronunciation, meaning, and current use of medical terms and their application to medical records and reports.
Associate Degree Applicable

CIT 045
MEDICAL INSURANCE FORMS 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORIES: CIT 010 and CIT 044.
LECTURE: 3 hours per week.
A comprehensive study of various types of health insurance programs including insurance benefits, patient cost, sharing coverage, insurance terminology, and the proper handling of insurance claims in medical and dental offices.
Associate Degree Applicable

CIT 048
MEDICAL OFFICE PROCEDURES 3 UNITS
PREREQUISITE: CIT 010 or CIT 009.
DEPARTMENTAL ADVISORY: CIT 020.
LECTURE: 3 hours per week.
This course prepares students for employment as “front office” administrative medical assistants. Instruction is provided for both the traditional and technological medical environments. The course covers the medical environment and ethics. Students learn to input patient information, schedule appointments, handle billing, produce lists and reports, and handle insurance claims manually and electronically.
Associate Degree Applicable

CIT 080
INSIDE THE PERSONAL COMPUTER 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
An introduction to the personal computers at the machine level. Topics include the system board, keyboard, floppy and hard disk drives, interface cards, monitors, printers, machine organization, and design conventions.
Associate Degree Applicable

CIT 091
NETWORKING FUNDAMENTALS, SEMESTER ONE (CISCO NETWORKING ACADEMY) 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORIES: MATH 952 and CIT 105.
LECTURE: 2 hours per week and LABORATORY: 3 hours per week.
Designed to provide students with classroom and laboratory experience in the fundamentals of current and emerging networking technology. Topics covered include network topology, cabling, electrical considerations, the OSI model, Internet Protocol, addressing, bridges, switches, hubs, and routers. This is the first course in a four-course CCNA preparation sequence.
Associate Degree Applicable
CIT 092
NETWORKING FUNDAMENTALS BASIC ROUTING, SEMESTER TWO (CISCO NETWORKING ACADEMY) 3 UNITS

PREREQUISITE: CIT 091.
LECTURE: 2 hours per week and LABORATORY: 3 hours per week.
This course is the second in a series of four semester courses designed to prepare the student to test for the Cisco Certified Network Associate (CCNA) certification. CCNA certification indicates a foundation in and apprentice knowledge of networking for the small home/office market. Topics covered include router fundamentals, router setup and configuration, network management, routing and routed protocols, and network troubleshooting.
Associate Degree Applicable

CIT 093
FUNDAMENTALS OF LANS, LOCAL AREA NETWORKS, SEMESTER THREE (CISCO NETWORKING ACADEMY) 3 UNITS

PREREQUISITE: CIT 092.
LECTURE: 2 hours per week and LABORATORY: 3 hours per week.
The third semester of the Cisco Academy provides students with classroom and laboratory experience in configuring routers for various industry standard protocols. It includes, but is not limited to segmentation of LAN's using bridges, routers, and switches; and virtual LANs, Fast Ethernet, cut-through and store and forward LAN switching.
Associate Degree Applicable

CIT 094
FUNDAMENTALS OF WANS WIDE AREA NETWORKS, SEMESTER FOUR (CISCO NETWORKING ACADEMY) 3 UNITS

PREREQUISITE: CIT 093.
LECTURE: 2 hours per week and LABORATORY: 3 hours per week.
This course provides the fundamentals in Wide Area Network topologies, interfaces, protocols, linking technology, frame encapsulation, design, internetworking structure and theory, ISDN and ISDN components, configuration, frame relay, and subinterfaces. Learn through theory and hands-on application in the process of designing, configuring, installing and implementing a Wide Area Network.
Associate Degree Applicable

CIT 095
ADVANCED ROUTERS, SEMESTER FIVE (CISCO NETWORKING ACADEMY) 3 UNITS

PREREQUISITE: CIT 094.
LECTURE: 2 hours per week and LABORATORY: 3 hours per week.
Cisco Semester Five focuses on advanced routing and using Cisco routers connected to local-area networks (LANs) and wide-area networks (WANs) typically found at medium to large network sites where students will be able to select and implement the appropriate Cisco IOS services required to build a scalable routed network. This is a first in a series of four courses recommended for CCNP (Cisco Certified network Professional) certification.
Associate Degree Applicable

CIT 096
REMOTE ACCESS, SEMESTER SIX (CISCO NETWORKING ACADEMY) 3 UNITS

PREREQUISITE: CIT 095.
LECTURE: 2 hours per week and LABORATORY: 3 hours per week.
Cisco Semester Six focuses on Remote Access to the network. This course will provide students with learning experiences in asynchronous dial-up, ISDN, DDR, X.25, Frame Relay, ODR, Wan backup, queuing, compression, NAT, and AAA. This is the second in a series of four courses recommended for CCNP (Cisco Certified network Professional) certification.
Associate Degree Applicable

CIT 097
LAN SWITCHING, SEMESTER SEVEN (CISCO NETWORKING ACADEMY) 3 UNITS

PREREQUISITE: CIT 094.
LECTURE: 2 hours per week and LABORATORY: 3 hours per week.
Cisco Semester Seven focuses on LAN Switching. The course will provide students with learning experiences in traditional campus networks, LAN media types, basic switch configurations, VLANs, Multilayer Switching, HSRP, Multicasting, and Restricting Network Access. This is the third in a series of four courses recommended for CCNP (Cisco Certified Network Professional) certification.
Associate Degree Applicable

CIT 098
NETWORK TROUBLESHOOTING, SEMESTER EIGHT (CISCO NETWORKING ACADEMY) 3 UNITS

PREREQUISITE: CIT 094.
LECTURE: 2 hours per week and LABORATORY: 3 hours per week.
Cisco Semester Eight focuses on Network Troubleshooting. The course will provide students with learning experiences in troubleshooting methodologies. It will include Protocol Overview, Management and Diagnostic Tools, Troubleshooting TCP/IP, LAN Switches, VLANs, Routing and Switching Processes, Frame Relay, ISDNs, and AppleTalk. This is the fourth in a series of four courses recommended for CCNP (Cisco Certified Network Professional) certification.
Associate Degree Applicable

CIT 100
INTRODUCTION TO PERSONAL COMPUTERS 3 UNITS

PREREQUISITE: None.
LECTURE: 3 hours per week.
A survey course for the use of software tools such as word processing, spreadsheets, graphics, presentation and database using Microsoft Office which includes hands-on experience on PC compatible computers.
Associate Degree Applicable
Course credit transfers to CSU.
CIT 101
INTRODUCTION TO COMPUTER LITERACY  3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: CIT 010 or CIT 008.
LECTURE: 3 hours per week.
The course covers basic computer concepts including hardware components and application software programs. Topics include components of a computer system (CPU, memory, ports, busses, etc.), operating systems and utilities programs, communication and network, ethical issues, and usage of the Internet. The course covers also the use of word processing software to generate business documents, the use of the spreadsheets. Students will learn how to create, modify, insert formulas, use what-if-analysis/goal seek concepts, and format worksheets professionally. In addition the course covers the use of database software and covers concepts such as creating tables, queries, forms, and reports, and the use of presentation software and personal information management software such as Outlook.
Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; contact a counselor for details.
CAN (California Articulation Number): BUS 6

CIT 102
ADVANCED COMPUTER LITERACY  3 UNITS
PREREQUISITE: CIT 101.
LECTURE: 3 hours per week.
Expands upon the basic fundamentals of hardware computer concepts, theory and software applications by creating word processing, spreadsheet, database, and presentation graphics and documents introduced in CIT 101.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

CIT 105
INTRODUCTION TO WINDOWS  2 UNITS
PREREQUISITE: None.
LECTURE: 1.5 hours per week and
LABORATORY: 1.5 hours per week.
Course will provide the necessary background to understand the graphical user interface of the most widely used operating system. An introduction to the computer operating system that simplifies the process of working with documents and applications, transferring data between documents, and organizing the manner in which one interacts with a computer.
Associate Degree Applicable
Course credit transfers to CSU.

CIT 114
SPREADSHEETS: EXCEL  3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: CIT 100 or CIT 101.
LECTURE: 3 hours per week.
Production of workbooks using EXCEL, which integrates spreadsheet analysis, information management, and graphics. Includes the design and the use of worksheets; how to enter labels, numbers, formulas, and create graphs; how to format worksheets professionally; how to use Excel functions in different applications and understand the concept of data management in Excel; how to use the concept of what-if-analysis; how to consolidate data in a 3-D workbook and establish File Linking; and how to integrate Excel with the Web.
Associate Degree Applicable
Course credit transfers to CSU.

CIT 116
DATABASE MANAGEMENT: ACCESS  3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: CIT 100 or CIT 101.
LECTURE: 3 hours per week.
Development and maintenance of a database. Provides a working knowledge of designing a database and setting field properties, storing, retrieving, printing, and indexing records; creating informational and technical queries; developing customized forms and reports; establishing different types of relationships; integrating Access with the Web; and creating a database Switchboard. Emphasis on developing a practical ability to use a database in a Windows environment with full graphical user interface functionality.
Associate Degree Applicable
Course credit transfers to CSU.

CIT 118
MICROSOFT POWERPOINT  3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: CIT 105.
LECTURE: 3 hour per week.
Introduction to a presentation graphics program for those who plan to make effective and compelling presentations. Instruction includes developing and customizing presentations by using charts, clip art, pictures, presentation templates, WordArt, and information and graphics from Word, Excel, and Access.
Associate Degree Applicable
Course credit transfers to CSU.

CIT 120
INTERNET  2 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: CIT 105.
LECTURE: 1.5 hours per week and
LABORATORY: 1.5 hours per week.
Basics of the Internet using the World Wide Web and Netscape Navigator. Internet and the Information Superhighway provide electronic access to products, services and resources available throughout the United States and the world.
Associate Degree Applicable
Course credit transfers to CSU.

CIT 122
WEB PUBLISHING  3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: CIT 101.
LECTURE: 3 hours per week.
An introduction to Web Page design in a hypertext language such as HTML, Fusion, or FrontPage. Topics include design and construction of effective web pages, the World Wide Web, Internet, searching and loading files, interface and navigation, color and graphics, text and image files, and updating a web site.
Associate Degree Applicable
Course credit transfers to CSU.
CIT 126  
COMPUTER GRAPHICS  
3 UNITS  
PREREQUISITE: CIT 101.  
LECTURE: 3 hours per week.  
An introduction course to graphic design using graphic software. Topics include the study of good graphic design skills and how to apply them, learning graphics software to create professional-looking documents and hands-on experiencing using the PC. 
Associate Degree Applicable 
Course credit transfers to CSU.

CIT 150  
OFFICE APPLICATION DEVELOPMENT  
3 UNITS  
PREREQUISITE: CIT 101.  
DEPARTMENTAL ADVISORY: CIT 102.  
LECTURE: 2 hour per week and  
LABORATORY: 3 hours per week.  
An introduction to Visual Basic for Application, Microsoft's application scripting language for Microsoft office applications. Topics include: programming basics; automated formatting of spreadsheet and word processor documents; design and construction of customized data entry screens for databases. 
Associate Degree Applicable 
Course credit transfers to CSU.

CIT 198  
COMPUTER INFORMATION 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 to earn units using the following formula: For paid work, 75 hours = 1 unit; for volunteer work, 60 hours = 1 unit. Students may earn a total of 16 units toward graduation in Work Experience 198 courses. Students MUST be working for pay or volunteer before registering for a Work Experience class. NOTE: Only one section of Work Experience may be taken during a semester. 
Associate Degree Applicable 
Course credit transfers to CSU for elective credit only.

CIT 210  
SYSTEMS ANALYSIS AND DESIGN  
3 UNITS  
PREREQUISITE: CIT 101.  
LECTURE: 3 hours per week.  
Introduction to systems analysis and design using traditional development (SDLC) and current techniques, such as client server and object-oriented development, GUI, and electronic data exchange. Emphasis on the role of the analyst, project management techniques, communication skills, economic analysis tools, and computer-assisted system engineering options. 
Associate Degree Applicable 
Course credit transfers to CSU and UC.

CIT 215  
DATABASE MANAGEMENT SYSTEMS  
3 UNITS  
PREREQUISITE: None.  
DEPARTMENTAL ADVISORY: CIT 101.  
LECTURE: 3 hours per week.  
An introduction to the components of relational database management including data definition language, data manipulation language, screen generation, the use of report writers, and Structured Query Language (SQL). 
Associate Degree Applicable 
Course credit transfers to CSU.

CIT 222  
INDEPENDENT STUDY IN COMPUTER INFORMATION TECHNOLOGY  
1-3 UNITS  
PREREQUISITE: CIT 101.  
LABORATORY: 3-9 hours per week.  
Assigned projects involving research and analysis of selected topics or directed study for students who are interested in furthering their knowledge of information technology 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 for elective credit only.

CIT 232  
DATA COMMUNICATIONS AND NETWORKS  
3 UNITS  
PREREQUISITE: CIT 101.  
LECTURE: 3 hours per week.  
An introduction to human-to-computer and computer-to-computer communications. Topics include data transmission, modems, network configurations, protocols and software, telecommunication, teleprocessing, security, and the control and management of LAN's and WAN's. 
Associate Degree Applicable 
Course credit transfers to CSU.

COMPUTER SCIENCE

DIVISION: Science and Math  
DIVISION DEAN: Haragewen Kinde, Ed.D.  
DEPARTMENT HEAD: John Stanskas, Ph.D.  
Chemistry 114  
(909) 384-8268  
DIVISION SECRETARY: Rose Garcia  
DIVISION OFFICE: Chemistry 121  
(909) 384-8645  
LIAISON COUNSELOR: Rafael Herrera, M.S.  
(909) 384-4404

Courses offered by the Computer Science Department are interactive, featuring hands-on experience with the college’s computer hardware and software. The courses cover a range of topics in the computer field with an emphasis on software engineering and information processing.

The Computer Science curriculum may culminate in either an Associate of Science degree or a certificate. The degree program prepares students to transfer to a four-year institution with a major in computer science or a related discipline. Students planning to transfer to a four-year institution and major in computer science should consult with a counselor regarding the transfer process and lower division requirements. The certificate program
prepares students for entry-level employment as programmers for scientific and business applications.

Core competencies emphasized by courses in this department:

- Read and retain information.
- Employ vocabulary of the subject studied.
- Utilize technology to organize and present information.
- Demonstrate working knowledge of basic computer function.
- Apply learned knowledge to new situations.
- Apply principles of scientific reasoning to solve problems.

**COMPUTER SCIENCE ASSOCIATE OF SCIENCE DEGREE**

To graduate with a specialization in Computer Science and intending to transfer to four-year institutions, students must complete a total of 29 units listed below in addition to general education requirements.

**REQUIRED COURSES:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 110</td>
<td>3</td>
</tr>
<tr>
<td>CS 190</td>
<td>4</td>
</tr>
<tr>
<td>CS 265</td>
<td>3</td>
</tr>
<tr>
<td>PHYSIC 200</td>
<td>6</td>
</tr>
<tr>
<td>PHYSIC 201</td>
<td>6</td>
</tr>
</tbody>
</table>

**SELECT ONE OF THE FOLLOWING COURSES:**

- CS 130 Applied Computer Logic (3)
- CS 170 Assembly Language (4)
- CS 215 Programming with Java (4)

**TOTAL UNITS:** 25-26

**COMPUTER SCIENCE CERTIFICATE**

This certificate is designed to provide students with the fundamentals of software engineering, information processing concepts, and programming to prepare them for entry-level positions as programmers for scientific and business applications. In addition, this certificate completes the lower division requirements of the certificate program offered by the Computer Science Department at CSU San Bernardino.

**REQUIRED COURSES:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 110</td>
<td>3</td>
</tr>
<tr>
<td>CIT 100</td>
<td>3</td>
</tr>
<tr>
<td>CS 120</td>
<td>4</td>
</tr>
<tr>
<td>CS 220</td>
<td>3</td>
</tr>
</tbody>
</table>

**SELECT ONE OF THE FOLLOWING COURSES:**

- CS 190 Programming in C++ (4)
- CS 215 Programming with Java (4)

**TOTAL UNITS:** 17

**COURSES OFFERED BY THE DEPARTMENT OF COMPUTER SCIENCE:**

**CS 110**

**FUNDAMENTALS OF COMPUTER SCIENCE**  
**3 UNITS**

**PREREQUISITE:** MATH 095.

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

An orientation in computer science for computer science majors. Topics include an overview of the computer discipline, the design and use of the computer devices, the art of problem solving and programming, and the representation of data. Includes hands-on experience in computer programming using languages such as Visual Basic.NET and C++.

Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; contact a counselor for details.

**CS 120**

**INTRODUCTION TO VISUAL BASIC.NET**  
**4 UNITS**

**PREREQUISITE:** None.

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

An introduction to a Web-based programming language, Visual Basic.NET as it applies to scientific, business and manufacturing settings. Topics include problem solving, graphical user interface, program design, software tools, structured logic, object-oriented programming, graphics and animation, procedures, arrays, files, and Web projects.

Associate Degree Applicable
Course credit transfers to CSU.
CAN (California Articulation Number): CSCI 6

**CS 130**

**APPLIED COMPUTER LOGIC**  
**3 UNITS**

**PREREQUISITE:** CS 110.

**LECTURE:** 3 hours per week.

An introduction to digital systems. Topics include Boolean algebra, truth tables, logic gates, number systems and codes, Karnaugh maps, flip-flops, counters and registers, digital arithmetic, combinatorial logic and functions.

Associate Degree Applicable
Course credit transfers to CSU and UC.

**CS 170**

**ASSEMBLY LANGUAGE**  
**4 UNITS**

**PREREQUISITE:** CS 110.

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

An introduction to assembly language and machine organization. Topics include memory location, register references, data definitions, machine instructions, screen processing, disk storage and macros.

Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): CSCI 10
CS 190
PROGRAMMING IN C++          4 UNITS
PREREQUISITE: CS 110.
LECTURE: 3 hours per week and
LABORATORY: 3 hours per week
This course is an introduction to the object-oriented language, C++. Topics include object-oriented design, program logic structures, program solving techniques, arrays and records, procedures and functions, classes and objects, pointers and references, inheritance, and polymorphism.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): CSCI 16

CS 198
COMPUTER SCIENCE 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 to earn units using the following formula: For paid work, 75 hours = 1 unit; for volunteer work, 60 hours = 1 unit. Students may earn a total of 16 units toward graduation in Work Experience 198 courses. Students MUST be working for pay or volunteer before registering for a Work Experience class. NOTE: Only one section of Work Experience may be taken during a semester.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

CS 215
PROGRAMMING WITH JAVA          4 UNITS
PREREQUISITE: CS 110.
LECTURE: 3 hours per week and
LABORATORY: 3 hours per week.
An introduction to the network-friendly language, Java. Topics include object-oriented design, multiple platform environment, program logic structures, graphical user interface, Visual J++, Java Applet and recursion.
Associate Degree Applicable
Course credit transfers to CSU and UC.

CS 192
SPECIAL PROBLEMS IN COMPUTER SCIENCE I          1 UNIT
PREREQUISITE: CS 110.
INDEPENDENT STUDY: 3 hours per week.
Assigned problems involving computer laboratory work for selected students who are interested in furthering their knowledge of computer science 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; credit determined after transfer to UC.

CS 265
DATA STRUCTURES          3 UNITS
PREREQUISITE: CS 190.
LECTURE: 2 hours per week and
LABORATORY: 3 hours per week.
An introduction to data structures such as linked lists, stacks, queues and trees. Topics include algorithm development, storage allocation, data organization, information retrieval system software and language support features. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): CSCI 24

CS 220
VISUAL BASIC.NET PROGRAMMING II          3 UNITS
PREREQUISITE: CS 120.
LECTURE: 2 hours per week and
LABORATORY: 3 hours per week.
Advanced programming using Visual Basic.NET with emphasis on software development and maintenance. Topics include object-oriented design, multiple class modules, interface and linking, windows and Internet controls, and database access.
Associate Degree Applicable
Course credit transfers to CSU and UC.

COOPERATIVE WORK EXPERIENCE
See WORK EXPERIENCE

CORRECTIONS
DIVISION: Criminal Justice
ADMINISTRATIVE 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: Joyce Smith, M.A.
(909) 384-4404

Core competencies emphasized by courses in this department:
• Read and retain information.
• Write clearly.
• Speak clearly.
• Employ vocabulary of the subject studied.
• Evaluate authority and bias of information.
• Locate, evaluate and select evidence to support or discredit an argument.
• Apply learned knowledge to new situations.
• Accept responsibility for own actions.
• Demonstrate respect for a diversity of ideas and the rights of others.
• Exhibit personal, professional and academic honesty.
• Recognize own biases and values.
• Develop time management skills.
• Set goals for educational, personal and professional development.
• Demonstrate etiquette in face-to-face and written interactions.
• Work effectively in group settings.
• Utilize conflict resolution skills.
• Demonstrate knowledge of and respect for other cultures.

COURSES OFFERED BY THE DEPARTMENT OF CORRECTIONS:

The Corrections courses listed may not be offered every semester due to instructor availability. Please refer to the college semester schedule for class offerings.

CORREC 101
INTRODUCTION TO CORRECTIONS 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
This course will focus on the legal issues, probation and parole, specific laws and general operation of correctional institutions. The relationship between historical trends of adult and juvenile corrections and other components of the judicial system will also be examined.
Associate Degree Applicable
Course credit transfers to CSU.

CORREC 102
CORRECTIONAL INTERVIEWING AND COUNSELING 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
This course is an overview of the techniques in counseling and interviewing available to practitioners in corrections. The student will learn the use of appropriate techniques and theories in confidence building which may be used by the correctional employee in client interviews and counseling. This is a basic course for students planning to enter or are already employed within the correctional science field.
Associate Degree Applicable
Course credit transfers to CSU.

CORREC 104
CONTROL AND SUPERVISION IN CORRECTIONS 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
This course will emphasize local, state and federal institutions and the role played by the offender and the correctional worker. Topics will include inmate subculture, violence and effects of crowding on inmates and staff, coping techniques for a correctional officer in a hostile prison environment.
Associate Degree Applicable
Course credit transfers to CSU.

CORREC 105
LEGAL ASPECTS OF CORRECTIONS 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
This course provides students with an awareness of the historical framework, concepts and precedents that guide correctional practice. Course material will broaden the individual’s perspective of the corrections environment, the civil rights of prisoners and responsibilities and liabilities of corrections officials.
Associate Degree Applicable
Course credit transfers to CSU.

CRIMINAL JUSTICE
(see also POLICE SCIENCE)

DIVISION: Criminal Justice
ADMINISTRATIVE DEAN: Gloria Fisher, J.D.
DIVISION SECRETARY: Sharen Chavira
CAMPUS OFFICE: Planetarium, 2nd Floor
(909) 384-4431
GLEN HELEN OFFICE: Sheriff’s Training Center
(909) 473-2695
LIAISON COUNSELOR: Joyce Smith, M.A.
(909) 384-4404

The Criminal Justice Department of classes are designed to meet the needs and interests of the general public, including individuals interested in law enforcement or related careers. Specialized training is available for persons interested in becoming a Basic Dispatcher or Forensic Specialist (Crime Scene Investigator).

Core competencies emphasized by courses in this department:
• Read and retain information.
• Speak clearly.
• Employ vocabulary of the subject studied.
• Demonstrate active listening skills.
• Evaluate authority and bias of information.
• Apply learned knowledge to new situations.
• Accept responsibility for own actions.
• Demonstrate respect for a diversity of ideas and the rights of others.
• Exhibit personal, professional and academic honesty.
• Display behavior consistent with ethical standards within a discipline.
• Apply lessons from the past to ethical issues faced in the present.
• Evaluate own ethical beliefs in relationship to moral dilemmas.
• Assume civic, political or social responsibilities.
• Recognize own strengths and weaknesses.
• Recognize own biases and values.
• Recognize own learning style. Give and receive constructive feedback.
• Develop time management skills.
• Set goals for educational, personal and professional development.
• Set goals to create balance in personal and professional life.
• Demonstrate etiquette in face-to-face and written interactions.
• Work effectively in group settings.
• Utilize conflict resolution skills.
• Demonstrate knowledge of and respect for other cultures.
• Demonstrate knowledge of and respect for one’s own culture.

The Criminal Justice courses listed may not be offered every semester due to instructor availability. Please refer to the college semester schedule of class offerings.

CRIME SCENE INVESTIGATION
This certificate is designed for persons considering a career in Forensic Sciences or Criminalistics. Covering critical components of Crime Scene Investigation (CSI), collection of evidence, courtroom testimony and presentation, forensic anthropology, entomology and odontology.

REQUIRED COURSES:                     UNITS
CRMJUS 086  Introduction to Crime Scene Investigation  2
CRMJUS 087  Intermediate Crime Scene Investigation  2
CRMJUS 088  Advanced Crime Scene Investigation  2
ADJUS 103   Concepts of Criminal Law  3
ADJUS 104   Legal Aspects of Evidence  3
Two (2) units of electives chosen from the following list:
CRMJUS 089   Forensic Photography  2
CRMJUS 090   Bloodstain Pattern Analysis  2
TOTAL UNITS:            14

COURSES OFFERED BY THE DEPARTMENT OF CRIMINAL JUSTICE:

CRMJUS 009  VERBAL JUDO      .25 UNIT
PREREQUISITE: None.
LABORATORY: 8 hours per semester.
This course provides a thorough overview that will enable students to apply the information they will learn about the philosophy of verbal judo. Introduces the proper procedures for using words as tool not weapons. Students will receive instruction on how to look creatively at conflict and use specific strategies and tactics to find peaceful resolutions.
Associate Degree Applicable

CRMJUS 015  CAMPUS SECURITY   1.50 UNITS
PREREQUISITE: None.
LECTURE: 24 hours per semester.
This course is directed toward the training need of campus security personnel employed in elementary schools, secondary schools and community colleges. Topics include: laws impacting school campuses; working with law enforcement personnel; tactical communications; school violence; gangs and disaster/emergency preparedness.
Associate Degree Applicable

CRMJUS 016  SCHOOL POLICE OFFICER  2 UNITS
PREREQUISITE: None.
LECTURE: 32 hours per semester.
This course is directed towards the training needs of the peace officers employed in elementary schools, secondary schools and community colleges. A school police course, which meets the requirements of SB1627 and Commission of Peace Officer Standards and Training (P.O.S.T.). Topics include: laws impacting school campuses; community relations; tactical communications; sexual harassment; violence/gangs; facility protection; disasters/emergencies.
Associate Degree Applicable

CRMJUS 018  COMMUNITY ORIENTED POLICING   1.50 UNITS
PREREQUISITE: None.
LECTURE: 24 hours per semester.
This course is intended to assist and define efficiency and equity as they pertain to community-oriented policing. An emphasis on analyzing the importance and use of a community assessment.
Associate Degree Applicable

CRMJUS 020  WORKPLACE VIOLENCE  .50 UNIT
PREREQUISITE: None.
LECTURE: 6 hours per semester and LABORATORY: 2 hours per semester.
This course is designed for the employee, employer, business owner or police officer who may become involved in a workplace violence incident. Students will learn the definition of workplace violence, will identify individual and organizational factors contributing to workplace violence, will learn prevention and intervention techniques, and will be introduced to the concepts of security analysis/threat assessment.
Associate Degree Applicable

CRMJUS 025  PUBLIC SAFETY INTERNSHIP ACADEMY MODULE 1A  1.75 UNITS
PREREQUISITE: None.
LECTURE: 18 hours per semester and LABORATORY: 31 hours per semester.
This course is designed to develop student's awareness of the Public Safety field, which includes law enforcement, corrections and fire safety. It is the first course in a series of eight to be completed by students who have a desire to pursue a career in public safety. Content covered in this course includes Professional Orientation, Ethics, Lifetime Fitness, Report Writing, Computer Applications, Weaponless Defense, Fire Conditions and Emergency Vehicle Operations Center Orientation.
Associate Degree Applicable
CRMJUS 026
PUBLIC SAFETY INTERNSHIP ACADEMY MODULE 1B
2.75 UNITS

PREREQUISITE: CRMJUS 025.
LECTURE: 38 hours per semester and
LABORATORY: 25 hours per semester.
This course is designed to develop students’ awareness of
the Public Safety field, which includes law enforcement,
corrections and fire safety. It is the second course in a
series of eight to be completed by students who have a
desire to pursue a career in public safety. Content covered
in this course includes Report Writing, Cultural
Awareness, Choices/Self-Esteem, Gangs, Animal/Insect
Danger, Patrol Procedures, Tactical Communications,
Support Units (K9/Horse/Aviation) and Glen Helen
Rehabilitation Center Orientation. LIMITED TO STUDENTS
WHO HAVE SUCCESSFULLY COMPLETED PROGRAM
PREREQUISITES.
Associate Degree Applicable

CRMJUS 027
PUBLIC SAFETY INTERNSHIP ACADEMY MODULE 2A
2.25 UNITS

PREREQUISITE: CRMJUS 026.
LECTURE: 27 hours per semester and
LABORATORY: 22 hours per semester.
This course is designed to develop students’ awareness of
the Public Safety field, which includes law enforcement,
corrections and fire safety. It is the third course in a series
of eight to be completed by students who have a desire to
pursue a career in public safety. Content covered in this
course includes Professional Orientation, Report Writing,
Traffic Control, Law Enforcement Math, Tactical
Communications, Emergency Vehicle Operations Center
Simulator, Administration of Justice, Railroad and Problem
Oriented Policing. LIMITED TO STUDENTS WHO HAVE
SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable

CRMJUS 028
PUBLIC SAFETY INTERNSHIP ACADEMY MODULE 2B
3 UNITS

PREREQUISITE: CRMJUS 027.
LECTURE: 40.5 hours per semester and
LABORATORY: 22.5 hours per semester.
This course is designed to develop students’ awareness of
the Public Safety field, which includes law enforcement,
corrections and fire safety. It is the fourth course in a
series of eight to be completed by students who have a
desire to pursue a career in public safety. Content covered
in this course includes Report Writing, Vehicle Stops,
Weaponless Defense, Narcotics, Lifetime Fitness, Sign
Language, Blood Borne Pathogens, Goals, Counseling
Team and Support Units (K-9/Horse/Aviation). LIMITED TO
STUDENTS WHO HAVE SUCCESSFULLY COMPLETED
PROGRAM PREREQUISITES.
Associate Degree Applicable

CRMJUS 031
PUBLIC SAFETY INTERNSHIP ACADEMY MODULE 4A
4.75 UNITS

PREREQUISITE: CRMJUS 030.
LECTURE: 62 hours per semester and
LABORATORY: 36 hours per semester.
This course is designed to develop students’ awareness of
the Public Safety field, which includes law enforcement,
corrections and fire safety. It is the seventh course in a
series of eight to be completed by students who have a
desire to pursue a career in public safety. Content covered
in this course includes Weaponless Defense, Report
Writing, Cultural Awareness, Choices/Self-Esteem, Crimes
Against Persons, Firearm Training, Fire Rescue,
Cardiopulmonary Resuscitation (CPR), First Aid and
Gangs. LIMITED TO STUDENTS WHO HAVE
SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable

CRMJUS 032
PUBLIC SAFETY INTERNSHIP ACADEMY MODULE 4B
5.75 UNITS

PREREQUISITE: CRMJUS 031.
LECTURE: 76 hours per semester and
LABORATORY: 50 hours per semester.
This course is designed to develop students’ awareness of
the Public Safety field, which includes law enforcement,
corrections and fire safety. It is the eighth course in a
series of eight to be completed by students who have a
desire to pursue a career in public safety. Content covered
in this course includes Report Writing, Scientific
Investigations, Search and Seizure, Weaponless Defense,
Driver Awareness, Firearm Training, Cultural Awareness,
Chemical Agents, Water Safety, Tactical Communications,
Aviation/Communications and Court Demeanor. LIMITED TO
STUDENTS WHO HAVE SUCCESSFULLY COMPLETED
PROGRAM PREREQUISITES.
Associate Degree Applicable

CRMJUS 036
BASIC INVESTIGATIVE TRACKING
.50 UNIT

PREREQUISITE: None.
LECTURE: 8 hours per semester and
LABORATORY: 8 hours per semester.
Covers the basic tracking techniques used by law
enforcement officers to apprehend suspects or to track
lost children or adults. Topics include: track sketch; track
preservation and processing; vehicle tracks; suspect
interviews; preparation for testifying in court.
Associate Degree Applicable

CRMJUS 040
CITIZENS' ORIENTATION TO LAW ENFORCEMENT
FUNCTIONS
1.75 UNITS

PREREQUISITE: None.
LECTURE: 26 hours per semester and
LABORATORY: 13 hours per semester.
This course is designed to inform the public of the
functions, organizational structure, and daily operations of
a Sheriff’s department. Students will visit the following
divisions: aviation, basic academy, county jail, crime lab,
firing range, homicide, SWAT and narcotics.
Associate Degree Applicable
CRMJUS 041
CRIME PREVENTION .50 UNIT
PREREQUISITE: CRMJUS 058.
LECTURE: 8 hours per semester.
REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable

CRMJUS 042
BUSINESS ACADEMY 1.50 UNITS
PREREQUISITE: None.
LECTURE: 22 hours per semester and
LABORATORY: 11 hours per semester.
This course is designed to inform business owners of rules, regulations and practices of a sheriff’s department. During this course, students will tour and learn about different divisions of the department. Students will visit the following divisions: aviation, basic academy, crime lab, and firing range. Special emphasis will be placed upon gang and narcotic awareness and crime prevention principles.
Associate Degree Applicable

CRMJUS 043
RAILROAD CROSSING .25 UNIT
PREREQUISITE: None.
LECTURE: 3 hours per semester and
LABORATORY: 5 hours per semester.
This course is designed to familiarize students with railroad crossing collisions, incidents involving trespassing on railroad property and the skills needed to properly investigate a grade crossing collision.
Associate Degree Applicable

CRMJUS 044
RESERVE AND VOLUNTEER COORDINATOR’S TRAINING 1.25 UNITS
PREREQUISITE: None.
LECTURE: 20 hours per semester and
LABORATORY: 4 hours per semester.
Designed to assist those charged with establishing and maintaining Reserve Peace Officer or Volunteer Units within law enforcement agencies with the information they need to succeed. Topics include: establishing agency policy and procedures; conducting background investigations; developing recruiting methods, managing, training and disciplining reserve officers and volunteers; liability issues.
Associate Degree Applicable

CRMJUS 046
CITIZENS ON PATROL 1.75 UNITS
PREREQUISITE: PE 231.
LECTURE: 24 hours per semester and
LABORATORY: 12 hours per semester.
This course is designed to inform the public of rules, regulations, and practices of a sheriff’s department Citizen’s on Patrol unit. Students will learn the necessary skills to perform as a citizen on patrol for the sheriff’s department. Skills include proper radio procedure, proper vehicle operations, public contact, telephone demeanor, and clerical/administrative duties. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable

CRMJUS 055
PREPARATION FOR POLICE ACADEMY 3.5 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week and
LABORATORY: 1.5 hours per week.
This course is designed to familiarize students with the requirements, scope, and commitments of the Police Academy Training Program. Includes assessing potential academy recruits for job related skills, such as physical endurance, report-writing, and comprehension of penal codes. Students who successfully complete this course are eligible for admission into the Police Academy Training Program.
Associate Degree Applicable

CRMJUS 058
PENAL CODE 832 COURSE 3.50 UNITS
PREREQUISITE: None.
LECTURE: 50 hours per semester and
LABORATORY: 26 hours per semester.
These functions include the history, professionalism, and ethics of law enforcement, the criminal justice system, community relations, criminal law, laws of arrest, search and seizure, presentation of evidence, report writing, use of force, preliminary investigation, arrest and control, firearms, and crimes against the justice system. MUST MEET STATE SCREENING REQUIREMENTS.
Associate Degree Applicable

CRMJUS 059
BASIC LAW ENFORCEMENT ACADEMY-LEVEL I OF THE MODULAR FORMAT 18.50 UNITS
PREREQUISITE: CRMJUS 060.
LECTURE: 225 hours per semester and
LABORATORY: 215 hours per semester.
This course is the third module in the Regular Basic Course Modular Format Training sequence. The intensive and disciplined instruction is designed to meet the minimum requirements of a full time peace officer or Level I reserve peace officer in the state of California. The course includes professional orientation, police-community relations, laws of arrest, evidence and search and seizure, vehicle and radio procedures, administration of justice, narcotics, gangs, patrol procedures, firearms, vehicle stops, domestic violence, defensive tactics, physical training, criminal investigations, traffic investigations, practical scenarios and testing. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES AND STATE SCREENING REQUIREMENTS.
Associate Degree Applicable

CRMJUS 060
RESERVE LEVEL II OFFICER 14.25 UNITS
PREREQUISITE: CRMJUS 058.
LECTURE: 203 hours per semester and
LABORATORY: 73 hours per semester.
This course will familiarize the Level II Reserve officers with training in various law enforcement functions. These law enforcement functions include the prevention and detection of crime and the general enforcement of the laws of this state while under the immediate supervision of a peace officer that has completed the basic training course for deputy sheriffs and police officers. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable
CRMJUS 061
RESERVE LEVEL III OFFICER
6 UNITS
PREREQUISITE: CRMJUS 058.
LECTURE: 64 hours per semester and
LABORATORY: 93 hours per semester.
This course will familiarize the Level III Reserve officers with training in various law enforcement functions. These law enforcement functions include law enforcement history, criminal justice system, tactical communication, crimes against persons and property, report writing, vehicle operations and pullover, traffic enforcement, custody, weaponless defense, first aid cardiopulmonary resuscitation, firearms/chemical agents, information systems, and cultural awareness. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable

CRMJUS 065
SIGN LANGUAGE FOR EMERGENCY PERSONNEL
1 UNIT
PREREQUISITE: CRMJUS 058.
LECTURE: 12 hours per semester and
LABORATORY: 12 hours per semester.
This course trains emergency personnel to interact with deaf victims, witnesses and suspects. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable

CRMJUS 066
INSTRUCTOR DEVELOPMENT
.75 UNIT
PREREQUISITE: None.
LECTURE: 8 hours per semester and
LABORATORY: 16 hours per semester.
This course will enable police instructors to improve their public speaking skills, understand adult learning theories, write learning objectives and lesson plans, use various methods of instruction effectively, and understand techniques of testing and remediation.
Associate Degree Applicable

CRMJUS 069
LIFETIME FITNESS AND COPING WITH STRESS
.50 UNIT
PREREQUISITE: CRMJUS 058.
LECTURE: 8 hours per semester.
Designed to assist officers in developing a personal fitness program, this course includes strategies to permanently control body fat, such as routine exercise and diet modification, and strategies for identifying and managing stress. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable

CRMJUS 070
BASIC DISPATCHER’S COURSE
6 UNITS
PREREQUISITE: None.
LECTURE: 92 hours per semester and
LABORATORY: 30 hours per semester.
Training in the terminology, codes, and skills required for employment as a public safety dispatcher. Satisfies Peace Officers Standards and Training (POST) requirements for basic training of Public Safety Dispatchers.
Associate Degree Applicable

CRMJUS 071
DISPATCHERS AND CRITICAL INCIDENTS
2.25 UNITS
PREREQUISITE: CRMJUS 070.
LECTURE: 36 hours per semester and
LABORATORY: 4 hours per semester.
This course is devoted to the experienced dispatcher’s role in critical incidents and officer survival. Course content will include: civil liabilities, communications under stress, physical disablers and psychological wellness, courtroom demeanor, sexual harassment, domestic violence, missing persons, hostage barricaded subject and suicidal subject situations, overview of telephone, radio and 800 megahertz systems. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
Associate Degree Applicable

CRMJUS 072x20
CIVIL UPDATE FOR DISPATCHERS
.50 UNIT
PREREQUISITE: CRMJUS 070.
LECTURE: 6 hours per semester and
LABORATORY: 2 hours per semester.
Does it seem like everybody wants to sue a police agency? Get updated information concerning civil liability issues related to dispatching, learn courtroom survival techniques in the event of a lawsuit, and get the latest information concerning court orders and civil disputes. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
This course may be taken twenty times.
Associate Degree Applicable

CRMJUS 073
DISASTER PREPAREDNESS FOR DISPATCHERS
.50 UNIT
PREREQUISITE: CRMJUS 070.
LECTURE: 6 hours per semester and
LABORATORY: 2 hours per semester.
The “big one” hits Southern California. Are you prepared to deal with the effects of this disaster during and immediately after? Learn what to expect when it hits and how to prepare, at home or at a dispatch center. Topics include extrication of employees, law enforcement response, fire and medical response, and how to protect your family. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable

CRMJUS 074x20
LEGAL UPDATE FOR DISPATCHERS
.25 UNIT
PREREQUISITE: CRMJUS 070.
LECTURE: 5 hours per semester and
LABORATORY: 3 hours per semester.
This class provides the student with an understanding of the legal requirements for missing persons and domestic violence reports, and provides the student with the current case law and statutory law information needed to completely perform public safety dispatching duties. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
This course may be taken twenty times.
Associate Degree Applicable
CRMJUS 075  CRITICAL INCIDENT FOR DISPATCHERS  .25 UNIT  
PREREQUISITE: CRMJUS 070.  
LECTURE: 5 hours per semester and  
LABORATORY: 3 hours per semester.  
Scenarios and basic skills will provide students with some new ideas and approaches to the everyday incidents. Students will have an understanding of what to tell the public in their inquiries, and where to get more information.  
REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.  
Associate Degree Applicable  

CRMJUS 076  STRESS MANAGEMENT FOR DISPATCHERS  .50 UNIT  
PREREQUISITE: CRMJUS 070.  
LECTURE: 6 hours per semester and  
LABORATORY: 2 hours per semester.  
This course is designed to identify the primary causes of chronic stress associated with public safety dispatching. Some sources of stress associated with dispatching will include multiple requests for priority traffic and managing large-scale critical incidents. Scenarios and basic skills will be provided to him/her with some new ideas and approaches to combat the sources of stress on the job.  
LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.  
Associate Degree Applicable  

CRMJUS 086  INTRODUCTION TO CRIME SCENE INVESTIGATION  2 UNITS  
PREREQUISITE: None.  
LECTURE: 24 hours per semester and  
LABORATORY: 30 hours per semester.  
This course is designed to be an introductory level course for those persons considering a career in Forensic Sciences or Criminalistics. Lecture topics include securing a crime scene, identification and collection of evidence at crime scenes, processing evidence and crime scenes for latent fingerprints, basic fingerprint pattern recognition, basic crime scene photography, documentation of the crime scene and the examinations performed, a discussion of common mistakes and how to avoid making them and an introduction to courtroom presentation and testimony.  
Associate Degree Applicable  

CRMJUS 087  INTERMEDIATE CRIME SCENE INVESTIGATION  2 UNITS  
PREREQUISITE: CRMJUS 086.  
LECTURE: 24 hours per semester and  
LABORATORY: 24 hours per semester.  
This course is designed to be an intermediate level course for those persons considering a career in Forensic Sciences or Criminalistics. Lecture topics include reviewing the critical components of the Basic CSI class, identification and collection of evidence at violent crime scenes, processing evidence and crime scenes for latent prints using advanced techniques, intermediate crime scene photography, documentation of the crime scene and the examinations performed, a discussion of common mistakes and how to avoid making them and courtroom presentation and testimony.  
Associate Degree Applicable  

CRMJUS 088  ADVANCED CRIME SCENE INVESTIGATION  2 UNITS  
PREREQUISITE: CRMJUS 087.  
LECTURE: 24 hours per semester and  
LABORATORY: 30 hours per semester.  
This course is designed to be an advanced level course for those persons considering a career in Forensic Sciences or Criminalistics. Lecture topics include reviewing the critical components of the Basic and second level CSI classes, identification and collection of evidence at crime scenes involving death (homicides, suicide, accidental death and homicides that involve additional violence, such as sexual assault), processing of the deceased for physical evidence, latent fingerprints and other clues relating to the identity of the assailant, shooting reconstruction and gravesite excavation. This course will also discuss other specialties available to the death investigator, such as Forensic Anthropology, Entomology and Odontology.  
Associate Degree Applicable  

CRMJUS 089  FORENSIC PHOTOGRAPHY  2 UNITS  
PREREQUISITE: None.  
LECTURE: 24 hours per semester and  
LABORATORY: 30 hours per semester.  
This course is designed as an overall photography class with an emphasis on techniques needed for crime scene and evidence documentation. This course will discuss different types of cameras used for crime scene documentation, their advantages and disadvantages and special applications. This course will cover manual camera operations necessary for close-up, nighttime and other specialty photographs.  
Associate Degree Applicable  

CRMJUS 090  BLOODSTAIN PATTERN ANALYSIS  2 UNITS  
PREREQUISITES: CRMJUS 088 and MATH 093 or MATH 103 or equivalent.  
LECTURE: 24 hours per semester and  
LABORATORY: 30 hours per semester.  
This course is designed to be an advanced level course for those persons considering a career in Forensic Sciences or Criminalistics. Lecture topics include the physical properties of blood, the dynamics of blood in flight, mathematical principles relating to bloodstain pattern interpretation and what this information can tell you about the crime that took place. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.  
Associate Degree Applicable
DANCE

DIVISION: Humanities
DIVISION DEAN: Marjorie Price, M.A., M.Ed.
DEPARTMENT HEAD: Leticia Hector, M.A.
Library Arts 239
(909) 384-8618
OTHER FACULTY: Denise Dale Jacobs, M.F.A.
DIVISION SECRETARIES: Kelly Adcock
(909) 384-8625
Cheryl Benner
(909) 384-8633
DIVISION OFFICE: North Hall 236
(909) 384-4445
LIAISON COUNSELOR: Juan Zepeda, M.S.
(909) 384-4404

Core competencies emphasized by courses in this department:

• Employ vocabulary of the subject studied.
• Give and receive constructive feedback.
• Evaluate diverse artistic works.
• Demonstrate creative thought through original expression.

COURSES OFFERED BY THE DEPARTMENT OF DANCE:

DANCE 101x2
BEGINNING MODERN DANCE 2 UNITS
PREREQUISITE: None.
LABORATORY: 6 hours per week.
A comprehensive survey of the beginning techniques of Modern Dance with a focus on vocabulary, placement and alignment, strength and flexibility exercises, and simple combinations of locomotor movement. This course may be taken twice.
Associate Degree Applicable
Course credit transfers to CSU and UC.

DANCE 102x4
INTERMEDIATE MODERN DANCE 2 UNITS
PREREQUISITE: DANCE 101x2.
LABORATORY: 6 hours per week.
A progressive study of Modern Dance including strengthening exercises, center work on balance and control, rhythmic awareness, and combinations of increasing speed, length, and complexity. This course may be taken four times.
Associate Degree Applicable
Course credit transfers to CSU and UC.

DANCE 103x2
BALLET 2 UNITS
PREREQUISITE: None.
LABORATORY: 6 hours per week.
A progressive study of Ballet including vocabulary, placement and alignment, strength and flexibility exercises, work on balance and control, and combinations of increasing speed, length, and complexity. This course may be taken two times.
Associate Degree Applicable
Course credit transfers to CSU and UC.

DANCE 105x2
BEGINNING JAZZ DANCE 2 UNITS
PREREQUISITE: None.
LABORATORY: 6 hours per week.
A comprehensive survey of the beginning techniques of Jazz Dance with a focus on vocabulary, placement and alignment, strength and flexibility exercises, and simple combinations of locomotor movement. This course may be taken two times.
Associate Degree Applicable
Course credit transfers to CSU and UC.

DANCE 106x4
INTERMEDIATE JAZZ DANCE 2 UNITS
PREREQUISITE: DANCE 105x2.
LABORATORY: 6 hours per week.
A progressive study of Jazz Dance including strengthening exercises, work on balance and control, rhythmic awareness, and combinations of increasing speed, length, and complexity. This course may be taken four times.
Associate Degree Applicable
Course credit transfers to CSU and UC.

DANCE 107x2
TAP DANCE 2 UNITS
PREREQUISITE: None.
LABORATORY: 6 hours per week.
A comprehensive study and practice of tap as presented through physical strengthening, rhythmic awareness, and the learning of tap combinations and routines, vocabulary, and stylistic concerns. This course may be taken two times.
Associate Degree Applicable
Course credit transfers to CSU and UC.

DANCE 114x4
DANCE REHEARSAL AND PERFORMANCE 4 UNITS
PREREQUISITE: None.
LECTURE: 2 hours per week
LABORATORY: 6 hours per week.
Instruction and supervision of rehearsal and performance of various dance productions. ENROLLMENT IN THIS CLASS IS CONTINGENT WITH AN AUDITION FOR A CURRENT DANCE PRODUCTION. This course may be taken four times.
Associate Degree Applicable
Course credit transfers to CSU and UC.

DANCE 200
DANCE HISTORY AND APPRECIATION 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
A comprehensive survey of dance from primitive time through the 20th century. Emphasis will be placed on historical perspectives revealing dance as an emerging art form. Course material also includes the relation of dance to religion and myth, as a reflection of cultural and social attitudes and mores, and its relation to other art forms.
Associate Degree Applicable
Course credit transfers to CSU and UC.
DANCE 203
CHOREOGRAPHY  3 UNITS
PREREQUISITE: None.
LECTURE: 2 hours per week and
LABORATORY: 2 hours per week.
An introduction and analysis of the elements of dance composition. A comprehensive survey of theories, techniques, and historical perspectives of dance composition, as well as the practical application of these elements through the actual physical activity of creating and teaching dance compositions. Associate Degree Applicable
Course credit transfers to CSU and UC.

DANCE 206x4
DANCE PRODUCTION  4 UNITS
PREREQUISITE: None.
LECTURE: 2 hours per week and
LABORATORY: 6 hours per week.
Instruction and analysis of all aspects of dance production including organizing a dance production; publicity and marketing; budget; theatrical and dance lighting; set design; costumes and makeup; and instruction in elements of physical theater, such as stage terminology, stage directions, and roles of theatre personnel. This course may be taken four times. Associate Degree Applicable
Course credit transfers to CSU and UC.

DIESEL

DIVISION: Applied Technology & Transportation
DIVISION DEAN: Thomas Bauman, M.S., P.E.
DIRECTOR: Kevin Anderson, M.B.A.
FACULTY: Daniel Hook, A.S.
DEPARTMENT SECRETARY: Amanda Moody
DEPARTMENT OFFICE: 264 S. Leland Norton Way
DEPARTMENT OFFICE: Suite A120, San Bernardino
LIAISON COUNSELOR: Jennifer Mendoza, M.S.
LIAISON COUNSELOR: (909) 384-4404

Core competencies emphasized by courses in this department:
• Employ vocabulary of the subject studied.
• Find and interpret information.
• Apply learned knowledge to new situations.
• Accept responsibility for own actions.
• Exhibit personal, professional and academic honesty.
• Work effectively in group settings.
• Utilize conflict resolution skills.

HEAVY-DUTY DIESEL TECHNICIAN CERTIFICATE
This certificate is designed to prepare students for entry-level positions repairing and maintaining diesel engines in trucks, buses, locomotives, heavy vehicles, and mobile heavy-duty equipment. 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
CIT 101 Introduction to Computer Literacy  3
DIESEL 021 Diesel Engine - Heavy Duty  4
DIESEL 022 Heavy-Duty Truck Brakes  2
DIESEL 023 Heavy-Duty Truck Suspension & Steering  2
DIESEL 024 Advanced Heavy-Duty Diesel Engines  4
DIESEL 028 Heavy-Duty Truck Preventive Maintenance Service  4
DIESEL 030 Advanced Heavy-Duty Truck Systems  4
TECALC 950 Shop Calculations  3
WELD 123 Oxy-Acetylene Welding  3
WELD 077x4 Continuous Wire Welding  1
TOTAL UNITS: 30

COURSES OFFERED BY THE DEPARTMENT OF DIESEL:

DIESEL 020
DIESEL ENGINES – LIGHT DUTY  4 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week and
LABORATORY: 3 hours per week.
Theory and practical shop work in the repair, operation and maintenance of light duty automotive diesel engines and fuel injection systems. Course includes general trouble-shooting and diagnostic testing. This course may be used in preparation for the Automotive Service Excellence (ASE) National Test.
Associate Degree Applicable

DIESEL 021
DIESEL ENGINES-HEAVY DUTY  4 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week and
LABORATORY: 3 hours per week.
Theory and practical shop work in repair, operation, and maintenance of heavy-duty industrial diesel engines and fuel injection systems. Course includes general trouble-shooting and diagnostic testing. This course may be used in preparation for the automotive Service Excellence (ASE) National Test.
Associate Degree Applicable

DIESEL 022
HEAVY-DUTY TRUCK BRAKES  2 UNITS
PREREQUISITE: None.
LECTURE: 1.5 hours per week and
LABORATORY: 1.5 hours per week.
Theory and practical shop work in the construction and repair of heavy-duty truck brake systems and components. Includes principles of hydraulic and pneumatic brake systems, anti-lock, and computer controlled braking systems used in today's modern heavy-duty diesel trucks and semi-tractors.
Associate Degree Applicable

DIESEL 023
HEAVY-DUTY TRUCK SUSPENSION AND STEERING  2 UNITS
PREREQUISITE: None.
LECTURE: 1.5 hours per week and
LABORATORY: 1.5 hours per week.
Theory and practical shop work in the construction, operation, and repair of heavy-duty truck suspension and steering components. Includes principles of hydraulic and pneumatic steering and suspension systems.
Associate Degree Applicable
DIESEL 024
ADVANCED HEAVY-DUTY DIESEL ENGINES  4 UNITS
PREREQUISITE: DIESEL 021.
LECTURE: 3 hours per week and
LABORATORY: 3 hours per week.
Theory and practical shop work in the repair, operation, and the
construction of heavy
duty diesel engines. Includes principles of diesel turbo
cchargers and blowers; two and four cycle combustion
systems. This course is an intermediate engine rebuild
class.
Associate Degree Applicable

DIESEL 025x3
HEAVY-EQUIPMENT DIESEL ENGINES LABORATORY
1 UNIT
PREREQUISITE: DIESEL 024.
LABORATORY: 3 hours per week.
Practical shop work in the construction, operation, and
repair of automotive, heavy-duty, and heavy-equipment
diesel engines. Includes principles of diesel fuel injection
pumps, governors, and injectors; turbo-charges and
blowers; two and four-cycle combustion systems. This
course may be taken three times.
Associate Degree Applicable

DIESEL 026
CONTROLLED DIESEL ENGINES  4 UNITS
PREREQUISITE: DIESEL 024.
LECTURE: 3 hours per week and
LABORATORY: 3 hours per week.
Theory and practical shop work in the repair, operation, and
maintenance of computer controlled diesel engines. Includes
general trouble-shooting and diagnostics using assorted
electronic and computerized test equipment on operable
computer controlled diesel engines.
Associate Degree Applicable

DIESEL 027x3
MICRO-COMPUTER CONTROLLED DIESEL ENGINES
LABORATORY
1 UNIT
PREREQUISITE: DIESEL 026.
LABORATORY: 3 hours per week.
Practical shop work in the repair, operation, and
maintenance of micro-computer controlled diesel engines.
Includes general troubleshooting and diagnostics using
diverse electronic and computerized test equipment on
operable
computer controlled diesel engines. Caterpillar engines is emphasized. This course may be
taken three times.
Associate Degree Applicable

DIESEL 028
HEAVY-DUTY TRUCK PREVENTIVE MAINTENANCE
SERVICE  4 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week and
LABORATORY: 3 hours per week.
Theory and practical shop work in maintenance and
preventive maintenance service of heavy-duty trucks and
semi-tractor systems. Fundamentals of truck components
and systems are explained as students perform routine
service tasks on a Ford semitractor truck. Course is
designed to provide students the needed skills and
knowledge to perform entry level labor tasks in the heavy-
duty truck service industry.
Associate Degree Applicable

DIESEL 030
ADVANCED HEAVY-DUTY TRUCK SYSTEMS  4 UNITS
PREREQUISITE: DIESEL 028.
LECTURE: 3 hours per week and
LABORATORY: 3 hours per week.
Advanced level theory and practical workshop in maintenance, air conditioning, ABS, computers, and
operations of the heavy-duty truck and semi-tractors
systems.
Associate Degree Applicable

DIESEL 034
INTRODUCTION TO HEAVY-DUTY COMPRESSED
NATURAL GAS VEHICLE SYSTEMS  2 UNITS
PREREQUISITE: DIESEL 026.
LECTURE: 1.5 hours per week and
LABORATORY: 1.5 hours per week.
This course provides theory and hands-on experience in the
operation, service, inspection, and maintenance of
compressed natural gas (CNG) systems. This course
prepares students for ASE Alternate Fuels Test (F-1).
Associate Degree Applicable

DIESEL 035
HEAVY-DUTY VEHICLE AUTOMATIC
TRANSMISSIONS  2 UNITS
PREREQUISITE: None
LECTURE: 1.5 hours per week and
LABORATORY: 1.5 hours per week.
This course provides theory and hands-on experience with
heavy-duty vehicle automatic transmissions operation,
construction, service and overhaul procedures. The
purpose of the class is to prepare the students to
successfully troubleshoot and repair heavy-duty vehicle
automatic transmissions as well medium-duty vehicle
automatic transmissions. Classroom topics include, but
are not limited to: torque converter, power flows, vehicle
interfaces, and troubleshooting. Lab work will consist of
disassembly, inspection of all parts, and transmission
reassembly.

ECONOMICS

DIVISION:  Business & Information Technology
DIVISION DEAN:  Margaret Ortiz, M.A.
DEPARTMENT HEAD:  Nickolas Zoumbos, M.S.
Business 100D
(909) 384-8912
FACULTY:
Walt Chatfield, Ph.D.
J. D. Dulgeroff, Ph.D.
DIVISION SECRETARY:  Chris Williams
DIVISION OFFICE:  Business 101
(909) 384-8908
LIAISON COUNSELOR:  Marco Cota, M.A.
(909) 384-4404

Economics is concerned with the study of how people and
societies produce various commodities and distribute them
for consumption, now or in the future, among various
persons and groups in society. As a descriptive, academic
discipline, it is concerned with accurate portrayals of
national economics as well as those of regions, firms, and
individuals. As an analytic discipline, its tools are used to
order, modify, and describe economic activity.

Training in economics, supplemented by course work in other
disciplines, provide excellent preparations for particular careers in industry, government, and many
professions including management, law, education, public
administration or consulting. The study of economics also provides useful intellectual training for individuals who may be uncertain about their future plans.

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

Core competencies emphasized by courses in this department:
- Read and retain information.
- Write clearly.
- Employ vocabulary of the subject studied.
- Find and interpret information.
- Locate, evaluate and select evidence to support or discredit an argument.
- Construct a persuasive argument.
- Apply learned knowledge to new situations.
- Apply principles of scientific reasoning to solve problems.
- Defend a logical hypothesis to explain observed phenomenon.

COURSES OFFERED BY THE DEPARTMENT OF ECONOMICS:

**ECON 100**
**INTRODUCTION TO ECONOMICS** 3 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week.  
Survey of the American economy and the development, functioning and significance of economic institutions. Emphasis on economic growth, the national debt, inflation and international economic problems.  
**Associate Degree Applicable**  
**Course credit transfers to CSU and UC.**

**ECON 200**
**INTRODUCTION TO MACROECONOMICS** 3 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week.  
Introduction to macroeconomic theory and the role of fiscal and monetary policies in economics with emphasis on national economic problems.  
**Associate Degree Applicable**  
**Course credit transfers to CSU and UC.**  
**Limited transfer to UC; contact a counselor for details.**

**ECON 200H**
**INTRODUCTION TO MACROECONOMICS – HONORS** 3 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week.  
Introduction to macroeconomic theory and the role of fiscal and monetary policies in economics with special emphasis on national economic problems. Enrollment is limited to students eligible for the Honors Program.  
**Associate Degree Applicable**  
**Course credit transfers to CSU and UC.**  
**Limited transfer to UC; contact a counselor for details.**

**ECON 201**
**PRINCIPLES OF MICROECONOMICS** 3 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week.  
Introduction to microeconomic theory including international economics, economic development, and comparative economic systems with emphasis on microeconomic problems.  
**Associate Degree Applicable**  
**Course credit transfers to CSU and UC.**  
**CAN (California Articulation Number): ECON 4**

**ECON 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 BUSCAL 208.  
**Associate Degree Applicable**  
**Course credit transfers to CSU and UC.**  
**Limited transfer to UC; contact a counselor for details.**

**ECON 222**
**INDEPENDENT STUDY IN ECONOMICS** 1-3 UNITS  
**PREREQUISITES:** ECON 200 and ECON 201.  
**LABORATORY:** 3-9 hours per week.  
Assigned projects involving research and analysis of selected topics or directed study for students who are interested in furthering their knowledge of economics 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.**  
**Limited transfer to UC; credit determined after transfer to UC.**

**ECON 285**
**HONORS IN ECONOMICS** 3 UNITS  
**PREREQUISITE:** ECON 200 or ECON 201.  
**COREQUISITE:** ECON 200 or ECON 201.  
**LECTURE:** 3 hours per week.  
Building on the concepts introduced in Principles of Economics (200 or 201), this class focuses on contemporary social issues including the educational, energy, and environmental impact of economic decisions, the use of computers in the field of economics, and methods for conducting research in the fields of macro and micro-economics.  
**Associate Degree Applicable**  
**Course credit transfers to CSU and UC.**
EDUCATION

DIVISION: Social Science & Human Development
DIVISION DEAN: Janice Noble, M.Ed.
DEPARTMENT HEAD: Juliann Martin, M.A.
OTHER FACULTY: Kathryn Adams, M.S.
Kellie Barnett, M.S.
Denise Knight, B.A.
Susan Shimoff, M.A.
Debra Ward, M.S.
DIVISION SECRETARY: To Be Announced
DIVISION OFFICE: Liberal Arts, Room 122
LIAISON COUNSELOR: Mary Beth Barrios, M.S.

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.

ELECTRICITY/ELECTRONICS/ TECHNICAL CALCULATIONS

DIVISION: Applied Technology & Transportation
DIVISION DEAN: Thomas Bauman, M.S., P.E.
DEPARTMENT HEAD: Edward Szumski, M.A.
OTHER FACULTY: Carlos Busselle, B.A.
DIVISION SECRETARY: Patsy Martinez
DIVISION OFFICE: Technical 108
LIAISON COUNSELOR: Jennifer Mendoza, M.S.

The Electricity/Electronics curriculum is designed to provide entry-level job training in this broad and expanding field. These classes lead to trainee positions in maintenance, installation, field service, networking, and apprenticeship in the area of specialization. Students who seek a Certificate or an Associate of Science Degree in the fields of: 1) Electronics Technology, 2) Communication Engineering Technology, 3) Computer Engineering Technology, 4) Electric Power Technology, or (5) Avionics Technology, will complete a series of Electronics Technology courses common to electricity, communications, and computers and then complete the appropriate area of specialization. All classes must be completed with a grade of C or better.

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

Core competencies emphasized by courses in this department:
• Read and retain information.
• Employ vocabulary of the subject studied.
• Find and interpret information.

ELECTRICITY/ELECTRONICS ASSOCIATE OF SCIENCE DEGREE

To graduate with a specialization in one of the Electricity/Electronics 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.

ELECTRICITY/ELECTRONICS CERTIFICATES

These certificates are designed to provide students with the fundamentals of electronics technology by offering courses common to electricity, communications and computers. These preparation can be for transfer to the university or for further study in areas of communications, computers, electricity, and aircraft electronics. It can also prepare students for entry-level positions in electronics maintenance, installation, field service, networking, and apprenticeship in the field of electronics technology. 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. Students should have normal color vision, hand/eye coordination and the ability to lift over 50 pounds.

1. ELECTRONICS TECHNOLOGY
(Core Courses required for all specializations)

REQUIRED COURSES: UNITS
TECALC 087 Technical Calculations 4
ELECTR 110 Direct Current Circuit Analysis 3
ELECTR 111 Direct Current Circuit Laboratory 1
ELECTR 115 Alternating Current Circuit Analysis 3
ELECTR 116 Alternating Current Circuit Lab 1
ELECTR 155 Electronic Drawing and Assembly 3
ELECTR 230 Semiconductor Devices 3
ELECTR 235 Solid State Circuit Analysis 4
ELECTR 265 Digital Logic Design 4
ELECTR 266 Microprocessor Technology 4
ELECTR 270 Linear Integrated Circuit Analysis 4

TOTAL UNITS: 34

2. COMMUNICATION ENGINEERING TECHNOLOGY

This certificate is designed to provide students with the fundamentals of electronics technology as it applies to communications engineering. The curriculum prepares students for entry-level positions in electronics communications maintenance, installation, field service, networking, and apprenticeship in the field of communications engineering technology. 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.
Complete the REQUIRED COURSES for Electronics Technology plus -
**REQUIRED COURSES:**
- ELECTR 220B F.C.C. Rules and Regulations: 3 UNITS
- ELECTR 250B Radio Transmitters, Receivers and Antennas: 4 UNITS
- ELECTR 255B Telephone Networking: 4 UNITS
**TOTAL UNITS:** 45

3. COMPUTER ENGINEERING TECHNOLOGY
This certificate is designed to provide students with the fundamentals of electronics technology as it applies to computer engineering. The curriculum prepares students for entry-level positions in computer maintenance, installation, field service, networking, and apprenticeship in the field of computer engineering technology. 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.

Complete the REQUIRED COURSES for Electronics Technology plus -
**REQUIRED COURSES:**
- ELEC 217B Industrial Electricity: 4 UNITS
- ELECTR 158 Microcomputer Operation: 2 UNITS
- ELECTR 280B Computer Operations and Maintenance: 4 UNITS
**TOTAL UNITS:** 44

4. ELECTRIC POWER TECHNOLOGY
This certificate is designed to provide students with the fundamentals of electronics technology as it applies to industrial electricity. The curriculum prepares students for entry-level positions in electrical maintenance, installation, field service, networking, and apprenticeship in the field of electronic power technology. 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.

Complete the REQUIRED COURSES for Electronics Technology plus -
**REQUIRED COURSES:**
- ELEC 216B Introduction to Industrial Electricity: 4 UNITS
- ELEC 217B Industrial Electricity: 4 UNITS
- ELEC 218B Controlling Industrial Electricity: 4 UNITS
**TOTAL UNITS:** 46

5. AVIONICS TECHNOLOGY
This certificate is designed to provide students with the fundamentals of electronics technology as it applies to avionics. The curriculum prepares students for entry-level positions in aircraft electricity, maintenance, installation, field service, networking, and apprenticeship in the field of avionics technology. 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.

Complete the REQUIRED COURSES for Electronics Technology plus -
- AERO 121* Aviation Fundamentals: 3 UNITS
- AERO 140C Instrument Ground School & Flight Sim: 4 UNITS
- ELECTR 220B FCC Rules and Regulations: 3 UNITS
- ELECTR 250A Radio Transmitters, Receivers, and Antennas: 4 UNITS
- ELECTR 257B Navigation & Communication Systems: 4 UNITS
**TOTAL UNITS:** 52

* AERO 102 & 103 can be substituted for AERO 121 & 140C

**COURSES OFFERED BY THE DEPARTMENT OF ELECTRICITY/ELECTRONICS:**

**ELEC 012**
UTILITY POLE CLIMBING: OSPCTP 3.25 UNITS
**PREREQUISITE:** None.
**LECTURE:** 2 hours per week and
**LABORATORY:** 4 hours per week.
The study of the procedures, safety practices and equipment used in telephone and utility pole climbing. Subjects include: knots, handlines, cable repair, pole climbing, blueprints, cable placement, and pole handling.
**DOCTOR'S VERIFICATION THAT THERE IS AN ABSENCE OF FEAR OF HEIGHTS, HEART TROUBLE, DIZZINESS, FAINTING SPELLS, HIGH BLOOD PRESSURE, BACK TROUBLE, ASTHMA, EPILEPSY; OR A PHYSICIAN'S STATEMENT THAT PRE-EXISTING CONDITIONS WILL NOT AFFECT THE STUDENT'S ABILITY TO SAFELY COMPLETE THIS COURSE IS REQUIRED.**

Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.

**ELEC 216B**
INTRODUCTION TO INDUSTRIAL ELECTRICITY 4 UNITS
**PREREQUISITE:** None.
**LECTURE:** 3 hours per week and
**LABORATORY:** 3 hours per week.
The study of electrical power transmission, the National Electrical Code, electrical blueprints, and residential and commercial wiring.

**ELEC 217B**
INDUSTRIAL ELECTRICITY 4 UNITS
**PREREQUISITE:** ELECTR 115.
**LECTURE:** 3 hours per week and
**LABORATORY:** 3 hours per week.
The study of DC motors, single and polyphase AC motors, and the necessary controls and measuring equipment, industrial circuit protection and switching equipment.

**ELEC 218B**
CONTROLLING INDUSTRIAL ELECTRICITY 4 UNITS
**PREREQUISITES:** ELECTR 115 and ELECTR 116.
**LECTURE:** 3 hours per week and
**LABORATORY:** 3 hours per week.
The study of DC, AC and polyphase motor operation, of mechanical and programmable machine controls, relays and programmable controllers, ladder logic diagrams and the communication network linking the programmer, the controller and the machine.

**Course credit transfers to CSU.**
ELECTR 110
DIRECT CURRENT CIRCUIT ANALYSIS 3 UNITS
PREREQUISITE: None.
COREQUISITE: ELECTR 111.
LECTURE: 3 hours per week.
A comprehensive course in direct circuit analysis including Ohm's Law, series and parallel circuit analysis, voltage and current dividers, DC meters, Kirchhoff's Laws, magnetic circuits, and network theorems.
Associate Degree Applicable
Course credit transfers to CSU and UC.

ELECTR 111
DIRECT CURRENT CIRCUIT LABORATORY 1 UNIT
PREREQUISITE: None.
COREQUISITE: ELECTR 110.
LABORATORY: 3 hours per week.
The laboratory complement to ELECTR 110 including experiments reinforcing the theory of electricity and the necessary technical skills.
Associate Degree Applicable
Course credit transfers to CSU and UC.

ELECTR 115
ALTERNATING CURRENT CIRCUIT ANALYSIS 3 UNITS
PREREQUISITES: ELECTR 110 and ELECTR 111.
COREQUISITE: ELECTR 116.
LECTURE: 3 hours per week.
An in-depth analysis of alternating current circuits including AC generation and transformation, inductance and inductive circuits, capacitance and capacitive circuits, time constants, rectangular and polar notation, AC circuit analysis, resonance and filters.
Associate Degree Applicable
Course credit transfers to CSU and UC.

ELECTR 116
ALTERNATING CURRENT CIRCUIT LABORATORY 1 UNIT
PREREQUISITES: ELECTR 110 and ELECTR 111.
COREQUISITE: ELECTR 115.
LABORATORY: 3 hours per week.
The laboratory complement to ELECTR 115 including skill training in oscilloscopes QT boards, function generators, and other test equipment.
Associate Degree Applicable
Course credit transfers to CSU and UC.

ELECTR 155
ELECTRONIC DRAWING AND ASSEMBLY 3 UNITS
PREREQUISITE: None.
LECTURE: 2 hours per week and
LABORATORY: 3 hours per week.
Skill in interpreting and creating electronic drawings, circuit board construction and assembly. Emphasis on drawings, soldering, assembly, and fundamentals of CAD.
Associate Degree Applicable
Course credit transfers to CSU.

ELECTR 158
MICROCOMPUTER OPERATION 2 UNITS
PREREQUISITE: None.
LECTURE: 1.5 hours per week and
LABORATORY: 1.5 hours per week.
A survey course in the technical applications of the microcomputer systems including computer interconnections, system capabilities and limitations, flowcharting, trouble isolation techniques and the use of microcomputers as calculating devices.
Associate Degree Applicable
Course credit transfers to CSU.

ELECTR 198
ELECTRONICS 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 to earn units using the following formula: For paid work, 75 hours = 1 unit; for volunteer work, 60 hours = 1 unit. Students may earn a total of 16 units toward graduation in Work Experience 198 courses. Students MUST be working for pay or volunteer before registering for a Work Experience class. NOTE: Only one section of Work Experience may be taken during a semester.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

ELECTR 220B
F.C.C. RULES AND REGULATIONS 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
A review of the requirements for the General Radiotelephone Operator's License offered by the Federal Communications Commission.
Associate Degree Applicable
Course credit transfers to CSU.

ELECTR 222
SPECIAL PROBLEMS IN ELECTRONICS I 1 UNIT
PREREQUISITE: ELECTR 116.
INDEPENDENT STUDY: 3 hours per week.
Assigned problems involving laboratory work for selected students who are interested in furthering their knowledge of electronics 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 for elective credit only.

ELECTR 223
SPECIAL PROBLEMS IN ELECTRONICS II 2 UNITS
PREREQUISITE: ELECTR 116.
INDEPENDENT STUDY: 6 hours per week.
Assigned problems involving laboratory work for selected students who are interested in furthering their knowledge of electronics 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 for elective credit only.
ELECTR 230
SEMIConDUCTOR DEVICES 3 UNITS
PREREQUISITE: ELECTR 110.
LECTURE: 3 hours per week.
A study of semiconductor devices including the chemistry and physics of the structure of matter, the structure of the atom and the operation of semiconductor of devices based on energy level analysis.
Associate Degree Applicable
Course credit transfers to CSU.

ELECTR 235
SOLID STATE CIRCUIT ANALYSIS 4 UNITS
PREREQUISITE: ELECTR 230.
LECTURE: 3 hours per week and LABORATORY: 3 hours per week.
An analysis of discrete solid state circuits and their design including diodes and their applications; circuit configurations; amplifiers and amplification; biasing techniques; quiescent point stabilization; feedback principles; FETs; photo devices; multi-stage amplifiers and power devices; multi-stage amplifiers and power amplifiers; breadboarding and evaluation of designed circuits using discrete components.
Associate Degree Applicable
Course credit transfers to CSU.

ELECTR 250B
RADIO TRANSMITTERS, RECEIVERS AND ANTENNAS 4 UNITS
PREREQUISITE: ELECTR 115.
LECTURE: 3 hours per week and LABORATORY: 3 hours per week.
Course includes radio frequency amplifiers, oscillators, signal spectra, elements of noise, AM and FM modulation and demodulation, AM and FM transmitter and receiver systems, transmitter and receiver circuits, frequency and phase modulation and demodulation, phase locked loops, pulse and digital modulation and demodulation and data communication techniques.
Associate Degree Applicable
Course credit transfers to CSU.

ELECTR 255B
TELEPHONE NETWORKING 4 UNITS
PREREQUISITE: ELECTR 115.
LECTURE: 3 hours per week and LABORATORY: 3 hours per week.
Course includes telephone topology with emphasis on the Open System Interconnection (OSI) model, telephony color code, tools, patch panels, phone wiring and installation, voice and data block wiring, installation, and programming/troubleshooting a digital key system and network.
Associate Degree Applicable
Course credit transfers to CSU.

ELECTR 257B
NAVIGATION AND COMMUNICATION SYSTEMS 4 UNITS
PREREQUISITE: ELECTR 250B.
LECTURE: 3 hours per week and LABORATORY: 3 hours per week.
Bench test, installation and ramp test of transmitter and receiver systems and their operating principles. Systems include Auto Direction Finder, Very High Frequency Omairange, LORAN-C, Omega, INS, DME, ILS, VHF comm, HF comm, FM transceivers and transponder.
Associate Degree Applicable
Course credit transfers to CSU.

ELECTR 265
DIGITAL LOGIC DESIGN 4 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week and LABORATORY: 3 hours per week.
Provides technicians, engineers, and programmers with a working knowledge of digital logic circuits and their application to logic circuits to computers. Includes theory and experience necessary to understand and analyze digital circuits logic and systems.
Associate Degree Applicable
Course credit transfers to CSU.

ELECTR 266
MICROPROCESSOR TECHNOLOGY 4 UNITS
PREREQUISITE: ELECTR 265.
LECTURE: 3 hours per week and LABORATORY: 3 hours per week.
Fundamental principles of microprocessors, 8080 series with emphasis on their operation and applications in radio, VCRs, and traffic control. Makes use of assembly language interfacing with both analog and digital circuitry. Includes breadboarding circuits and controlling them with the 8080 microprocessor.
Associate Degree Applicable
Course credit transfers to CSU.

ELECTR 270
LINEAR INTEGRATED CIRCUIT ANALYSIS 4 UNITS
PREREQUISITE: ELECTR 115 and ELECTR 116.
LECTURE: 3 hours per week and LABORATORY: 3 hours per week.
A review of bipolar transistor fundamentals and differential amplifiers with emphasis on inner connections and circuit designs using integrated circuit operational amplifiers, phase-lock loops, and current differentiating amplifiers. Includes breadboarding and evaluation of various types of active linear and pulse circuits involving operational amplifiers and phase-lock loops.
Associate Degree Applicable
Course credit transfers to CSU.

ELECTR 280B
MINI COMPUTER OPERATION AND MAINTENANCE 4 UNITS
PREREQUISITE: ELECTR 266.
LECTURE: 3 hours per week and LABORATORY: 3 hours per week.
Provides technicians and engineers with a working knowledge of the principles and analysis techniques applicable to computer operations and maintenance. Includes the theory and experience necessary to understand and analyze computer circuitry as needed for entry-level work in the computer and electronics industry.
Associate Degree Applicable
Course credit transfers to CSU.

ELECTR 290B
INDUSTRIAL COMPUTERS AND ROBOTICS MAINTENANCE 4 UNITS
PREREQUISITE: ELECTR 266.
LECTURE: 3 hours per week and LABORATORY: 3 hours per week.
A comprehensive study of computers and robots used in industry. Includes diagnostics and programming for controlling robots, machines and medical equipment.
Associate Degree Applicable
Course credit transfers to CSU.
TECALC 950
SHOP CALCULATIONS 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
A basic skills course designed as a review of whole numbers, fractions, decimals, problem solving methods, and practical measurements.
Not applicable to the Associate Degree

TECALC 087
TECHNICAL CALCULATIONS 4 UNITS
PREREQUISITE: None.
LECTURE: 4 hours per week.
Practical use and applications of technical calculations on topics such as electrical, measurements, temperature, volume, weight, and positioning. Includes the number line, working with dedicated formula, applied problems, geometric principles, graphs, right triangles, coordinate systems, and scientific notation.
Not applicable to the Associate Degree
Sequence of English Courses at SBVC

Your placement within any of the sequences is dependent on the results of the SBVC Reading and English assessment process.

(Contact a counselor for details and the Admissions Office for assessment dates.)

ESL students must also meet the READ 950 prerequisite

ESL 907

ESL 930

ESL 931

ESL 940

ESL 941

ENGL 914

ENGL 015

ENGL 101 or
ENGL 101H

ENGL 102 or
ENGL 102H

READ 910

READ 920

READ 950

Effective Fall 2004:
Prerequisite for ENGL 914

(For additional reading classes, see Reading sequence)

Effective Fall 2004:
Prerequisite: READ 950 or eligibility for READ 015 as determined by the SBVC assessment process

-----

Meets the graduation requirements for most AA or AS degrees

-----

Required for transfer to most four-year Colleges and universities

-----

Satisfies CSU and UC “Critical Thinking” requirement

ADVANCED ENGLISH COURSES

Advanced English Courses: News Writing, Creating Writing, and Literature courses (ENGL 120 through ENGL 281) have a prerequisite of ENGL 101

ENGL 120 Fundamentals of News Writing
ENGL 122x4 Journalism Production
ENGL 151 Freshman Composition and Literature
ENGL 153 Literature and Film
ENGL 155 Children’s Literature
ENGL 161 Women Writers
ENGL 163 Chicano Literature
ENGL 165 African-American Literature
ENGL 175 Literature and Religion of the Bible
ENGL 232 Creative Writing
ENGL 260 American Literature: to the Mid-1800s
ENGL 261 American Literature: from the Mid-1800s to the Present
ENGL 270 English Literature to the 18th Century
ENGL 271 English Literature from the 18th Century to the Present
ENGL 275 Shakespeare
ENGL 280 World Literature to the 17th Century
ENGL 281 World Literature from the 17th Century to the Present
The English Department offers courses in composition, literature, journalism, creative writing, English as a second-language, and basic skills. These courses are designed to help students develop skills in reading perceptively, thinking critically, and writing effectively. The Writing Center, located in Liberal Arts 201, offers supplemental support to assist students in developing these skills.

In order to be placed into the proper level of composition class, all new students are required to take a placement test and meet with a counselor prior to enrollment. A schedule of test dates is available in the Counseling Center. A counselor will use those scores as well as other information, such as high school and/or work experience, to place students in the proper English class.

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

Core competencies emphasized by courses in this department:
- Read and retain information.
- Write clearly.
- Evaluate diverse artistic works.
- Demonstrate creative thought through original expression.
- Demonstrate etiquette in face-to-face and written interactions.
- Work effectively in group settings.
- Utilize conflict resolution skills.
- Demonstrate knowledge of and respect for other cultures.
- Demonstrate knowledge of and respect for one’s own culture.

### COURSES OFFERED BY THE DEPARTMENT OF ENGLISH:

**ENGL 911**
BASIC GRAMMAR AND USAGE REVIEW 1 UNIT  
**PREREQUISITE:** None.  
**LECTURE:** 1 hour per week.  
A review of basic English grammar (parts of speech and sentence structure) as well as a review of common errors in grammar and usage.  
*Not applicable to the Associate Degree*

**ENGL 912**
RESEARCH PAPER WORKSHOP 1 UNIT  
**PREREQUISITE:** None.  
**LECTURE:** 1 hour per week.  
A workshop to prepare students in all phases of preparing a research paper, from selecting a topic to final format.  
*Not Applicable to the Associate Degree*

**ENGL 914**
BASIC WRITING 3 UNITS  
**PREREQUISITE:** READ 950 or eligibility for READ 015 as determined by SBVC assessment process.  
**LECTURE:** 3 hours per week.  
A basic skills writing course for students who are not eligible for ENGL 015. Focus is on effective sentences and paragraphs including an extensive review of grammar, punctuation, and usage.  
*Not Applicable to the Associate Degree*

**ENGL 920**
GRAMMAR 3 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week.  
An introductory course on basic grammatical principles and language use, focusing on the structure of the sentence, parts of speech and major errors in grammar and usage.  
*Not Applicable to the Associate Degree*

**ENGL 015**
PREPARATION FOR COLLEGE WRITING 4 UNITS  
**PREREQUISITE:** ENGL 914 or eligibility for ENGL 015 as determined by SBVC assessment process.  
**LECTURE:** 4 hours per week.  
A writing course designed to prepare students for ENGL 101. Primary focus on the development of the paragraph and short essay. Includes a review of grammar, sentence structure, and punctuation.  
*Associate Degree Applicable (applies toward English requirement)*

**ENGL 020**
FUNDAMENTALS OF NEWS WRITING 3 UNITS  
**PREREQUISITE:** ENGL 914 or eligibility for ENGL 015 as determined by SBVC assessment process.  
**LECTURE:** 3 hours per week.  
A course in journalistic writing: reporting, feature writing, interpretation, editorial and column writing and critical review of the arts. Emphasis is on the most basic form, the news story. This non-transfer course is taught simultaneously with ENGL 120, a transfer-level course. Assignments differ for the two courses although students participate in the same lectures.  
*Associate Degree Applicable*
ENGL 022x4
JOURNALISM PRODUCTION 2 UNITS
PREREQUISITE: ENGL 914 or eligibility for ENGL 015 as determined by SBVC assessment process.
LABORATORY: 6 hours per week.
A laboratory course for the production of the campus newspaper. Students participate in all phases of newspaper production: writing, reporting, layout, advertising, photography, editing and distribution. This course may be taken four times. This non-transfer course is taught simultaneously with ENGL 122x4, a transfer-level course. Assignments differ for the two courses although students participate in the same lectures. This course may be taken four times.

Associate Degree Applicable

ENGL 032
CREATIVE WRITING 3 UNITS
PREREQUISITE: ENGL 914 or eligibility for ENGL 015 as determined by SBVC assessment process.
LECTURE: 3 hours per week.
Introductory course in creative writing focusing on poetry and fiction. Includes strategies for writing both poetry and fiction, and the development of critical standards for judging literature. This non-transfer course is taught simultaneously with ENGL 232, a transfer-level course. Assignments differ for the two courses although students participate in the same lectures.

Associate Degree Applicable

ENGL 055
CHILDREN'S LITERATURE 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Survey of literature written for children with emphasis on values common to all significant literature. This non-transfer course is taught simultaneously with ENGL 155, a transfer-level course. Assignments differ for the two courses although students participate in the same lectures.

Associate Degree Applicable

ENGL 061
WOMEN WRITERS 3 UNITS
PREREQUISITE: ENGL 914 or eligibility for ENGL 015 as determined by SBVC assessment process.
LECTURE: 3 hours per week.
A survey of poetry and prose by prominent women writers, exploring historical and contemporary issues in women’s lives. This non-transfer course is taught simultaneously with ENGL 161, a transfer-level course. Assignments differ for the two courses although students participate in the same lectures.

Associate Degree Applicable

ENGL 063
CHICANO LITERATURE 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Survey of representative Chicano literature including novels, drama, poetry, and essays. This non-transfer course is taught simultaneously with ENGL 163, a transfer-level course. Assignments differ for the two courses although students participate in the same lectures.

Associate Degree Applicable

ENGL 085
AFRICAN-AMERICAN LITERATURE 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
A survey of some of the most important works written by African-Americans in the genres of poetry, drama, the short story, the novel and the essay. This non-transfer course is taught simultaneously with ENGL 165, a transfer-level course. Assignments differ for the two courses although students participate in the same lectures.

Associate Degree Applicable

ENGL 070
ENGLISH LITERATURE TO THE 18TH CENTURY 3 UNITS
PREREQUISITE: ENGL 914 or eligibility for ENGL 015 as determined by SBVC assessment process.
LECTURE: 3 hours per week.
Analysis of masterpieces of every literary type significant in the development of English literature from the Middle Ages to the early 18th Century, supplemented by a study of the historical and social background of the literature and lives of representative and important writers. This non-transfer course is taught simultaneously with ENGL 270, a transfer-level course. Assignments differ for the two courses although students participate in the same lectures.

Associate Degree Applicable

ENGL 071
ENGLISH LITERATURE FROM THE 18TH CENTURY TO THE PRESENT 3 UNITS
PREREQUISITE: ENGL 914 or eligibility for ENGL 015 as determined by SBVC assessment process.
LECTURE: 3 hours per week.
Analysis of masterpieces of every literary type significant in the development of English literature from the 18th Century to the present day, supplemented by a study of the historical and social background of the literature and lives of representative and important writers. This non-transfer course is taught simultaneously with ENGL 271, a transfer-level course. Assignments differ for the two courses although students participate in the same lectures.

Associate Degree Applicable

ENGL 075
LITERATURE AND RELIGION OF THE BIBLE 3 UNITS
PREREQUISITE: ENGL 914 or eligibility for ENGL 015 as determined by SBVC assessment process.
LECTURE: 3 hours per week.
The English Bible as literature and as religion including an examination of the types of literature found in the Bible, the historical and religious context in which the literature was developed and an extensive reading of the two testaments. This non-transfer course is taught simultaneously with ENGL 175, a transfer-level course. Assignments differ for the two courses although students participate in the same lectures.

Associate Degree Applicable
ENGL 077
SHAKESPEARE  3 UNITS
PREREQUISITE: ENGL 914 or eligibility for ENGL 015 as determined by SBVC assessment process.
LECTURE: 3 hours per week.
A critical analysis of a selection of Shakespeare’s plays representative of his literary development. Lectures, films, and recordings will examine life and the theater in Elizabethan England. This non-transfer course is taught simultaneously with ENGL 275, a transfer-level course. Assignments differ for the two courses although students participate in the same lectures.
Associate Degree Applicable

ENGL 080
WORLD LITERATURE TO THE 17TH CENTURY  3 UNITS
PREREQUISITE: ENGL 914 or eligibility for ENGL 015 as determined by SBVC assessment process.
LECTURE: 3 hours per week.
An introduction to world literature from the beginning to the seventeenth century, including a critical analysis of selected samples of literature within the context of the culture and time in which they were written. This non-transfer course is taught simultaneously with ENGL 280, a transfer-level course. Assignments differ for the two courses although students participate in the same lectures.
Associate Degree Applicable

ENGL 081
WORLD LITERATURE: FROM THE 17TH CENTURY TO THE PRESENT  3 UNITS
PREREQUISITE: ENGL 914 or eligibility for ENGL 015 as determined by SBVC assessment process.
LECTURE: 3 Hours per week.
An introduction to world literature from the seventeenth century to the present, including a critical analysis of selected samples of literature within the context of the culture and time in which they were written. This non-transfer course is taught simultaneously with ENGL 281, a transfer-level course. Assignments differ for the two courses although students participate in the same lectures.
Associate Degree Applicable

ENGL 101
FRESHMAN COMPOSITION  4 UNITS
PREREQUISITE: ENGL 015 or eligibility for ENGL 101 as determined by SBVC assessment process.
LECTURE: 4 hours per week.
A writing course which emphasizes expository and argumentative essays. Includes reading and analysis of various forms of writing, instruction in library research and preparation of documented papers.
Associate Degree Applicable
Course credit transfers to CSU.
CAN (California Articulation Number): ENGL 2

ENGL 101H
FRESHMAN COMPOSITION-HONORS  4 UNITS
PREREQUISITE: ENGL 015 or eligibility for ENGL 101 as determined by SBVC assessment process.
LECTURE: 4 hours per week.
A writing course which emphasizes expository and argumentative essays. Includes reading and analysis of various forms of writing, instruction in library research and preparation of documented papers. Enrollment is limited to students eligible for the Honors Program.
Course credit transfers to CSU.
Limited transfer to UC; contact a counselor for details.

ENGL 102
INTERMEDIATE COMPOSITION AND CRITICAL THINKING  4 UNITS
PREREQUISITE: ENGL 101.
LECTURE: 4 hours per week.
Further work in the expository and argumentative essay with emphasis on the critical examination of literature and on analytical and explicatory writing.
Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; contact a counselor for details.

ENGL 102H
INTERMEDIATE COMPOSITION AND CRITICAL THINKING – HONORS  4 UNITS
PREREQUISITE: ENGL 101 or ENGL 101H.
LECTURE: 4 hours per week.
Further work in the expository and argumentative essay with emphasis on the critical examination of literature and on analytical and explicatory writing. Enrollment is limited to students eligible for the Honors Program.
Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; contact a counselor for details.

ENGL 120
FUNDAMENTALS OF NEWS WRITING  3 UNITS
PREREQUISITE: ENGL 101.
LECTURE: 3 hours per week.
A course in journalistic writing: reporting, feature writing, interpretation, editorial and column writing and critical review of the arts. Emphasis on the most basic form, the news story.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): JOUR 2

ENGL 122x4
JOURNALISM PRODUCTION  2 UNITS
PREREQUISITE: ENGL 101 or ENGL 101H.
LABORATORY: 6 hours per week.
A laboratory course for the production of the campus newspaper. Students participate in all phases of newspaper production: writing, reporting, layout, advertising, photography, editing, and distribution. This course may be taken four times.
Associate Degree Applicable
Course credit transfers to CSU.
ENGL 125x2
LITERARY MAGAZINE PRODUCTION 2 UNITS
PREREQUISITE: ENGL 015 or eligibility for ENGL101 as determined by SBVC assessment process.
LABORATORY: 4 hours per week.
The production of the college literary magazine including selecting material, planning format, typesetting, and paste-up. This course may be taken two times.
Associate Degree Applicable
Course credit transfers to CSU.

ENGL 151
FRESHMAN COMPOSITION AND LITERATURE 3 UNITS
PREREQUISITE: ENGL 101.
LECTURE: 3 hours per week.
Study of fiction, poetry, and drama with emphasis on the fundamental principles of literary criticism and interpretation. Includes student writing based on critical reading.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): ENGL 4

ENGL 153
LITERATURE AND FILM 3 UNITS
PREREQUISITE: ENGL 101.
LECTURE: 2 hours per week and
LABORATORY: 2 hours per week.
A study of literature adapted into film. Students will read short stories, novels, and plays; view the film(s) adapted from each literary work; and write critical and analytic essays about the literature, the films, and their interplay.
Associate Degree Applicable
Course credit transfers to CSU and UC.

ENGL 155
CHILDREN'S LITERATURE 3 UNITS
PREREQUISITE: ENGL 101.
LECTURE: 3 hours per week.
Survey of literature written for children with emphasis on values common to all significant literature. This transfer course is taught simultaneously with ENGL 055, a non-transfer course. Assignments differ for the two courses although the students participate in the same lectures.
Associate Degree Applicable
Course credit transfers to CSU and UC.

ENGL 161
WOMEN WRITERS 3 UNITS
PREREQUISITE: ENGL 101.
LECTURE: 3 hours per week.
A survey of poetry and prose by prominent women writers, exploring historical and contemporary issues in women's lives.
Associate Degree Applicable
Course credit transfers to CSU and UC.

ENGL 163
CHICANO LITERATURE 3 UNITS
PREREQUISITE: ENGL 101.
LECTURE: 3 hours per week.
Survey of representative Chicano literature including novels, drama, poetry, and essays which focus on the cultural, social, and political developments/themes which shape and characterize Chicano culture and literary expression. This transfer course is taught simultaneously with ENGL 063, a non-transfer-level course. Assignments differ for the two courses although students participate in the same lectures.
Associate Degree Applicable
Course credit transfers to CSU and UC.

ENGL 165
AFRICAN-AMERICAN LITERATURE 3 UNITS
PREREQUISITE: ENGL 101.
LECTURE: 3 hours per week.
A survey of some of the most important works written by African-Americans in the genres of poetry, drama, the short story, the novel and the essay. This transfer course is taught simultaneously with ENGL 065, a non-transfer course. Assignments differ for the two courses although the students participate in the same lectures.
Associate Degree Applicable
Course credit transfers to CSU and UC.

ENGL 175
LITERATURE AND RELIGION OF THE BIBLE 3 UNITS
PREREQUISITE: ENGL 101.
LECTURE: 3 hours per week.
The English Bible as literature and as religion including an examination of the types of literature found in the Bible, the historical and religious context in which the literature was developed and an extensive reading of the two testaments. This course is also offered as RELIG 175.
Associate Degree Applicable
Course credit transfers to CSU and UC.

ENGL 232
CREATIVE WRITING 3 UNITS
PREREQUISITE: ENGL 101.
LECTURE: 3 hours per week.
An introductory course in creative writing focusing on poetry and fiction. Includes strategies for writing both poetry and fiction, and the development of critical standards for judging literature.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): ENGL 6

ENGL 260
AMERICAN LITERATURE: TO THE MID-1800S 3 UNITS
PREREQUISITE: ENGL 101.
LECTURE: 3 hours per week.
Reading of representative literary works of significant writers to illustrate the origin and development of American thought and culture from colonial times to the mid-1800s.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): ENGL 14
ENGL 261
AMERICAN LITERATURE: FROM THE MID-1800S TO THE PRESENT 3 UNITS
PREREQUISITE: ENGL 101.
LECTURE: 3 hours per week.
Reading of representative literary works of significant writers to illustrate the development of literary and intellectual American thought from the mid-1800s to the present.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): ENGL 16

ENGL 270
ENGLISH LITERATURE TO THE 18TH CENTURY 3 UNITS
PREREQUISITE: ENGL 101.
LECTURE: 3 hours per week.
Analysis of masterpieces of every literary type significant in the development of English literature from the Middle Ages to the early 18th century, supplemented by a study of the historical and social background of the literature and lives of representative and important writers.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): ENGL 8

ENGL 271
ENGLISH LITERATURE FROM THE 18TH CENTURY TO THE PRESENT 3 UNITS
PREREQUISITE: ENGL 101.
LECTURE: 3 hours per week.
Analysis of masterpieces of every literary type significant in the development of English literature from the 18th century to the present day, supplemented by a study of the historical and social background of the literature and lives of representative and important writers.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): ENGL 10

ENGL 275
SHAKESPEARE 3 UNITS
PREREQUISITE: ENGL 101.
LECTURE: 3 hours per week.
Associate Degree Applicable
Course credit transfers to CSU and UC.

ENGL 280
WORLD LITERATURE: TO THE 17TH CENTURY 3 UNITS
PREREQUISITE: ENGL 101.
LECTURE: 3 hours per week.
An introduction to world literature from the beginning to the 17th century, including a critical analysis of selected samples of literature within the context of the culture and time in which they were written.
Associate Degree Applicable
Course credit transfers to CSU and UC.

ENGL 281
WORLD LITERATURE: FROM THE 17TH CENTURY TO THE PRESENT 3 UNITS
PREREQUISITE: ENGL 101.
LECTURE: 3 hours per week.
An introduction to world literature from the 17th century to the present, including a critical analysis of selected samples of literature within the context of the culture and time in which they were written.
Associate Degree Applicable
Course credit transfers to CSU and UC.

ENGLISH AS A SECOND LANGUAGE
Courses in English as a second language are designed for individuals learning English as a foreign language. The various courses cover writing, conversation, spelling and vocabulary in the English language.

Core competencies emphasized by courses in this department:

- Write clearly.
- Speak clearly.
- Employ vocabulary of the subject studied.

ESL 906
THE SOUND PATTERNS OF ENGLISH 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
A basic skills course designed to increase the non-native English speaker's ability to understand and pronounce the sounds of standard American English. Instruction in the pronunciation of vowels, consonants and intonation patterns with special emphasis in decreasing communication problems due to non-standard American English pronunciation.
Not Applicable to the Associate Degree

ESL 907
PRACTICAL CONVERSATION 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
This is a course designed to increase non-native students' skills in pronunciation, listening and conversation. The course will offer extensive listening and conversation instruction.
Not Applicable to the Associate Degree

ESL 930
PATTERNS OF CONTEMPORARY ENGLISH I 4 UNITS
PREREQUISITE: None.
LECTURE: 4 hours per week.
This is the first of two courses which together present an introduction of spoken and written English for non-native speakers of English. It provides instruction on listening comprehension, conversation, reading and writing. The course covers grammatical features, troublesome exceptions, elementary pronunciation and basic sentence patterns.
Not Applicable to the Associate Degree
ESL 931
PATTERNS OF CONTEMPORARY ENGLISH II
4 UNITS
PREREQUISITE: ESL 930 or eligibility as determined by SBVC assessment process.
LECTURE: 4 hours per week.
This is the second of a two-course basic skills sequence which together present an introduction of spoken and written English for non-native speakers of English. It provides instruction on listening comprehension, conversation, reading and writing. The course covers grammatical features, troublesome exceptions, elementary pronunciation and basic sentence patterns including complex sentences and simple paragraphs. Not Applicable to the Associate Degree

ESL 940
PATTERNS OF CONTEMPORARY ENGLISH III
4 UNITS
PREREQUISITE: ESL 931 or eligibility as determined by SBVC assessment process.
LECTURE: 4 hours per week.
The first of a two-course basic skills sequence emphasizing written English. Emphasis on intensive paragraph writing preparation, reading comprehension practice, and instruction on writing brief essay responses to questions on reading passages. Not Applicable to the Associate Degree

ESL 941
PATTERNS OF CONTEMPORARY ENGLISH IV
4 UNITS
PREREQUISITE: ESL 940 or eligibility as determined through the SBVC assessment process.
LECTURE: 4 hours per week.
The second of a two-course basic skills sequence emphasizing written English. Emphasis on intensive paragraph writing preparation, reading comprehension practice, writing brief essay responses to short articles and developing summarizing skills. Not Applicable to the Associate Degree

ESCROW
See the Department of REAL ESTATE AND ESCROW

FAMILY AND CONSUMER SCIENCE

DIVISION: Social Science & Human Development
DIVISION DEAN: Janice Noble, M.Ed.
DEPARTMENT HEAD: Juliann Martin, M.A.
North Hall 244
(909) 384-4457
DIVISION SECRETARY: To Be Announced
DIVISION OFFICE: Liberal Arts, Room 122
(909) 384-8603
LIAISON COUNSELOR: Mary Beth Barrios, M.S.
(909) 384-4404

Core competencies emphasized by courses in this department:
• Read and retain information.
• Write clearly.
• Employ vocabulary of the subject studied.
• Find and interpret information.

• Apply learned knowledge to new situations.
• Apply principles of scientific reasoning to solve problems.
• Display behavior consistent with ethical standards within a discipline.

FAMILY AND CONSUMER SCIENCE 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. DIETETIC AIDE CERTIFICATE
This certificate is designed to prepare students for entry-level employment in dietetics, assisting dieticians in the provision of food service and nutritional programs. 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
FCS 160 Food Preparation 3
FCS 161 Quantity Food Preparation 3
FCS 162 Nutrition 3
FCS 225 Sanitation and Safety 3
FCS 235 Menu Planning 3
FCS 240 Purchasing 3
FCS 260 Modified Diets 3
TOTAL UNITS: 21

2. DIETETIC SERVICE SUPERVISOR CERTIFICATE
This certificate is designed to prepare students to meet the California Department of Health Licensing Requirements for Dietetic Service Supervisor (DSS) in order to supervise production, writing menus, designing diets, teaching classes to food service personnel, and giving diet instructions. 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
FCS 160 Food Preparation 3
FCS 161 Quantity Food Preparation 3
FCS 162 Nutrition 3
FCS 225 Sanitation and Safety 3
FCS 240 Purchasing 3
FCS 260 Modified Diets 3
FCS 262 Nutrition Care 4.5
FCS 264 Nutrition Management 3

RECOMMENDED COURSES:
BUSAD 105 Small Business Management 3
TECALC 097 Technical Calculations 4
Or
MATH 090 Elementary Algebra 4
TOTAL UNITS: 25.5-32.5

COURSES OFFERED BY THE DEPARTMENT OF FAMILY AND CONSUMER SCIENCE:
FCS 160
INTRODUCTION TO FOODS 3 UNITS
PREREQUISITE: None.
LECTURE: 2 hours per week and LABORATORY: 3 hours per week.
Introduction to food science principles and food preparation techniques. Emphasis on ingredient functions and interactions; technique, production and sensory evaluation standards, food safety, sanitation, nutrient values, and food presentation. This course is also listed as RM160.
Associate Degree Applicable
Course credit transfers to CSU.
CAN (California Articulation Number): FCS 8

FCS 161
QUANTITY FOOD PREPARATION 3 UNITS
PREREQUISITE: FCS 160 or RM 160.
LECTURE: 3 hours per week.
Introduction to the scientific theory of the application of heat, and the changes that takes place in food during the cooking process. Includes handling of kitchen tools and equipment, analysis of budgets, and the proper techniques of preparing food for quantity production. This course is also offered as RM/FS 161.
Associate Degree Applicable
Course credit transfers to CSU.

FCS 162
NUTRITION 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Scientific concepts of nutrition relating to the functioning of nutrients in the basic life processes. Emphasis on individual needs, food sources of nutrients, current nutritional issues and diet analysis.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): FCS 2

FCS 198
FAMILY AND CONSUMER SCIENCE 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 to earn units using the following formula: For paid work, 75 hours = 1 unit; for volunteer work, 60 hours = 1 unit. Students may earn a total of 16 units toward graduation in Work Experience 198 courses. Students MUST be working for pay or volunteer before registering for a Work Experience class. NOTE: Only one section of Work Experience may be taken during a semester.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

FCS 222
SPECIAL PROBLEMS IN FAMILY AND CONSUMER SCIENCE I 1 UNIT
PREREQUISITE: One class in Family and Consumer Science.
INDEPENDENT STUDY: 3 hours per week.
Assigned problems involving library and laboratory work for selected students who are interested in furthering their knowledge of family and consumer science 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 for elective credit only.

FCS 225
SANITATION AND SAFETY 3 UNITS
PREREQUISITE: FCS 160 or RM/FS 101 or RM 160.
LECTURE: 3 hours per week.
Sanitation and safety as these effect the individual and the operation with a focus on prevention and control of problems encountered in client and employee safety and sanitation. Includes accidents, fire prevention, security maintenance and foodborne illnesses. This course is also offered as RM/FS 225.
Associate Degree Applicable
Course credit transfers to CSU.

FCS 235
MENU PLANNING 3 UNITS
PREREQUISITE: FCS 160 or RM/FS 101 or RM 160.
LECTURE: 3 hours per week.
Principles of menu planning with emphasis on development, types, organization and significance of menus. Includes cost and pricing of menu items, and current legislation regarding truth in advertising. This course is also offered as RM 235.
Associate Degree Applicable
Course credit transfers to CSU.

FCS 240
PURCHASING 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Policies, procedures, controls and their implementation in purchasing merchandise and supplies including food, beverage, equipment, service-ware, furniture, fixtures, and contract services. Students write and analyze reports of purchasing procedures, manuals, and receiving reports. This course is also offered as RM/FS 240.
Associate Degree Applicable
Course credit transfers to CSU.

FCS 260
MODIFIED DIETS 3 UNITS
PREREQUISITE: FCS 162.
LECTURE: 3 hours per week.
The principles of nutrition relating to modified diets used in the treatment of abnormal physical conditions with an emphasis on the rationale for the diet and how these modifications will improve the patient’s condition.
Associate Degree Applicable
Course credit transfers to CSU.
FCS 262
NUTRITION CARE 4.5 UNITS
PREREQUISITE: FCS 162.
COREQUISITE: FCS 260.
LECTURE: 2 hours per week and
FIELD WORK: 150 hours total.
The integration of academic knowledge and clinical field experience in dietary health care including nutrition care, dietary evaluation, education, and case studies.
Associate Degree Applicable
Course credit transfers to CSU.

FCS 264
NUTRITION MANAGEMENT 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Planning and coordinating the operation of a food service system within the policies of an organization including the staffing, training, procedures, and responsibilities for financial planning and cost control.
Associate Degree Applicable
Course credit transfers to CSU.

FLOOR
DIVISION: Applied Technology & Transportation
DIVISION DEAN: Thomas Bauman, M.S., P.E.
DEPARTMENT HEAD: William Clark, Ed.D.
Technical 108
(909) 384-8504
DIVISION SECRETARY: Patsy Martinez
(909) 384-8902
DIVISION OFFICE: Technical Building, Room 108
(909) 384-4451
LIASION COUNSELOR: Jennifer Mendoza, M.S.
(909) 384-4404

COURSES OFFERED BY THE DEPARTMENT OF FLOOR:

FLOOR 010A
FLOORING INSTALLATION: CARPET 1 UNIT
PREREQUISITE: None.
LECTURE: .50 hour per week and
LABORATORY: 1.50 hours per week.
Theory and practical application of techniques for installation of carpet, including methods of measuring, selecting appropriate products and cutting techniques. Employment in the industry will also be addressed.
Associate Degree Applicable

FLOOR 010B
FLOORING INSTALLATION: SHEET VINYL, VINYL TILE AND COMPOSITION TILE 1 UNIT
PREREQUISITE: None.
LECTURE: .50 hour per week and
LABORATORY: 1.50 hours per week.
Theory and practical application of techniques for installation of sheet vinyl, vinyl tile, and composition tile, including methods of measuring, selecting appropriate products and cutting techniques. Employment in the industry will also be addressed.
Associate Degree Applicable

FLOOR 010C
FLOORING INSTALLATION: CERAMIC TILE 1 UNIT
PREREQUISITE: None.
LECTURE: .50 hour per week and
LABORATORY: 1.50 hours per week.
Theory and practical application of techniques for installation of ceramic tile, including methods of measuring, selecting appropriate products and cutting techniques. Employment in the industry will also be addressed.
Associate Degree Applicable

FLOOR 010D
FLOORING INSTALLATION: WOOD FLOOR AND LAMINATE 1 UNIT
PREREQUISITE: None.
LECTURE: .50 hour per week and
LABORATORY: 1.50 hours per week.
Theory and practical application of techniques for installation of wood floor and laminate, including methods of measuring, selecting appropriate products and cutting techniques. Employment in the industry will also be addressed.
Associate Degree Applicable

FLOOR 011Ax3
FLOORING INSTALLATION: CARPET LABORATORY .50 UNIT
PREREQUISITE: FLOOR 010A.
LABORATORY: 1.50 hours per week.
Practical application of techniques for installation of carpet, including methods of measuring, selecting appropriate products and installation. This course may be taken three times.
Associate Degree Applicable

FLOOR 011Bx3
FLOORING INSTALLATION: VINYL AND COMPOSITION FLOOR LABORATORY .50 UNIT
PREREQUISITE: FLOOR 010B.
LABORATORY: 1.50 hours per week.
Practical application of techniques for installation of sheet vinyl, vinyl tile and composition tile, including methods of measuring, selecting appropriate products and installation. Employment in the industry will also be addressed. This course may be taken three times.
Associate Degree Applicable

FLOOR 011Cx3
FLOORING INSTALLATION: CERAMIC TILE LABORATORY .50 UNIT
PREREQUISITE: FLOOR 010C.
LABORATORY: 1.50 hours per week.
Practical application of techniques for installation of ceramic tile, including methods of measuring, selecting appropriate products and installation. Employment in the industry will also be addressed. This course may be taken three times.
Associate Degree Applicable

FLOOR 011Dx3
FLOORING INSTALLATION: WOOD FLOOR AND LAMINATE LABORATORY .50 UNIT
PREREQUISITE: FLOOR 010D.
LABORATORY: 1.50 hours per week.
Practical application of techniques for installation of wood floor and laminate, including methods of measuring, selecting appropriate products and installation. Employment in the industry will also be addressed. This course may be taken three times.
Associate Degree Applicable
FOOD SERVICE
See the Department of RESTAURANT MANAGEMENT/FOOD SERVICE

FRENCH

DIVISION: Humanities
DIVISION DEAN: Marjorie Price, M.A., M.Ed.
DEPARTMENT HEAD: Nori Sogomonian
North Hall 221-222
(909) 384-8544
DIVISION SECRETARIES: Kelly Adcock
(909) 384-8906
Cheryl Benner
(909) 384-8633
DIVISION OFFICE: North Hall 236
(909) 384-4445
LIAISON COUNSELOR: Juan Zepeda, M.S.
(909) 384-4404

The ever-increasing role that the United States takes in global affairs, international trade, and the growing numbers of immigrants dictate the need for knowledge of a modern foreign language. The primary objective of the Modern Languages Department is communication at an acceptably correct level with an understanding of culture. Teaching methods incorporate critical thinking activities and include the direct oral approach, lectures and language laboratory assignments. Courses are offered in American Sign Language, French, and Spanish.

Students planning to transfer to a four-year institution and major in a modern language should consult with a counselor regarding the transfer process and lower division requirements. Positions for which four-year graduates in modern languages are qualified are teaching, business, foreign services, law enforcement, nursing, hospitality services, and secretarial services.

Core competencies emphasized by courses in this department:
- Read and retain information.
- Write clearly.
- Speak clearly.
- Employ vocabulary of the subject studied.
- Demonstrate active listening skills.
- Apply learned knowledge to new situations.
- Work effectively in group settings.
- Demonstrate knowledge of and respect for other cultures.

FRENCH COURSES OFFERED BY THE DEPARTMENT OF MODERN LANGUAGES:

FRENCH 101
COLLEGE FRENCH I
5 UNITS
PREREQUISITE: None.
LECTURE: 5 hours per week.
Develops the ability to converse, read and write in French. The course includes the study of essentials of pronunciation, vocabulary, idioms and grammatical structures along with an introduction to the culture of French-speaking peoples. This course corresponds to two years of high school study.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): FREN 2

FRENCH 102
COLLEGE FRENCH II
5 UNITS
PREREQUISITE: FRENCH 101.
LECTURE: 5 hours per week.
Continues to develop conversational, reading and writing skills in French with special emphasis on past tense verbs, grammar, vocabulary expansion and cultural applications of the French language.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): FREN 4

GEOGRAPHIC INFORMATION SYSTEMS

DIVISION: Science and Math
DIVISION DEAN: Dan Bridges, Ph.D.
DEPARTMENT HEAD: Todd Heibel, M.A.
Chemistry 113
(909) 384-8986
DIVISION SECRETARY: Rose Garcia
DIVISION OFFICE: Chemistry 121
(909) 384-8645
LIAISON COUNSELOR: Rafael Herrera, M.S.
(909) 384-4404

GEOGRAPHIC INFORMATION SYSTEMS CERTIFICATE
This certificate is designed to prepare students for entry-level employment in Geographic Information Systems [GIS] and automated mapping technology, utilizing earth resources data satellites, aerial photography, and computerized data banks of spatial data. 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:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIS 130 Introduction to Geographic Information Systems (GIS)</td>
<td>3</td>
</tr>
<tr>
<td>GIS 131 GIS Applications</td>
<td>3</td>
</tr>
<tr>
<td>GIS 133 GIS Cartography and Base Map Dev</td>
<td>3</td>
</tr>
<tr>
<td>GIS 135 Spatial Analysis with GIS</td>
<td>3</td>
</tr>
<tr>
<td>GIS 136 GIS for Science, Government and Business</td>
<td>3</td>
</tr>
<tr>
<td>Or</td>
<td></td>
</tr>
<tr>
<td>GIS 137 Advanced GIS Applications</td>
<td>(3)</td>
</tr>
<tr>
<td>GIS 139 Global Positioning Systems (GPS) Field Techniques</td>
<td>1</td>
</tr>
<tr>
<td>Or</td>
<td></td>
</tr>
<tr>
<td>GIS 150 GIS Internship</td>
<td>(1)</td>
</tr>
<tr>
<td>TOTAL UNITS:</td>
<td>16</td>
</tr>
</tbody>
</table>
COURSES OFFERED BY THE DEPARTMENT OF GEOGRAPHIC INFORMATION SYSTEMS (GIS):

GIS 130
INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS (GIS) 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
An introduction to the fundamentals of Geographic Information Systems (GIS) including the history of automated mapping. Includes a brief introduction to basic cartographic principles, an in-depth review of the hardware and software used in GIS, and various applications of GIS technology in environmental science, business and government.
Associate Degree Applicable
Course credit transfers to CSU and UC.

GIS 131
GIS APPLICATIONS 3 UNITS
PREREQUISITE: CIT 101. DEPARTMENTAL ADVISORY: GIS 130.
LECTURE: 2 hours per week and
LABORATORY: 2 hours per week.
Survey of the fundamentals of Geographic Information Systems (GIS) including hands-on experience in hardware and software elements used in GIS, vector-based data structures using ArcView, and raster-based data structures using ArcView Spatial Analysis Module.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

GIS 133
GIS CARTOGRAPHY AND BASE MAP DEVELOPMENT 3 UNITS
PREREQUISITE: GIS 131.
LECTURE: 2 hours per week and
LABORATORY: 2 hours per week.
A comprehensive study of Geographic Information Systems (GIS) cartographic principles, data acquisition methods used in map production, and methods of base map development. Includes an in-depth study of cartography, such as history, principles, map projections, scales, and map accuracy; methods of data acquisition, such as basic principles used in remote sensing, aerial images and the use of Global Positioning System (GPS) in the field for map feature location; techniques of GIS base map development, such as scanning, digitizing and coordinate geometry; and the production of professional quality maps using Arc View software.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

GIS 135
SPATIAL ANALYSIS WITH GIS 3 UNITS
PREREQUISITE: GIS 131.
LECTURE: 2 hours per week and
LABORATORY: 2 hours per week.
An introduction to spatial analysis including the use of the principles of statistics in analysis of geographically referenced data; sampling strategies for data used in Geographic Information Systems (GIS) using raster and vector data structures; comparisons of conventional and geostatistical estimation techniques; single and multi-layer statistical operations including classification, coordination, and modeling analysis. Emphasis on application and interpretation of spatial analyses and problems in spatial correlation.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

GIS 136
GIS FOR SCIENCE, GOVERNMENT AND BUSINESS 3 UNITS
PREREQUISITE: GIS 135.
LECTURE: 2 hours per week and
LABORATORY: 2 hours per week.
An in-depth survey of the uses of Geographic Information Systems (GIS) techniques in science (geography, geology, oceanography, archeology and meteorology), government (city, county, state and federal) and business. Topics include data acquisition, accuracy, analysis, presentation techniques and legal issues for various GIS applications. Students produce a GIS project, including hardware and software requirements, methods of data acquisition, formulation of data standards, data structure, database features and attributes, metadata standards, methods of base map development, cost benefits analysis and generation of presentation-quality map layouts specific to their chosen GIS application.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

GIS 137
ADVANCED GIS APPLICATIONS 3 UNITS
PREREQUISITE: GIS 135.
LECTURE: 2 hours per week and
LABORATORY: 2 hours per week.
Hands-on training in advanced applications of Geographic Information Systems (GIS) using ArcView and ArcInfo, and a review of Avenue programming for customizing ArcView. Add-on modules extend the analytical capabilities of ArcView and allow input of map features and conversion of feature themes from raster to vector. Includes spatial analysis of slope and aspect maps, neighborhood and zone analysis; problem-solving techniques for geographic networks (point to point routing) or closest points; and use of ArcView and ArcInfo software to produce professional quality documents for use in spatial analysis and decision-making.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

GIS 139
GLOBAL POSITIONING SYSTEMS (GPS) FIELD TECHNIQUES 1 UNIT
PREREQUISITE: None.
LABORATORY: 3 hours per week.
An introduction to the use of a hand-held Global Positioning System (GPS) unit in the field including terminology; hardware; basic techniques of determining location; completion of a traverse using a GPS and a topographic map; and applications of GPS data in Geographic Information Systems.
Associate Degree Applicable
Course credit transfers to CSU for elective credit.

GIS 150
GIS INTERNSHIP 1 UNIT
PREREQUISITE: GIS 135.
LABORATORY: 5 hours per week.
A directed field study program in which students apply classroom instruction to real-world Geographic Information Systems (GIS) projects in a business or government agency. Students meet periodically with their advisor, complete interim reports and present a final report.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.
The environmental science of geography examines both physical and cultural landscapes. Geography includes the study of all forces of nature and the consequences of those forces: the nature and interactions of the atmosphere and the land, plants and animals, the earth’s waters, weather, climate, the earth’s dynamic surface, landforms and soil, and the way people have inhabited and altered the earth by creating various forms of agriculture, language, religion, and cities.

Courses in geography fulfill the science requirement for the associate degree, prepare students for majoring in geography at a four-year institution, and supplement other studies for students interested in careers in environmental studies, education, engineering, and architecture. Students planning to transfer to a four-year institution and major in geography should consult with a counselor regarding the transfer process and lower division requirements.

Core competencies emphasized by courses in this department:
- Read and retain information.
- Employ vocabulary of the subject studied.
- Demonstrate active listening skills.

GEOGRAPHY ASSOCIATE OF SCIENCE DEGREE

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

REQUIRED COURSES: UNITS
GEOG 102 Cultural Geography 3
GEOG 106 Natural Resources and Conservation 3
GEOG 110 Physical Geography 3
GEOG 111 Physical Geography Laboratory 1
or GEOG 285 Honors in Physical Geography (1)
GEOG 114 Weather and Climate 4
GEOG 120 World Regional Geography 3
Any Economics Course (3)
or Any Statistics Course (3)
or Any GIS Course (3)
TOTAL UNITS: 20

COURSES OFFERED BY THE DEPARTMENT OF GEOGRAPHY:

GEOG 102
CULTURAL GEOGRAPHY 3 UNITS
PREREQUISITE: None.
Lecture: 3 hours per week.
An introduction to the interrelationship of people and the land. Includes population trends, regional analysis and livelihood patterns. Emphasis on historical development and diffusion of agriculture, languages, religions, and cities.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): GEOG 4

GEOG 106
THE ENVIRONMENT, NATURAL RESOURCES AND CONSERVATION 3 UNITS
PREREQUISITE: None.
Lecture: 3 hours per week.
A non-traditional and revised examination of the origins, nature and restrictions relating to world resources in light of continuing expansion of demand for basic materials including energy, metals, water, open space, soils and biologic resources. Emphasis on value considerations and social institutions as they relate to allocation decisions and environmental regulation.
Associate Degree Applicable
Course credit transfers to CSU and UC.

GEOG 110
PHYSICAL GEOGRAPHY 3 UNITS
PREREQUISITE: None.
Lecture: 3 hours per week.
Basic physical elements of geography, especially climate, landforms, water, soils, native animal life and natural vegetation, and their Inter-relationships and patterns of distribution on a world basis.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): GEOG 2
CAN (California Articulation Number):
GEOG 110 + GEOG 111 = CAN GEOG 6

GEOG 111
PHYSICAL GEOGRAPHY LABORATORY 1 UNIT
COREQUISITE: GEOG 110 (May be taken previously)
Laboratory: 3 hours per week.
Laboratory companion for various lecture courses in geography. May be taken during the same semester as the lecture courses or be taken after completing the lecture course.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): GEOG 110 + GEOG 111 = CAN GEOG 6

GEOG 114
WEATHER AND CLIMATE 4 UNITS
PREREQUISITE: None.
Lecture: 3 hours per week and Laboratory: 3 hours per week.
The earth’s atmospheric phenomena with special reference to the causes and regional distribution of weather and climate, both past and present.
Associate Degree Applicable
Course credit transfers to CSU and UC.
GEOG 120
WORLD REGIONAL GEOGRAPHY  3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
An introduction to world geography emphasizing the nature of major world cultural regions, their social structure, religions, government, and economics.
Associate Degree Applicable
Course credit transfers to CSU and UC.

GEOG 222
INDEPENDENT STUDY IN GEOGRAPHY  1-3 UNITS
PREREQUISITE: GEOG 102 or GEOG 110.
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 geography 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. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
Associate Degree Applicable
Course credit transfers to CSU and UC.

GEOG 285
HONORS IN PHYSICAL GEOGRAPHY LABORATORY  1 UNIT
PREREQUISITE: None.
COREQUISITE: GEOG 110 (May be taken previously).
LABORATORY: 3 hours per week.
An experiential in-depth supplement specifically designed for the above average student. This is an interactive laboratory experience examining the earth's atmosphere and weather, soil and sediments, landforms, vegetation and rocks. Maps and remotely sensed imagery will be studied and used. Lecture material given in Introduction to Physical Geography (GEOG 110) will be enhanced and research techniques and methodologies explored. Satisfies the Physical Geography Laboratory requirement.
Associate Degree Applicable
Course credit transfers to CSU and UC.

GEOLOGY
DIVISION:  Science and Math
DIVISION DEAN:  Haragewen Kinde, Ed.D.
DEPARTMENT HEAD:  Jerry Horne, Ph.D.
DIVISION SECRETARY:  Rose Garcia
DIVISION OFFICE:  Chemistry 121
(909) 384-8645
LIAISON COUNSELOR:  Rafael Herrera, M.S.
(909) 384-4404

The Geology Department offers courses which examine the earth's history, structure, and economic resources. These courses meet the needs for (1) students planning to transfer to a four-year institution and prepare for a career in geology or related fields, (2) students fulfilling the undergraduate general education science requirement, and (3) students who wish to better understand the planet on which we live.

The first course in geology offers the following laboratory option: Students may enroll in GEOL 101, a four-unit course which includes a laboratory, or they may enroll in GEOL 100, a four-unit course without a laboratory. All remaining courses offered by the Geology Department require that students have completed either GEOL 100 or GEOL 101 or an equivalent course in geology.

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

Core competencies emphasized by courses in this department:
- Read and retain information.
- Employ vocabulary of the subject studied.

GEOLOGY
ASSOCIATE OF SCIENCE DEGREE
To graduate with a specialization in geology, 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
GEOL 100 Physical Geology  4
GEOL 201 Mineralogy  4
GEOL 200 Rocks and Rock Minerals  4
MATH 250 Single Variable Calculus I  4
MATH 251 Single Variable Calculus II  4
PHYSIC 150A Physics for the Life Sciences I  5
PHYSIC 150B Physics for the Life Sciences II  5

Eight units from the list of RECOMMENDED COURSES  8

TOTAL UNITS:  48

RECOMMENDED COURSES:  UNITS
GEOL 112 Historical Geology  4
GEOL 122 Environmental Geology  3
GEOL 170x4 Geologic History of the Great Basin  1
GEOL 250 Geology of California  3
GEOL 251 Geology of the National Parks and Monuments  3
GEOL 260 Introduction to Field Geology  2
GEOL 270x4 Geology of the Eastern Sierra Nevada  1

COURSES OFFERED BY THE DEPARTMENT OF GEOLOGY:

GEOL 100
PHYSICAL GEOLOGY  4 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week and
LABORATORY: 3 hours per week.
An introduction to the study of the earth with emphasis on the materials that make up the earth; plate tectonics, the process that created the continents and the ocean basins; and the processes that change the landscape. Laboratory study is closely coordinated with the lecture.
Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; contact a counselor for details.
CAN (California Articulation Number): GEOL 2
GEOL 101
INTRODUCTION TO PHYSICAL GEOLOGY 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
An introduction to the study of the earth with emphasis on the materials that make up the earth; plate tectonics; the process that created the continents and the ocean basins; and the processes that change the landscape. Laboratory study is closely coordinated with the lecture.
Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; contact a counselor for details.

GEOL 111
INVESTIGATIONS IN PHYSICAL GEOLOGY 1 UNIT
PREREQUISITE/COREQUISITE: GEOL 101.
LABORATORY: 3 hours per week.
DEPARTMENTAL ADVISORY: ENGL 015 or eligibility for ENGL 101 as determined by SBVC assessment process.
The laboratory portion of GEOL 100. Students who have completed GEOL 101 may enroll in GEOL 111 to complete the requirement for a physical science with a laboratory.
Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; contact a counselor for details.

GEOL 112
HISTORICAL GEOLOGY 4 UNITS
PREREQUISITE: GEOL 100 or 101.
LECTURE: 3 hours per week and
LABORATORY: 3 hours per week.
Geologic history of the earth including chronological development of major continental features, plate tectonics, and sea floor spreading, interpretation of earth history from rock and fossil records, and evolutionary development of plant and animal life. Field trips required.
Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): GEOL 4

GEOL 122
ENVIRONMENTAL GEOLOGY 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
A survey of the relationships between geologic processes, natural resources and the needs of society. Topics include natural hazards such as earthquakes, landslides and mudflows; mineral and energy resources; and the particular problems of geologic nature associated with massive urbanization.
Associate Degree Applicable
Course credit transfers to CSU and UC.

GEOL 170X4
GEOLOGIC HISTORY OF THE GREAT BASIN 1 UNIT
PREREQUISITE: GEOL 100 or 101.
LECTURE: .5 hour per week and
LABORATORY: 24 hours during a four-day field trip.
Discussion and observation of the physical and historical geology of the Great Basin province of the United States with specific emphasis on the geology of the Death Valley National Monument. Course work will include a series of lectures preparatory to a four-day field trip through parts of the Great Basin in and around Death Valley. Students must attend the field trip for successful completion of the course. This course may be taken four times.
Associate Degree Applicable
Course credit transfers to CSU.

GEOL 200
ROCKS AND ROCK MINERALS 4 UNITS
PREREQUISITE: GEOL 100 or 101.
LECTURE: 3 hours per week and
LABORATORY: 3 hours per week.
An introduction to the techniques of field identification of the principal rocks and rock-forming minerals through hand specimen examination. Discussions of the major classes of rocks and their origins. Field trips are an integral part of the class. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; contact a counselor for details.

GEOL 201
MINERALOGY 4 UNITS
PREREQUISITE: CHEM 101.
LECTURE: 3 hours per week and
LABORATORY: 3 hours per week.
Identification of minerals through chemical tests, physical properties, spectroscopic, optical and x-ray diffraction analysis. The study of crystal structures with models, natural crystals, and stenographic projection. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
Associate Degree Applicable
Course credit transfers to CSU.

GEOL 222
INDEPENDENT STUDY IN GEOLOGY 1-3 UNITS
PREREQUISITE: GEOL 100 or 101.
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 geology on an independent study basis. For each unit earned, 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. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; credit determined after transfer to UC.
GEOL 250  GEOLGY OF CALIFORNIA  3 UNITS  
PREREQUISITE: None.  
LECTURE: 3 hours per week.  
Physical and historical geology of California emphasizing the distinctive geologic features of each of California's twelve geomorphic provinces.  
Associate Degree Applicable  
Course credit transfers to CSU and UC.  

GEOL 251  GEOLOGY OF THE NATIONAL PARKS AND MONUMENTS  3 UNITS  
PREREQUISITE: None.  
LECTURE: 3 hours per week.  
A study of the geology of selected National Parks and Monuments of the United States with emphasis on the geologic processes which formed them. Field trips are offered. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.  
Associate Degree Applicable  
Course credit transfers to CSU.  

GEOL 260  INTRODUCTION TO FIELD GEOLOGY  2 UNITS  
PREREQUISITE: GEOL 100 or 101.  
LECTURE: 1 hour per week and  
LABORATORY: 3 hours per week.  
Demonstration, discussion and practice of field investigations of geologic environments involving describing, mapping, and identifying geologic phenomena. Field studies are required. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.  
Associate Degree Applicable  
Course credit transfers to CSU.  

GEOL 270x2  GEOLOGY OF THE EASTERN SIERRA NEVADA  1 UNIT  
PREREQUISITE: GEOL 100 or 101.  
LECTURE: .5 hour per week and  
LABORATORY: 24 hours during a field trip.  
Physical and historical geology of the Eastern Sierra Nevada Province with emphasis on the volcanic and glacial features in and around Mammoth-Mono Lakes region. Course work is a series of lectures preparatory to a field trip along the eastern margin of the Sierra Nevada. Students must attend the field trip for successful completion of the course. This course may be taken two times.  
Associate Degree Applicable  
Course credit transfers to CSU.  

HISTORY  
DIVISION:  Social Science & Human Development  
DIVISION DEAN:  Janice Noble, M.Ed.  
DEPARTMENT HEAD:  Edward Gomez, M.A.  
OTHER FACULTY:  Colleen Calderon, M.A.  
Daniel Walker, Ph.D.  
DIVISION SECRETARY:  To Be Announced  
DIVISION OFFICE:  Liberal Arts 122  
(909) 384-8603  
LIAISON COUNSELOR:  Laura Gomez, M.A.  
(909) 384-4404  

Courses in the History Department explore the past in a variety of ways. Through a critical evaluation of the causes and significance of events in the past, students of history learn about the individuals, ideas, actions, and events that have shaped our present. History teaches students to think critically and to communicate their ideas in a more sophisticated fashion. It promotes an understanding of cultures and societies from the past while it helps students consider their own identities in the world of today. While the study of history is valuable in its own right, it also serves as a useful preparation for careers in law, public service, journalism, business, medicine, and education.  

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

Core competencies emphasized by courses in this department:  
- Read and retain information.  
- Write clearly.  
- Find and interpret information.  
- Evaluate authority and bias of information.  
- Locate, evaluate and select evidence to support or discredit an argument.  
- Construct a persuasive argument.  
- Demonstrate knowledge of and respect for other cultures.  
- Demonstrate knowledge of and respect for one's own culture.  

COURSES OFFERED BY THE DEPARTMENT OF HISTORY:  

HIST 100  UNITED STATES HISTORY TO 1877  3 UNITS  
PREREQUISITE: None.  
LECTURE: 3 hours per week.  
General survey of the history of the United States with an emphasis on political, economic, social and cultural developments from the discovery of the United States through the Civil War and Reconstruction period.  
Associate Degree Applicable  
Course credit transfers to CSU and UC.  
CAN (California Articulation Number): HIST 8  

HEALTH EDUCATION  
See the Department of  
PHYSICAL EDUCATION AND ATHLETICS  

HEALTH EDUCATION  
See the Department of  
PHYSICAL EDUCATION AND ATHLETICS
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Prerequisite</th>
<th>Lecture Hours</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 101</td>
<td>UNITED STATES HISTORY: 1865 TO PRESENT</td>
<td>3</td>
<td>None</td>
<td>3 hours per week</td>
<td>A general survey of the history of the United States from the Reconstruction era to present times. This course will emphasize the various social, political, cultural and economic forces which shaped North American history.</td>
</tr>
<tr>
<td>HIST 107</td>
<td>THE UNITED STATES AND THE NORTH AMERICAN INDIANS</td>
<td>3</td>
<td>None</td>
<td>3 hours per week</td>
<td>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.</td>
</tr>
<tr>
<td>HIST 110</td>
<td>INTRODUCTION TO SERRANO CULTURAL STUDIES</td>
<td>3</td>
<td>None</td>
<td>3 hours per week</td>
<td>An introduction and general overview to Serrano culture as represented by studies and research in history, archeology, linguistics, and ethnography. Relationships with other Native Americans and European people as influences will also be explored.</td>
</tr>
<tr>
<td>HIST 124</td>
<td>CIVIL WAR AND RECONSTRUCTION</td>
<td>3</td>
<td>None</td>
<td>3 hours per week</td>
<td>Study of the causes, nature, course and consequences of the Civil War with special focus on American leaders, institutions and values.</td>
</tr>
<tr>
<td>HIST 126</td>
<td>HISTORY OF THE AMERICAN WEST</td>
<td>3</td>
<td>None</td>
<td>3 hours per week</td>
<td>An examination of major topics and issues in the United States history concerning the conquest, expansion and development of the West. The focus will be on critically analyzing major events and key themes, beginning with an analysis of the original inhabitants in the region, the purchasing and fighting to obtain greater amounts of land by the United States, the cultural clashes between new and old inhabitants, the railroad and the closing of the frontier, immigrants and their role in Westward expansion, and current ecological challenges. A special emphasis will also be given to the roles of women, African-Americans, ethnic immigrants like the German, Irish, and Chinese-Americans, and various Native Americans.</td>
</tr>
<tr>
<td>HIST 135</td>
<td>RELIGION IN AMERICA</td>
<td>3</td>
<td>None</td>
<td>3 hours per week</td>
<td>Principal figures, groups, issues and trends in religion from colonial times to the present including such topics as the Puritans, the growth of religious liberty in America, religion and social protest, the African-American religious experience; Catholics, Protestants and Jews, and contemporary religious phenomena.</td>
</tr>
<tr>
<td>HIST 137</td>
<td>RACIAL AND ETHNIC GROUPS IN UNITED STATES HISTORY</td>
<td>3</td>
<td>None</td>
<td>3 hours per week</td>
<td>An introduction to United States history focusing on the experiences of racial and ethnic groups that spans from the early Colonial period to present times. This course chronologically presents various racial and ethnic groups and their experiences through major social, political, economic, and cultural events in United States history. This course compares the experiences of racial and ethnic groups, such as African Americans, Native Americans, Jewish immigrants, European immigrants, Asian Americans, and Latinos throughout the establishment and development of our nation.</td>
</tr>
<tr>
<td>HIST 138</td>
<td>AFRICAN-AMERICAN HISTORY I</td>
<td>3</td>
<td>None</td>
<td>3 hours per week</td>
<td>An historical survey of African-Americans with emphasis on their origin, slave experience, cultural transplantation, participation in the American Revolution, and their march toward freedom during the Civil War and Reconstruction.</td>
</tr>
<tr>
<td>HIST 139</td>
<td>AFRICAN-AMERICAN HISTORY II</td>
<td>3</td>
<td>None</td>
<td>3 hours per week</td>
<td>An historical survey of Black Leadership in America since the 17th Century with emphasis on the changing nature of the African-American community, the Civil Rights struggle, Black Nationalism, and the rise of Black politics in our contemporary society.</td>
</tr>
<tr>
<td>HIST 140</td>
<td>CHICANO HISTORY</td>
<td>3</td>
<td>None</td>
<td>3 hours per week</td>
<td>An overview of the heritage of Mexican-Americans from its Spanish and Indian origins to the Chicano movement. This course will compare and contrast the Chicano experience to those of other racial and ethnic groups in American society, emphasizing the period since 1845.</td>
</tr>
</tbody>
</table>
HIST 145
HISTORY OF CALIFORNIA

3 UNITS

PREREQUISITE: None.
LECTURE: 3 hours per week.
A survey of California history from the Colonial times to the present including its diverse social, political, economic, racial and cultural make-up and development.
Associate Degree Applicable
Course credit transfers to CSU and UC.

HIST 150
INTRODUCTION TO LATIN AMERICAN HISTORY

3 UNITS

PREREQUISITE: None. 
LECTURE: 3 hours per week.
An introductory survey of Latin American history that begins with an overview of the region’s Iberian and American roots and surveys the major historical trends and events through recent times. Includes the impact of the encounter between European and American societies; the formation of colonial societies; the independence struggles; the integration of Latin America in the world economy; revolutionary movements in the 20th century; and the relations between the United States and Latin America.
Associate Degree Applicable 
Course credit transfers to CSU and UC.

HIST 153
HISTORY OF MEXICO

3 UNITS

PREREQUISITE: None. 
LECTURE: 3 hours per week.
Survey study of the development of Mexico from its early agrarian, colonial beginning to its present industrial growth with an emphasis on Mexico’s cultural, social and political changes.
Associate Degree Applicable 
Course credit transfers to CSU and UC.

HIST 160
HISTORY OF WESTERN CIVILIZATION: ANCIENT TIMES TO 1600 A.D.

3 UNITS

PREREQUISITE: None. 
LECTURE: 3 hours per week.
An introduction to the historical roots and development of Western Civilization from the Neolithic Age to the Renaissance. Includes the rise of Mediterranean civilization; the classical societies of Greece and Rome; the spread of Christianity; medieval European political, social and cultural achievements; and the European Renaissance.
Associate Degree Applicable 
Course credit transfers to CSU and UC.
CAN (California Articulation Number): HIST 2

HIST 161
HISTORY OF WESTERN CIVILIZATION: 1600 A.D. TO THE PRESENT

3 UNITS

PREREQUISITE: None. 
LECTURE: 3 hours per week.
An introduction to the history of Western Civilization from the Reformation to the present time. Includes the rise of the modern state system; the religious, political, scientific and technological revolutions and the cultural changes that accompany them; and the development of nationalism/imperialism and their economic/ideological foundations.
Associate Degree Applicable 
Course credit transfers to CSU and UC.
CAN (California Articulation Number): HIST 4

HIST 165
WORLD CIVILIZATIONS TO 1500

3 UNITS

PREREQUISITE: None. 
LECTURE: 3 hours per week.
Explores the origin and development of civilizations in Europe, the Americas, Africa, the Near East and East Asia. Using a global perspective and a comparative approach between the world’s major civilizations, students will examine social structure and daily life, evolution of complex political systems, cultural values and economic development to 1500.
Associate Degree Applicable 
Course credit transfers to CSU and UC.
CAN (California Articulation Number): HIST 14

HIST 170
WORLD CIVILIZATIONS SINCE 1492

3 UNITS

PREREQUISITE: None. 
LECTURE: 3 hours per week.
Survey of the modern world from 1500 to the present. The course emphasizes the unique characteristics of world cultures as they entered into a critical period of increasing interaction, a process that led to the shaping of the modern world. Specific themes include religious, economic and political revolution; the development of modern science; industrialism; imperialism; rise and fall of super powers: colonization and de-colonization, fascism, communism, world wars, and contemporary history.
Associate Degree Applicable 
Course credit transfers to CSU and UC.
CAN (California Articulation Number): HIST 16

HIST 171
AFRICAN CIVILIZATION

3 UNITS

PREREQUISITE: None. 
LECTURE: 3 hours per week.
A general survey of the history of Africa from the early Nile Valley civilizations to the twentieth century.
Associate Degree Applicable 
Course credit transfers to CSU and UC.

HIST 173
WORLD CIVILIZATIONS TO 1500

3 UNITS

PREREQUISITE: None. 
LECTURE: 3 hours per week.
A survey of the history of the Near and Middle East and Egypt from the beginning of the Old Kingdom to the Arab conquest.
Associate Degree Applicable 
Course credit transfers to CSU and UC.

HIST 180
SELECTED STUDIES IN HISTORY

3 UNITS

PREREQUISITE: HIST 100 or HIST 101. 
LECTURE: 3 hours per week.
A review of selected historical themes, periods, or personalities in history chosen by the department. Note: It is not anticipated that these courses will be offered during the current academic year. Please contact the Division Office for more information.
Associate Degree Applicable 
Course credit transfers to CSU.
Limited transfer to UC; credit determined after transfer to UC.

HIST 190-191
LIMITED TOPICS IN HISTORY

3 UNITS

PREREQUISITE: None. 
LECTURE: 3 hours per week.
Study of a limited number of historical topics. 

HIST 222
INDEPENDENT STUDY IN HISTORY

1-3 UNITS

PREREQUISITE: None. 
INDEPENDENT STUDY: 3-9 hours per week.
Assigned projects involving research and analysis of selected topic(s) or directed study for students who are interested in furthering their knowledge of history on an independent study basis. For each unit earned, students are required to devote three hours per week throughout the semester. Enrollment is limited to those who meet independent study criteria. Prior to registration, a contract must be prepared by the student and the department chairperson. See department chairperson for details.
Associate Degree Applicable 
Course credit transfers to CSU.
Limited transfer to UC; credit determined after transfer to UC.
HIST 223
SPECIAL PROBLEMS IN HISTORY II  2 UNITS
PREREQUISITE: None.
INDEPENDENT STUDY: 6 hours per week.
Assigned problems involving library and research work for
selected students who are interested in furthering their
knowledge of history 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. Note:
It is not anticipated that this course will be offered during
the current academic year. Please contact the Division
Office for more information.
Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; credit determined after transfer to UC.

HUMAN SERVICES

DIVISION:  Social Science & Human Development
DIVISION DEAN:  Janice Noble, M.Ed.
DEPARTMENT HEAD:  James Robinson, M.A., C.A.T.S.
OTHER FACULTY:  Joan Harter, M.S., C.A.T.S.
DIVISION SECRETARY:  To Be Announced
DIVISION OFFICE:  Liberal Arts 122
(909) 384-8603
LIAISON COUNSELOR:  Laura Gomez, M.A.
(909) 384-4404

The Human Services Department offers an academic and
experiential study of the history, theory, development, and
implementation of society’s response to human need.
Reflecting this varied and expanding field, Human
Services courses are based on a synthesis of knowledge
and methodologies of intervention at the individual, group,
and community levels.

Courses in this department fulfill various needs: (1) an
introduction to helping skills for students planning
advanced degrees in social work, counseling, vocational
rehabilitation, and related professions; (2) career
preparation at the Associate Degree level; (3) career
preparation at the Vocational Certificate level (Alcohol/
Drug Studies, Career Specialist, Case Management in the
Public Sector, Eating Disorders Studies, or Human
Services); and (4) continuing education for professionals
working in nursing, alcohol/drug counseling, or related
clinical settings. Students planning to transfer to a four-
year institution and major in human services or a related
field should consult with a counselor regarding the transfer
process and lower division requirements.

Most courses in Human Services can be applied toward
Continuing Education Hours for Marriage and Family
Therapists (MFT’s) and Licensed Clinical Social Workers
(LCSW’s), Provider Number PCE 2005, as well as for the
CATS and CAS Credentials. Several courses also apply
toward Continuing Education hours for Registered Nurses,
Provider Number 01480.

HUMAN SERVICES
ASSOCIATE OF ARTS DEGREE
To graduate with a specialization in Human Services,
students must complete 18 units in Human Services
courses (excluding HUMSV 198) plus the general breadth
requirements for the Associate Degree (total = 60 units).

HUMAN SERVICES 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. ALCOHOL/DRUG STUDIES CERTIFICATE
This certificate is designed to provide students with career
preparation at the vocational certificate level in the field of
substance abuse intervention and counseling for those
preparing for careers in alcohol/drug counseling or other
related human or social services fields. 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:
HUMSV 179 Legal/Ethical Issues in Human Services  3
HUMSV 181 Alcohol/Drug Studies: Introduction  3
HUMSV 182 Alcohol/Drug: Program Modalities  3
HUMSV 186 Alcohol/Drugs in the Family  3
HUMSV 188 Alcohol/Drugs: Medical Aspects  3
HUMSV 190 Drugs: Use and Abuse  3

TAKE ONE OF THE FOLLOWING THREE COURSES:

HUMSV 170 Introduction to Human Services  3
or
HUMSV 189 Alcohol/Drug Prevention and Intervention  (3)
or
PSYCH 132 Counseling Techniques  (3)

REQUIRED FIELD WORK COURSES:
Prior to field work courses, students must complete
HUMSV 181 plus nine other units in Human Services
courses required for the certificate with a grade of C or
better.

THE FOLLOWING THREE COURSES ARE TO BE TAKEN CONCURRENTLY:

HUMSV 183 Alcohol/Drug: Counseling I  3
HUMSV 197A Alcohol/Drug: Intern Seminar I  1
HUMSV 198A Alcohol/Drug: Field Work I  2

THE FOLLOWING THREE COURSES ARE TO BE TAKEN CONCURRENTLY:
HUMSV 184 Alcohol/Drug: Counseling II  3
HUMSV 197B Alcohol/Drug: Intern Seminar II  1
HUMSV 198B Alcohol/Drug: Field Work II  2

REQUIRED GENERAL EDUCATION COURSES:
ENGL 015 Preparation for College Writing  4
ENGL 101 Freshman Composition  4
PSYCH 100 General Psychology  3
SOC 100 Introduction to Sociology  3
SPEECH 100 Elements of Public Speaking  3

RECOMMENDED COURSE:
HUMSV 205 AIDS: Practices, Processes, and Policy  (2)
TOTAL UNITS:  46

2. CAREER SPECIALIST CERTIFICATE
This certificate is designed to provide students with career
preparation at the vocational certificate level to prepare
them for entry-level employment in the field of career
preparation and counseling. 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:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUMSV 170</td>
<td>Introduction to Human Services</td>
<td>3</td>
</tr>
<tr>
<td>HUMSV 172</td>
<td>Group and Family Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>HUMSV 173</td>
<td>Helping and Interpersonal Skills</td>
<td>3</td>
</tr>
<tr>
<td>HUMSV 207</td>
<td>Career Specialist</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 132</td>
<td>Counseling Techniques</td>
<td>3</td>
</tr>
</tbody>
</table>

**REQUIRED FIELD WORK COURSES:**

A minimum of four Human Services courses required for the certificate must be completed with a grade of C or better prior to field work courses.

Students must complete one of the following sets of two concurrent courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUMSV 195A</td>
<td>Human Services: Intern Seminar I</td>
<td>1</td>
</tr>
<tr>
<td>HUMSV 204A</td>
<td>Career Specialist: Field Work I</td>
<td>2</td>
</tr>
<tr>
<td>or</td>
<td>HUMSV 195B Human Services: Intern Seminar II</td>
<td>(1)</td>
</tr>
<tr>
<td>HUMSV 204B</td>
<td>Career Specialist: Field Work II</td>
<td>(2)</td>
</tr>
</tbody>
</table>

**REQUIRED GENERAL EDUCATION COURSES:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 015</td>
<td>Preparation for College Writing</td>
<td>4</td>
</tr>
<tr>
<td>or</td>
<td>ENGL 101 Freshman Composition</td>
<td>(4)</td>
</tr>
<tr>
<td>PSYCH 100</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 100</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SPEECH 100</td>
<td>Elements of Public Speaking</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS:** 31

3. **EATING DISORDERS STUDIES CERTIFICATE**

This certificate is designed to provide students with career preparation at the vocational certificate level to prepare them for entry-level employment in the field of eating disorders intervention, counseling, and treatment. 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:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUMSV 170</td>
<td>Introduction to Human Services</td>
<td>3</td>
</tr>
<tr>
<td>HUMSV 172</td>
<td>Group and Family Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>HUMSV 173</td>
<td>Helping and Interpersonal Skills</td>
<td>3</td>
</tr>
<tr>
<td>HUMSV 175</td>
<td>Introduction to Eating Disorders</td>
<td>3</td>
</tr>
<tr>
<td>HUMSV 176</td>
<td>Treatment Modalities for Eating Disorders</td>
<td>3</td>
</tr>
<tr>
<td>HUMSV 178</td>
<td>Medical Aspects of Eating Disorders</td>
<td>3</td>
</tr>
</tbody>
</table>

**REQUIRED FIELD WORK COURSES:**

A minimum of four Human Services courses required for the certificate must be completed with a grade of C or better prior to field work courses.

Students must complete one of the following sets of two concurrent courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUMSV 195A</td>
<td>Human Services: Intern Seminar I</td>
<td>1</td>
</tr>
<tr>
<td>HUMSV 200A</td>
<td>Eating Disorders: Field Work I</td>
<td>2</td>
</tr>
<tr>
<td>or</td>
<td>HUMSV 195B Human Services: Intern Seminar II</td>
<td>(1)</td>
</tr>
<tr>
<td>HUMSV 200B</td>
<td>Eating Disorders: Field Work II</td>
<td>(2)</td>
</tr>
</tbody>
</table>

**REQUIRED GENERAL EDUCATION COURSES:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 015</td>
<td>Preparation for College Writing</td>
<td>4</td>
</tr>
<tr>
<td>or</td>
<td>ENGL 101 Freshman Composition</td>
<td>(4)</td>
</tr>
<tr>
<td>PSYCH 100</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>FCS 162</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>PSYCH 100 General Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS:** 40

4. **HUMAN SERVICES CERTIFICATE**

This certificate is designed to prepare students for entry-level employment in human services by providing them with fundamental, vocational certificate-level knowledge of the methodologies of intervention at the individual, group, and community levels. 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:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUMSV 170</td>
<td>Introduction to Human Services</td>
<td>3</td>
</tr>
<tr>
<td>HUMSV 172</td>
<td>Group and Family Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>HUMSV 173</td>
<td>Helping and Interpersonal Skills</td>
<td>3</td>
</tr>
<tr>
<td>HUMSV 179</td>
<td>Legal/Ethical Issues in Human Services</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 132</td>
<td>Counseling Techniques</td>
<td>3</td>
</tr>
<tr>
<td>SOC 110</td>
<td>Contemporary Social Issues</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>SOC 141 Race and Ethnic Relations</td>
<td>(3)</td>
</tr>
</tbody>
</table>

Two other 3-unit Human Services courses 6

**REQUIRED FIELD WORK COURSES:**

A minimum of four Human Services courses required for the certificate must be completed with a grade of C or better prior to field work courses.

**THE FOLLOWING TWO COURSES ARE TO BE TAKEN CONCURRENTLY:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUMSV 195A</td>
<td>Human Services: Intern Seminar I</td>
<td>1</td>
</tr>
<tr>
<td>HUMSV 196A</td>
<td>Human Services: Field Work I</td>
<td>2</td>
</tr>
</tbody>
</table>

**THE FOLLOWING TWO COURSES ARE TO BE TAKEN CONCURRENTLY:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUMSV 195B</td>
<td>Human Services: Intern Seminar II</td>
<td>1</td>
</tr>
<tr>
<td>HUMSV 196B</td>
<td>Human Services: Field Work II</td>
<td>2</td>
</tr>
</tbody>
</table>

**REQUIRED GENERAL EDUCATION COURSES:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 015</td>
<td>Preparation for College Writing</td>
<td>4</td>
</tr>
<tr>
<td>or</td>
<td>ENGL 101 Freshman Composition</td>
<td>(4)</td>
</tr>
<tr>
<td>PSYCH 100</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 100</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS:** 40

5. **CASE MANAGEMENT IN THE PUBLIC SECTOR CERTIFICATE**

This certificate is designed to prepare students for entry-level employment in case management in public social services setting, including the fundamentals of organizational structure, funding, evaluation, assessment and referral, employment services, and career paths. 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:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUMSV 140</td>
<td>Case management in Public Service</td>
<td>3</td>
</tr>
<tr>
<td>HUMSV 167</td>
<td>Crisis Intervention, Assessment, Referral</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>HUMSV 170 Introduction to Human Services</td>
<td>3</td>
</tr>
<tr>
<td>HUMSV 173</td>
<td>Helping and Interpersonal Skills</td>
<td>3</td>
</tr>
<tr>
<td>HUMSV 195A</td>
<td>Human Services: Intern Seminar I</td>
<td>1</td>
</tr>
<tr>
<td>HUMSV 196A</td>
<td>Human Services: Field Work I</td>
<td>2</td>
</tr>
</tbody>
</table>
ENGL 015 Preparation for College Writing or Higher English course 4
CIT 101 Intro to Computer Literacy 3
PSYCH 100 General Psychology 3
SPEECH 111 Interpersonal Communication 3
SPEECH 174 Intercultural Communication 3
TOTAL UNITS: 31

COURSES OFFERED BY THE DEPARTMENT OF HUMAN SERVICES:

HUMSV 140
CASE MANAGEMENT IN PUBLIC SERVICE 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
An overview of the history, theories, skills and knowledge of case management in public social service settings. Topics include organizational structure, funding streams, regulatory issues, job description, skills, personal qualities, evaluation, assessment and referral, employment services, and career paths. Designed for students entering into the field of case management in public service.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

HUMSV 160
HUMAN SERVICES ASPECTS OF CRIME AND DELINQUENCY 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
The nature of correctional work; aims and objectives of correctional administration; probation and parole practices; skills, knowledge, and attitudes required for employment in the field; types of institutions and services; and career opportunities in corrections.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

HUMSV 167
CRISIS INTERVENTION, ASSESSMENT, REFERRAL, AND EVALUATION 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
History and definitions of crisis intervention. Intervention theories and models, interviewing techniques, referral procedures, and assessment. Analysis of types of crises such as suicide, substance abuse and violence in the workplace; common dangers; and coping methods. Professional issues including legal and ethical issues, confidentiality, cultural sensitivity and burn out.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

HUMSV 170
INTRODUCTION TO HUMAN SERVICES 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Historical and theoretical perspectives of human services in response to social problems. Legal, ethical, and problem solving models are presented. Implications of ethnic, gender, and cultural diversity issues are discussed.
Associate Degree Applicable
Course credit transfers to CSU.

HUMSV 172
GROUP AND FAMILY DYNAMICS 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
A study of the dynamics operating in groups and families including the identification of healthy versus dysfunctional groups/families; methods of intervention in dysfunctional groups/families; and techniques of facilitating treatment groups. 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.

HUMSV 173
HELPING AND INTERPERSONAL SKILLS 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
A practical study of helping strategies and interpersonal skills. The focus is on the use of techniques to improve communication, better evaluate relationships, and resolve conflicts. 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.

HUMSV 175
INTRODUCTION TO EATING DISORDERS 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
An introduction to the description, explanation, and treatment of eating disorders (e.g., bulimia, anorexia). Includes patterns of compulsive eating, chronic dieting, and the history of attitudes toward eating disorders. Biological, psychoanalytic, behavioral, and other theoretical perspectives and treatment approaches are surveyed. 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.

HUMSV 176
TREATMENT MODALITIES FOR EATING DISORDERS 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
With a focus on treatment, this course addresses assessment, diagnosis, treatment, and community support systems for people with eating disorders and their families. 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. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
Associate Degree Applicable
Course credit transfers to CSU.
HUMSV 178
MEDICAL ASPECTS OF EATING DISORDERS
3 UNITS

PREREQUISITE: None.
LECTURE: 3 hours per week.
Reviews eating disorders from a medical perspective including a review of the etiology and physiology of obesity, anorexia, compulsive eating, and bulimia. Reviews medical treatment and possible physical complications associated with specific eating disorders. 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. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information. Associate Degree Applicable
Course credit transfers to CSU.

HUMSV 179
LEGAL/ETHICAL ISSUES IN HUMAN SERVICES
3 UNITS

PREREQUISITE: None.
LECTURE: 3 hours per week.
A study, interpretation, and practice of the legal/ethical responsibilities and liabilities encountered in providing and utilizing Human Services with special focus on privileged relationships, counseling, and confidentiality. Associate Degree Applicable
Course credit transfers to CSU.

HUMSV 181
ALCOHOL/DRUG STUDIES: INTRODUCTION
3 UNITS

PREREQUISITE: None.
LECTURE: 3 hours per week.
Exploration of the psychological, sociological, and physical causes and effects of alcohol and drug abuse. Includes the examination of stereotypes about substance abusers, and the major prevention and treatment strategies. 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. This course also qualifies for the educational requirement for Marriage and Family Counselors and Licensed Clinical Social Workers. Associate Degree Applicable
Course credit transfers to CSU.

HUMSV 182
ALCOHOL/DRUG: PROGRAM MODALITIES
3 UNITS

PREREQUISITE: None.
LECTURE: 3 hours per week.
Principles and practices of the social models of alcohol/drug rehabilitation; comparative analysis of the various program/treatment modalities; and a review of the state certification and licensing requirements with a focus on administration, staffing, and community involvement in treatment programs. 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.

HUMSV 183
ALCOHOL/DRUG: COUNSELING I
3 UNITS

PREREQUISITE: None.
DEPARTMENTAL ADVISORY: Complete four Human Services courses required for the Alcohol/Drug Studies Certificate.
LECTURE: 3 hours per week.
Designed for students seeking certificates in Alcohol/Drug Studies, and includes the dynamics of the helping relationship, analysis and implications of common characteristics of substance dependent individuals, demonstration and practice of assessment, interviewing and referral techniques; and review of counseling skills and case management. STUDENTS SEEKING ALCOHOL/DRUG STUDIES CERTIFICATE MUST ALSO TAKE HUMSV 197A and HUMSV 198A.
Associate Degree Applicable
Course credit transfers to CSU.

HUMSV 184
ALCOHOL/DRUG: COUNSELING II
3 UNITS

PREREQUISITE: None.
DEPARTMENTAL ADVISORY: Complete four Human Services courses required for the Alcohol/Drug Studies Certificate and HUMSV 183, HUMSV 197A and HUMSV 198A.
LECTURE: 3 hours per week.
Designed for students seeking certificates in Alcohol/Drug Studies, and includes practical implications and experience in various recovery and crisis intervention modalities; investigation of and experience in group dynamics; analysis and interpretation of critical aspects of counseling; analysis of the role of significant others in the recovery process; discussion of current treatment interventions; and the process of case management and record keeping. STUDENTS SEEKING ALCOHOL/DRUG STUDIES CERTIFICATE MUST ALSO TAKE HUMSV 197B AND HUMSV 198B.
Associate Degree Applicable
Course credit transfers to CSU.

HUMSV 185
ALCOHOL/DRUGS IN THE FAMILY
3 UNITS

PREREQUISITE: None.
DEPARTMENTAL ADVISORY: Complete four Human Services courses required for the Alcohol/Drug Studies Certificate.
LECTURE: 3 hours per week.
This course reviews the family dynamics associated with alcoholism and drug addiction; the impact of the diseases on different family members; family oriented approaches to recovery; and the reintegration of the family into the community. 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.

HUMSV 186
ALCOHOL/DRUGS IN THE FAMILY
3 UNITS

PREREQUISITE: None.
LECTURE: 3 hours per week.
This course reviews the family dynamics associated with alcoholism and drug addiction; the impact of the diseases on different family members; family oriented approaches to recovery; and the reintegration of the family into the community. 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.

HUMSV 187
ADULT CHILDREN OF ALCOHOLICS
1 UNIT

PREREQUISITE: None.
LECTURE: 1 hour per week.
Overview of the problems experienced by adult children of alcoholics (ACAs) with particular emphasis on the various approaches in counseling ACAs. Associate Degree Applicable
Course credit transfers to CSU for elective credit only.
HUMSV 188
ALCOHOL/DRUG: MEDICAL ASPECTS 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: HUMSV 181.
LECTURE: 3 hours per week.
The biological impact of alcoholism and other drug dependencies with an emphasis on the treatment and recovery processes, and the role of medical professionals as members of the recovery team. 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 for elective credit only.

HUMSV 189
ALCOHOL/DRUG: PREVENTION AND INTERVENTION 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Overview of theories and strategies for the prevention of and intervention with alcohol and drug abuse. Emphasis on promoting health and wellness through self-awareness, decision-making, and coping skills.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

HUMSV 190
DRUGS: USE AND ABUSE 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
A survey of the impact of drug use and abuse in our society including the history, pharmacology, and physiological impact of each drug category; laws related to drug abuse; and society’s response to both drug use and abuse.
Associate Degree Applicable
Course credit transfers to CSU.

HUMSV 195A
HUMAN SERVICES: INTERN SEMINAR I 1 UNIT
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: Complete at least four Human Services courses required for any of the Human Services Department Certificates (excluding the Alcohol/Drug Studies Certificate).
LECTURE: 1 hour per week.
An introduction to applied strategies for crisis intervention, case analysis, and therapeutic interventions, and serves as a lecture-based foundation for student's work experience. STUDENTS MUST ALSO TAKE THE WORK EXPERIENCE CLASS THAT MATCHES THEIR CERTIFICATE GOAL (HUMSV 198 A-Z).
Associate Degree Applicable
Course credit transfers to CSU.

HUMSV 195B
HUMAN SERVICES: INTERN SEMINAR II 1 UNIT
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: Complete at least four Human Services courses required for any of the Human Services Department Certificates (excluding the Alcohol/Drug Studies Certificate).
LECTURE: 1 hour per week.
An introduction to applied strategies for crisis intervention, case analysis, and therapeutic interventions, and serves as a lecture-based foundation for students’ work experience. STUDENTS MUST ALSO TAKE THE WORK EXPERIENCE CLASS THAT MATCHES THEIR CERTIFICATE GOAL (HUMSV 198 A-Z).
Associate Degree Applicable
Course credit transfers to CSU.

HUMSV 196A
HUMAN SERVICES: FIELD WORK I 2-3 UNITS
PREREQUISITE: None.
COREQUISITE: HUMSV 195A.
DEPARTMENTAL ADVISORY: Complete four Human Services courses required for the Human Services, Career Specialist or Eating Disorders certificate.
Supervised field experience in specific agencies to provide students with work experience. Students work 10-15 hours per week with 5 hours each week equal to one unit.
Associate Degree Applicable
Course credit transfers to CSU.

HUMSV 196B
HUMAN SERVICES: FIELD WORK II 2-3 UNITS
PREREQUISITE: None.
COREQUISITE: HUMSV 195B.
DEPARTMENTAL ADVISORY: Complete four Human Services courses required for the Human Services, Career Specialist or Eating Disorders certificate.
Supervised field experience in specific agencies to provide students with work experience in the field of Human Services. Students work in their assigned agencies 10-15 hours per week with 5 hours each week equal to one unit.
Associate Degree Applicable
Course credit transfers to CSU.

HUMSV 197A
ALCOHOL/DRUG: INTERN SEMINAR I 1 UNIT
DEPARTMENTAL ADVISORY: Complete four Human Services courses required for the Alcohol/Drug Studies Certificate or the Employees Assistance Program Certificate.
LECTURE: 1 hour per week.
An introduction to the duties and work objectives of counselors in alcohol/drug and related fields. Basic skills are developed through discussion and demonstration. Serves as a lecture-based foundation for students’ field work. STUDENTS SEEKING ALCOHOL/DRUG STUDIES CERTIFICATE MUST ALSO TAKE HUMSV 183 AND HUMSV 198A. STUDENTS SEEKING EMPLOYEES ASSISTANCE PROGRAM CERTIFICATE MUST ALSO TAKE HUMSV 183 AND HUMSV 202A.
Associate Degree Applicable
Course credit transfers to CSU.
HUMSV 197B
ALCOHOL/DRUG: INTERN SEMINAR II 1 UNIT
DEPARTMENTAL ADVISORY: Complete four Human Services courses required for the Alcohol/Drug Studies Certificate or the Employees Assistance Program Certificate.
LECTURE: 1 hour per week.
On-the-job skills, such as case management, assessment, and counseling, are monitored and enhanced through class discussion and demonstration in this lecture-based foundation to the students’ field work. STUDENTS SEEKING ALCOHOL/DRUG STUDIES CERTIFICATE MUST ALSO TAKE HUMSV 184 AND HUMSV 198B. STUDENTS SEEKING EMPLOYEES ASSISTANCE PROGRAM CERTIFICATE MUST ALSO TAKE HUMSV 184 AND HUMSV 202B.
Associate Degree Applicable
Course credit transfers to CSU.

HUMSV 198
HUMAN SERVICES 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 to earn units using the following formula: For paid work, 75 hours = 1 unit; for volunteer work, 60 hours = 1 unit. Students may earn a total of 16 units toward graduation in Work Experience 198 courses. Students MUST be working for pay or volunteer before registering for a Work Experience class. NOTE: Only one section of Work Experience may be taken during a semester.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

HUMSV 198A
ALCOHOL/DRUG: FIELD WORK I 2-3 UNITS
PREREQUISITE: None.
COREQUISITES: HUMSV 183 and HUMSV 197A.
DEPARTMENTAL ADVISORY: Complete four Human Services courses required for the Alcohol/Drug Studies Certificate.
Supervised field experience in specifically assigned agencies to provide students with work experience in the field of Alcohol/Drug Studies. Students work in their assigned agencies 10-15 hours per week with 5 hours each week equal to one unit.
Associate Degree Applicable
Course credit transfers to CSU.

HUMSV 204A
CAREER SPECIALIST: FIELD WORK I
PREREQUISITE: None.
COREQUISITE: HUMSV 195A.
DEPARTMENTAL ADVISORY: Complete four Human Services courses required for the Career Specialist Certificate.
Supervised field experience to provide students with work experience. Students work in their assigned agencies 10-15 hours per week with 5 hours each week equal to one unit.
Associate Degree Applicable
Course credit transfers to CSU.

HUMSV 205
AIDS: PRACTICES, PROCESSES, AND POLICY 2 UNITS
PREREQUISITE: None.
LECTURE: 2 hours per week.
An overview of the tragedy of Acquired Immune Deficiency Syndrome (AIDS) including its diagnosis, transmission, and prevention; the psychosocial and economic impact of the disease on patients and their families and friends; society’s response to the disease; and effective approaches to assist individuals coping with AIDS.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

HUMSV 207
CAREER SPECIALIST 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
An introduction to the field of career counseling including interviewing techniques, assessment tools, job opportunities, and models for developing occupational options.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

HUMSV 261 A-Z
SELECTED STUDIES IN HUMAN SERVICES:
261A CHILD ABUSE
261B YOUTH COUNSELING
261C FAMILY VIOLENCE
261D SCHOOL VIOLENCE PREVENTION
.25-3.00 UNITS
PREREQUISITE: None.
LECTURE: 4 - 54 hours per semester.
Explores themes that are current and relevant in the areas of Human Services such as Child Abuse, Eating Disorders, Social Work, Mental Health, Corrections, and Community Services. Possible topics include: child/spouse abuse; crisis intervention; youth issues; etc.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

HUMSV 281 A-Z
SELECTED STUDIES IN ALCOHOL/DRUG STUDIES
.25-3 UNITS
281A ADDICTION SEVERITY INDEX (ASI)
281B DUAL DIAGNOSIS
281C COUNSELING IN CRIMINAL JUSTICE SETTING
281D COMMUNITY BASED CRIMINAL JUSTICE PROGRAMS
PREREQUISITE: None.
LECTURE: 4 - 54 hours per semester.
Explores addictions in the areas of Human Services, Alcohol/Drug Counseling, Mental Health, Human Development, and Corrections. Suggested subjects include codependency, driving under the influence, co-occurring disorders, tobacco addiction, and assessment instruments, etc.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.
Courses in the Inspection Technology Department are designed to train construction inspectors and contractors who prepare construction for inspection. This training includes the structural, mechanical, and technical aspects of construction. Building, plumbing, electrical, heating and air conditioning codes and related laws are included in INSPEC 013B, 014B, 015B, and 016B. Energy regulations and the perspective of building inspectors are included in INSPEC 017B and 018B. INSPEC 024B and 025B have been developed for civil service employees working in this field.

Students interested in a single subject, such as electrical contractors who want to become more informed about the requirements of the electrical code, may take individual courses without prerequisites. Students seeking a certificate or an associate degree in this discipline must complete the sequence of required courses described below.

**INSPECTION TECHNOLOGY ASSOCIATE OF SCIENCE DEGREE**

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

**INSPECTION TECHNOLOGY CERTIFICATE**

This certificate is designed to prepare students for entry-level employment in construction inspection, examining the construction, alteration, or repair of buildings and other structures to ensure compliance with building codes and ordinances, zoning regulations, and contract specifications. 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:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INSPEC 010</td>
<td>Fundamentals of Construction Inspection I</td>
<td>3</td>
</tr>
<tr>
<td>INSPEC 011</td>
<td>Fundamentals of Construction Inspection II</td>
<td>3</td>
</tr>
<tr>
<td>INSPEC 012</td>
<td>Fundamentals of Construction Inspection III</td>
<td>3</td>
</tr>
<tr>
<td>INSPEC 013B</td>
<td>Advanced Construction Inspection: Uniform Building Code</td>
<td>3</td>
</tr>
<tr>
<td>INSPEC 014B</td>
<td>Advanced Construction Inspection: National Electrical Code</td>
<td>3</td>
</tr>
<tr>
<td>INSPEC 015B</td>
<td>Advanced Construction Inspection: Uniform Plumbing Code</td>
<td>3</td>
</tr>
<tr>
<td>INSPEC 016B</td>
<td>Advanced Construction Inspection: Uniform Mechanical Code</td>
<td>3</td>
</tr>
<tr>
<td>INSPEC 017B</td>
<td>California State Energy Regulations for Residential Buildings</td>
<td>3</td>
</tr>
<tr>
<td>INSPEC 018B</td>
<td>California State Energy Regulations for Non-Residential Buildings</td>
<td>3</td>
</tr>
<tr>
<td>INSPEC 024B</td>
<td>Community Relations for Civil Service Employees</td>
<td>3</td>
</tr>
<tr>
<td>INSPEC 025B</td>
<td>Communication and Enforcement</td>
<td>3</td>
</tr>
<tr>
<td>INSPEC 026B</td>
<td>Non-Structural Plan Review</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS:** 36

**COURSES OFFERED BY THE DEPARTMENT OF INSPECTION TECHNOLOGY:**

**INSPEC 010**

**FUNDAMENTALS OF CONSTRUCTION INSPECTION I**

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

A basic study of soils engineering, soils construction methods, soils identification, and soils terminology and nomenclature.

**Associate Degree Applicable**

**INSPEC 011**

**FUNDAMENTALS OF CONSTRUCTION INSPECTION II**

**PREREQUISITE:** INSPEC 010.

**LECTURE:** 3 hours per week.

A basic study of concrete and asphalt including cements, aggregates, admixtures, job and batch, control, properties of concrete, finishing, curing, and reinforcing.

**Associate Degree Applicable**

**INSPEC 012**

**FUNDAMENTALS OF CONSTRUCTION INSPECTION III**

**PREREQUISITE:** INSPEC 011.

**LECTURE:** 3 hours per week.

A basic study of structures including wood, steel, and masonry construction, building occupancies, constructions and separations, acoustics and sound control.

**Associate Degree Applicable**

**INSPEC 013B**

**ADVANCED CONSTRUCTION INSPECTION: UNIFORM BUILDING CODE**

**PREREQUISITE:** INSPEC 012.

**LECTURE:** 3 hours per week.

Study of the Uniform Building Code for inspectors, including application, interpretation, and use of the code.

**Associate Degree Applicable**

**INSPEC 014B**

**ADVANCED CONSTRUCTION INSPECTION: NATIONAL ELECTRICAL CODE**

**PREREQUISITE:** INSPEC 012.

**LECTURE:** 3 hours per week.

The interpretation and use of the National Electrical Code.

**Associate Degree Applicable**

**INSPEC 015B**

**ADVANCED CONSTRUCTION INSPECTION: UNIFORM PLUMBING CODE**

**PREREQUISITE/Corequisite:** INSPEC 012.

**LECTURE:** 3 hours per week.

The interpretation and use of the Uniform Plumbing Code.

**Associate Degree Applicable**
INSPEC 016B
ADVANCED CONSTRUCTION INSPECTION: UNIFORM MECHANICAL CODE 3 UNITS
PREREQUISITE: INSPEC 012.
LECTURE: 3 hours per week.
The interpretation and use of the Uniform Mechanical Code.
Associate Degree Applicable

INSPEC 017B
CALIFORNIA STATE ENERGY REGULATIONS FOR RESIDENTIAL BUILDINGS 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Basic compliance with California Title 24 Energy Efficiency Standards for residential buildings. Includes prescriptive and performance methods, such as alternative packages, point systems, and computers.
Associate Degree Applicable

INSPEC 018B
CALIFORNIA STATE ENERGY REGULATIONS FOR NON-RESIDENTIAL BUILDINGS 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Basic compliance with California Title 24 Energy Efficiency Standards for non-residential buildings. Includes prescriptive and performance methods, such as alternative packages, point systems, and computers.
Associate Degree Applicable

INSPEC 024B
COMMUNITY RELATIONS FOR CIVIL SERVICE EMPLOYEES 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Introduction to community relations for civil service employees.
Associate Degree Applicable

INSPEC 025B
BUILDING INSPECTION FOR CIVIL SERVICE EMPLOYEES: COMMUNICATION AND ENFORCEMENT 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Effective writing and building inspection skills for Civil Service employees.
Associate Degree Applicable

INSPEC 026B
NON-STRUCTURAL PLAN REVIEW 3 UNITS
COREQUISITE: INSPEC 013B.
LECTURE: 3 hours per week.
Training in the application of the Uniform Building Code to pre-construction drawings, including legal requirements for nonstructural plan review, local and community laws applicable to pre-construction drawings, and the use of plan reviews as a first step in performing consistent and thorough inspections.
Associate Degree Applicable

INSPEC 198
INSPECTION 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 to earn units using the following formula:
For paid work, 75 hours = 1 unit; for volunteer work, 60 hours = 1 unit. Students may earn a total of 16 units toward graduation in Work Experience 198 courses. Students MUST be working for pay or volunteer before registering for a Work Experience class. NOTE: Only one section of Work Experience may be taken during a semester.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

JOURNALISM
See the Department of ENGLISH

LIBERAL ARTS
ASSOCIATE OF ARTS DEGREE

Division: Instruction Office
Division Dean: Kay Ragan, Ed.D.
Interim Vice President, Instruction
Administrative Assistant: Lisa Gonzales
Division Office: Administration/Student Services 200
(909) 384-8993

The Liberal Arts major is an interdisciplinary major that exposes students to various academic disciplines and includes courses from the Sciences, Social Sciences and Humanities. The major is intended for students who want to transfer to a university, or for students who want a general Associate of Arts Degree that reflects broad-based interests rather than the more narrow focus of other majors.

Students may obtain an Associate of Arts Degree in Liberal Arts by completing a minimum of 60 semester units of coursework (of these 60 units, a minimum of 12 units must be taken at SBVC) in addition to meeting one of the following criteria:

1. Completion of all CSU General Education-Breadth requirements, as described on page 34 of the college catalog; or
2. Completion of all IGETC requirements for either the University of California or the California State University systems, as described on page 31 of the college catalog; or
3. Completion of the requirements for Associate Degree Option 2, as described on page 29 of the college catalog, plus a combined total of 18 additional units selected from Category I (Natural Science), Category II (Social and Behavioral Science) and Category III (Humanities).
Library skills are fundamental to student success, especially in today’s information-laden society. The Library Technology Department offers one course (LIB 110) which is designed to teach students how to access both print and on-line information sources more efficiently and effectively. The remaining Library Technology courses are part of an associate of arts degree or a certificate program designed for students who are interested in working as paraprofessionals in the library field. Taken alone, each course provides entry-level exposure to a particular library department or function. Presently-employed library workers can also take courses to increase their level and variety of training in the library field. Courses for the program are rotated over a two-semester sequence.

Core competencies emphasized by courses in this department:

- Employ vocabulary of the subject studied.
- Find and interpret information.
- Evaluate authority and bias of information.
- Utilize technology to organize and present information.
- Demonstrate working knowledge of basic computer function.
- Apply learned knowledge to new situations.
- Evaluate own ethical beliefs in relationship to moral dilemmas.
- Work effectively in group settings.

**LIBRARY SCIENCE**  
**ASSOCIATE OF ARTS DEGREE**

To graduate with a specialization in Library Science, students must complete 18 units from the following list of courses plus the general breadth requirements for the Associate Degree (minimum 60 units).

### REQUIRED COURSES:

<table>
<thead>
<tr>
<th>Course</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIB 062 Care and Repair of Library Materials</td>
<td>1</td>
</tr>
<tr>
<td>LIB 064 Introduction to Libraries for Library Technicians</td>
<td>1</td>
</tr>
<tr>
<td>LIB 065 Public Services for Library Technicians</td>
<td>3</td>
</tr>
<tr>
<td>LIB 066 Acquisitions for Library Technicians</td>
<td>3</td>
</tr>
<tr>
<td>LIB 067 Library Technical Services</td>
<td>3</td>
</tr>
<tr>
<td>LIB 068 Library Media Services</td>
<td>2</td>
</tr>
<tr>
<td>LIB 069 Library Automation for Library Technicians (or any other hands-on college-level computer course)</td>
<td>(2)</td>
</tr>
</tbody>
</table>

### RECOMMENDED COURSES:

<table>
<thead>
<tr>
<th>Course</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 055 or 155 Children’s Literature</td>
<td>(3)</td>
</tr>
<tr>
<td>LIB 110 Information Literacy</td>
<td>1</td>
</tr>
</tbody>
</table>

### LIBRARY TECHNOLOGY CERTIFICATE

This certificate is designed to prepare students for entry-level employment in a library, assisting librarians to acquire, prepare, and organize material, and/or assisting users in finding information. In some cases, such as in small branch or school libraries, library technicians may perform any or all of these tasks on their own. 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:

<table>
<thead>
<tr>
<th>Course</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIB 062 Care and Repair of Library Materials</td>
<td>1</td>
</tr>
<tr>
<td>LIB 064 Introduction to Libraries for Library Technicians</td>
<td>1</td>
</tr>
<tr>
<td>LIB 065 Public Services for Library Technicians</td>
<td>3</td>
</tr>
<tr>
<td>LIB 066 Acquisitions for Library Technicians</td>
<td>3</td>
</tr>
<tr>
<td>LIB 067 Library Technical Services</td>
<td>3</td>
</tr>
<tr>
<td>LIB 068 Library Media Services</td>
<td>2</td>
</tr>
<tr>
<td>LIB 069 Library Automation for Library Technicians (or any other hands-on college-level computer course)</td>
<td>(2)</td>
</tr>
<tr>
<td>LIB 198* Library Work Experience</td>
<td>1-4</td>
</tr>
<tr>
<td>ENGL 055 or 155 Children’s Literature</td>
<td>(3)</td>
</tr>
<tr>
<td>CIT 010 Beginning Keyboarding</td>
<td>(3)</td>
</tr>
</tbody>
</table>

*This requirement may be waived if the student has been employed in a library for at least one year at full time (or equivalent).

### COURSES OFFERED BY THE DEPARTMENT OF LIBRARY TECHNOLOGY:

**LIB 062**  
**CARE AND REPAIR OF LIBRARY MATERIALS**  
**1 UNIT**  
**PREREQUISITE:** None.  
**LECTURE:** .5 hour per week and **LABORATORY:** 1.5 hours per week.  
Basic, hands-on instruction in the binding, repair, and care of printed library materials.  
**Associate Degree Applicable**

**LIB 064**  
**INTRODUCTION TO LIBRARIES FOR LIBRARY TECHNICIANS**  
**1 UNIT**  
**PREREQUISITE:** None.  
**LECTURE:** 1 hour per week.  
Introduction to the philosophy of library service; the history and types of libraries; the relationship of a library to the community it serves; the organizational structure of libraries; the role of the Library Technician; and the development of workplace attitude.  
**Associate Degree Applicable**
LIB 065
PUBLIC SERVICES FOR LIBRARY TECHNICIANS  
3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
An introduction to library circulation systems; customer service skills; bibliographic instruction; shelf maintenance; image in public service; dealing with problem patrons; and basic reference skills, including a review of standard print and computer-based reference sources and their usage.
Associate Degree Applicable

LIB 066
ACQUISITIONS FOR LIBRARY TECHNICIANS  
3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Introduction to the publishing industry; principles of collection development; bibliographic searching; acquisitions tools and techniques; accounting and budgeting procedures; an overview of ordering, receiving and claiming procedures; and weeding procedures.
Associate Degree Applicable

LIB 067
LIBRARY TECHNICAL SERVICES  
3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Associate Degree Applicable

LIB 068
LIBRARY MEDIA SERVICES  
2 UNITS
PREREQUISITE: None.
LECTURE: 1.5 hours per week and
LABORATORY: 1.5 hours per week.
Provides an overview of a wide variety of media services within a library setting, ranging from the more traditional formats of film and video to the more recent compact disc technologies, digital audio, digitized video, telecommunications, and hypermedia.
Associate Degree Applicable

LIB 069
LIBRARY AUTOMATION FOR LIBRARY TECHNICIANS  
2 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORIES: Completion of LIB 065, LIB 066, AND LIB 067, or equivalent experience.
LECTURE: 1.5 hour per week and
LABORATORY: 1.5 hours per week.
Introduction to the application and integration of computer systems in libraries. Students will be exposed to a variety of computer applications including online public access catalogs, automated circulation and cataloging systems. In addition, students will gain entry-level proficiency in utilizing compact disc technology and in conducting online database searches.
Associate Degree Applicable

LIB 100
INFORMATION LITERACY  
1 UNIT
PREREQUISITE: None.
LECTURE: .50 hour and
LABORATORY: 1.5 hours per week.
An introduction to the skills needed to effectively access print and online information sources, to critically evaluate the information retrieved, and to practice ethical behavior in regard to information technology.
Applicable to Associate Degree
Course credit transfers to CSU and UC.

LIB 198
LIBRARY 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 to earn units using the following formula: For paid work, 75 hours = 1 unit; for volunteer work, 60 hours = 1 unit. Students may earn a total of 16 units toward graduation in Work Experience 198 courses. Students MUST be working for pay or volunteer before registering for a Work Experience class. NOTE: Only one section of Work Experience may be taken during a semester.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

MACHINIST TECHNOLOGY
DIVISION: Applied Technology & Transportation
DIVISION DEAN: Thomas Bauman, M.S., P.E.
DEPARTMENT HEAD: William Clarke, Ed.D.
Technical 108
(909) 384-8504
DIVISION SECRETARY: Patsy Martinez
(909) 384-8902
DIVISION OFFICE: Technical 108
(909) 384-4451
LIAISON COUNSELOR: Wendy Whitney, M.S.
(909) 384-4404

The Machinist Technology curriculum is designed to prepare students for entry-level employment in manufacturing. The courses train first-time students and re-train students already employed in the machine trades industry. The curriculum has been developed in collaboration with local industries to meet the National Industry Metalworking Standard (NIMS) Industry. Supporters of this program are Society of Plastics Industry (SPI) S&C Mold, W.A. Lane Corporation, Wilden Pump, Service Industrial Tool and Supply, Rettig Machine, Prestige Mold, Fontana Machines, MWYP International, and Zwerner Industries.

Core competencies emphasized by courses in this department:
- Find and interpret information.
- Demonstrate working knowledge of basic computer function.
- Apply learned knowledge to new situations.
- Apply principles of scientific reasoning to solve problems.
MACHINIST TECHNOLOGY ASSOCIATE OF SCIENCE DEGREE

To graduate with a specialization in one of the following five Machinist Technology majors, (1) Machine Technology, (2) Machinist Standard, (3) Tool and Die, (4) Computer Numerical Control CAD/CAM, (5) Mechanical Hydraulics/ Pneumatics, 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).

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.

The following is a list of six Machinist Technology Certificates and the number of credits required for each certificate:

Name of the Certificate | Units Required for the Certificate
--- | ---
Specialized Courses | Core Courses**

1. Machine Technology
2. Machinist Standard
3. Tool and Die
4. Computer Numerical Control: CAD/CAM
5. Mechanical Hydraulics/ Pneumatics
6. Basic Operation Computerized Numerical Control

**Core Courses:

<table>
<thead>
<tr>
<th>UNITS</th>
<th>NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>MACH 120B Machine Shop Theory</td>
</tr>
<tr>
<td>4</td>
<td>MACH 021B Machine Shop I</td>
</tr>
<tr>
<td>4</td>
<td>MACH 022B Machine Shop II</td>
</tr>
<tr>
<td>4</td>
<td>MACH 123A Machine Shop III</td>
</tr>
<tr>
<td>4</td>
<td>MACH 124A Machine Shop IV</td>
</tr>
<tr>
<td>3</td>
<td>MACH 090B Engineering Blueprint Reading, Geometric Dimensioning and Tolerancing</td>
</tr>
<tr>
<td>4</td>
<td>TECALC 087 Technical Calculations</td>
</tr>
<tr>
<td>25</td>
<td>TOTAL UNITS for the Core Requirements</td>
</tr>
</tbody>
</table>

MACHINIST 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.

The following is a list of six Machinist Technology Certificates and the number of credits required for each certificate:

Name of the Certificate | Units Required for the Certificate
--- | ---
Specialized Courses | Core Courses**

1. Machine Technology
2. Machinist Standard
3. Tool and Die
4. Computer Numerical Control: CAD/CAM
5. Mechanical Hydraulics/ Pneumatics
6. Basic Operation Computerized Numerical Control

**Core Courses:

<table>
<thead>
<tr>
<th>UNITS</th>
<th>NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>MACH 120B Machine Shop Theory</td>
</tr>
<tr>
<td>4</td>
<td>MACH 021B Machine Shop I</td>
</tr>
<tr>
<td>4</td>
<td>MACH 022B Machine Shop II</td>
</tr>
<tr>
<td>4</td>
<td>MACH 123A Machine Shop III</td>
</tr>
<tr>
<td>4</td>
<td>MACH 124A Machine Shop IV</td>
</tr>
<tr>
<td>3</td>
<td>MACH 090B Engineering Blueprint Reading, Geometric Dimensioning and Tolerancing</td>
</tr>
<tr>
<td>4</td>
<td>TECALC 087 Technical Calculations</td>
</tr>
<tr>
<td>25</td>
<td>TOTAL UNITS for the Core Requirements</td>
</tr>
</tbody>
</table>

1. Machine Technology
This certificate is designed to prepare students for entry-level employment in manufacturing using machine tools such as lathes, milling machines, and spindles to produce precision metal parts. 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:**

<table>
<thead>
<tr>
<th>UNITS</th>
<th>NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>Machine Technology Core Requirements</td>
</tr>
<tr>
<td>3</td>
<td>MACH 070B Computer Numerical Control Machining I</td>
</tr>
<tr>
<td>3</td>
<td>MACH 129B Manufacturing Processes</td>
</tr>
<tr>
<td>31</td>
<td>Total Units required for Machinist Standard Certificate</td>
</tr>
</tbody>
</table>

2. Machinist Standard
This certificate is designed to prepare students for entry-level employment producing tools, dies, and special guiding and holding devices that enable machines to manufacture a variety of products we use daily - from clothing and furniture to heavy equipment and parts for aircraft. 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:**

<table>
<thead>
<tr>
<th>UNITS</th>
<th>NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>Machine Technology Core Requirements</td>
</tr>
<tr>
<td>3</td>
<td>MACH 160B Tool and Die</td>
</tr>
<tr>
<td>4</td>
<td>MACH 061B Jig and Fixture Making</td>
</tr>
<tr>
<td>3</td>
<td>MACH 062x2 Introduction to Mold Making</td>
</tr>
<tr>
<td>3</td>
<td>MACH 129B Manufacturing Processes</td>
</tr>
<tr>
<td>39</td>
<td>Total Units required for the Tool and Die Certificate</td>
</tr>
</tbody>
</table>

3. Tool and Die
This certificate is designed to prepare students for entry-level employment producing tools, dies, and special guiding and holding devices that enable machines to manufacture a variety of products we use daily - from clothing and furniture to heavy equipment and parts for aircraft. 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:**

<table>
<thead>
<tr>
<th>UNITS</th>
<th>NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>Machine Technology Core Requirements</td>
</tr>
<tr>
<td>3</td>
<td>MACH 160B Tool and Die</td>
</tr>
<tr>
<td>4</td>
<td>MACH 061B Jig and Fixture Making</td>
</tr>
<tr>
<td>3</td>
<td>MACH 062x2 Introduction to Mold Making</td>
</tr>
<tr>
<td>3</td>
<td>MACH 129B Manufacturing Processes</td>
</tr>
<tr>
<td>43</td>
<td>Total Units required for Computer Numerical Control: CAD/CAM Certificate</td>
</tr>
</tbody>
</table>

4. Computer Numerical Control: CAD/CAM
This certificate is designed to prepare students for entry-level employment as production machinists working with complex computer numerically controlled (CNC) cutting machines. 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:**

<table>
<thead>
<tr>
<th>UNITS</th>
<th>NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>Machine Technology Core Requirements</td>
</tr>
<tr>
<td>3</td>
<td>MACH 070B Computer Numerical Control Machining I</td>
</tr>
<tr>
<td>3</td>
<td>MACH 071B Computer Numerical Control Machining II</td>
</tr>
<tr>
<td>3</td>
<td>MACH 072B Computer Aided Design/Computer Aided Manufacturing I</td>
</tr>
<tr>
<td>3</td>
<td>MACH 073B Computer Aided Design/Computer Aided Manufacturing II</td>
</tr>
<tr>
<td>3</td>
<td>MACH 074B Set-up and Operation of Various Machine Controls</td>
</tr>
<tr>
<td>3</td>
<td>MACH 129B Manufacturing Processes</td>
</tr>
<tr>
<td>43</td>
<td>Total Units required for Computer Numerical Control: CAD/CAM Certificate</td>
</tr>
</tbody>
</table>
5. Mechanical Hydraulics/Pneumatics
This certificate is designed to prepare students for entry-level employment for entry-level work in industrial mechanical hydraulics maintenance with training on state-of-the-art pneumatic systems, basic components, pumps and hydraulic simulation equipment. This certificate enables the holder to perform many plant maintenance requirements. 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
MACH 021B   Machine Shop I        4
MACH 090B   Engineering Blueprint Reading, Geometric Dimensioning and Tolerancing  3
MACH 091A   Rigging Systems and Techniques  3
MACH 092A   Fluid Power Systems I       2
MACH 093A   Fluid Power Systems II       2
MACH 094A   Fluid Pump Systems    2
MACH 095A   Piping Systems        1
MACH 096A   Central Lubrication   1
MACH 097A   Mechanical Systems   2
TECALC 087  Technical Calculations       4
WELD 145   Shielded Metal Arc Welding  3
Total Units required for Mechanical Hydraulics/Pneumatics Certificate                   27

6. Basic Operation Computerized Numerical Control (CNC)
This certificate is designed to provide entry-level skills to operate a CNC lathe or milling type machine tool.

REQUIRED COURSES:                                UNITS
MACH 021B   Machine Shop I         4
MACH 070B  Computer Numerical Control Machining I     3
MACH 074B   Set-up and Operation of Various Machine Controls      3
MACH 075X2 Introduction to Computer Aided Drafting Technologies  3
MACH 090B   Engineering Blueprint Reading, Geometric Dimensioning and Tolerancing  3
Total Units for Basic Operation Computerized Numerical Control (CNC) Certificate    16

COURSES OFFERED BY THE DEPARTMENT OF MACHINIST TECHNOLOGY:

MACH 021B
MACHINE SHOP I          4 UNITS
PREREQUISITE: None.  DEPARTMENTAL ADVISORY: MACH 120A.
LECTURE: 2 hours per week and LABORATORY: 6 hours per week.
First semester machine shop practices for majors or non-majors, with emphasis on Occupational Safety Health Association (OSHA), shop mathematics, measurements, and the correct use of the basic machine tools, mills, lathes, saws, and drill presses, as well as an introduction to National Industry Metal Working Standards (NIMS) skill standards.
Associate Degree Applicable

MACH 022B
MACHINE SHOP II          4 UNITS
PREREQUISITE: None.  DEPARTMENTAL ADVISORY: MACH 021B.
LECTURE: 2 hours per week and LABORATORY: 6 hours per week.
Second semester intermediate machine shop practices for majors or non-majors with a machining background. Emphasis on safety and Occupational Safety Health Act (OSHA), applied mathematics, and advanced processes on mills, lathes, and tool grinding and NIMS standards.
Associate Degree Applicable

MACH 061B
JIG AND FIXTURE MAKING     4 UNITS
PREREQUISITES: MACH 021B and MACH 120B.
LECTURE: 3 hours per week and LABORATORY: 3 hours per week.
The study of jig and fixtures applications for conventional and computerized numerical machining processes. Skills and standards apply to the National Metal Working Standards (NIMS).
Associate Degree Applicable

MACH 062X2
INTRODUCTION TO MOLD MAKING     2 UNITS
PREREQUISITE: MACH 120B.
LECTURE: 1 hour per week and LABORATORY: 3 hours per week.
Introduction to mold making and injection molding technology designed to give students a history and practical application of mold making for the industry. An overview of all mold making and injection molding procedures covering basic machining practices related to mold making and automated processes used in the mold making industry. This course may be taken two times.
Associate Degree Applicable

MACH 070B
COMPUTER NUMERICAL CONTROL MACHINING I     3 UNITS
PREREQUISITE: None.
LECTURE: 2 hours per week and LABORATORY: 3 hours per week.
Beginning Computer Numerical Control (CNC) programming covering programming concepts, Cartesian coordinate systems, geometric principles, and manual programming on Machining Centers.
Associate Degree Applicable

MACH 071B
COMPUTER NUMERICAL CONTROL MACHINING II     3 UNITS
PREREQUISITE: MACH 070B.
LECTURE: 2 hours per week and LABORATORY: 3 hours per week.
Intermediate computer numerical control (CNC) programming covering programming concepts, hands-on programming, computer assisted programming and down load programs to the mill and turning center.
Associate Degree Applicable

MACH 072B
COMPUTER AIDED DESIGN/COMPUTER AIDED MANUFACTURING I     3 UNITS
PREREQUISITE: MACH 071A.
LECTURE: 2 hours per week and LABORATORY: 3 hours per week.
The study and use of MasterCam software with emphasis on drawing 2-D solids construction and part design basics related to 2-D models part programming for mills, lathes, and Electric Discharge Machines (EDM) machining processes.
Associate Degree Applicable
MACH 073B
COMPUTER AIDED DESIGN/COMPUTER AIDED MANUFACTURING II          3 UNITS
PREREQUISITE: MACH 070A.
LECTURE: 2 hours per week and LABORATORY: 3 hours per week.
The study and use of MasterCam's mill and solids software to generate tool path, program codes, tooling information, and part coordinate information.
Associate Degree Applicable

MACH 074B
SET-UP AND OPERATION OF VARIOUS MACHINE CONTROLS          3 UNITS
PREREQUISITE: MACH 070B.
LECTURE: 2 hours per week and LABORATORY: 3 hours per week.
The study of 2-D tool path, machine control programming, part fixture, tool applications and management of data required to operate various CNC machines and inspection equipment.
Associate Degree Applicable

MACH 075X2
INTRODUCTION TO COMPUTER AIDED DRAFTING TECHNOLOGIES                        3 UNITS
PREREQUISITE: None.
LECTURE: 1 hour per week and LABORATORY: 6 hours per week.
An introduction to Computer Aided Drafting (CAD) and design. Emphasis is placed on industry convention, AutoCAD commands and menus to create and plot two-dimensional drawings. Students are also introduced to three-dimensional solid modeling using AutoCAD, Inventor, and SolidWorks and its application in design and rapid prototyping. This course may be taken two times.
Associate Degree Applicable

MACH 092A
FLUID POWER SYSTEMS I          2 UNITS
PREREQUISITE: None.
LECTURE: 1 hour per week and LABORATORY: 3 hours per week.
This course focuses on basic hydraulic and pneumatic systems. The student will study hydraulics, pneumatic power, basic circuits, symbols, schematic diagrams, and principles of power and flow processes.
Associate Degree Applicable

MACH 093A
FLUID POWER SYSTEMS II           2 UNITS
PREREQUISITE: MACH 092A
LECTURE: 1 hour per week and LABORATORY: 3 hours per week.
This course focuses on advanced hydraulic, advanced pneumatic and electro-fluid power systems. Fundamentals of fluid power controls including hydraulic and pneumatic directional control valves, electrical control of fluid power, cylinder application, air logic controls, electronic sensors, and vacuum systems.
Associate Degree Applicable

MACH 094A
FLUID PUMP SYSTEMS            2 UNITS
PREREQUISITE: None.
LECTURE: 2 hours per week.
This course focuses on an introduction to single- and multiple-stage pump operations, pump performance analysis, and pump selection and maintenance.
Associate Degree Applicable

MACH 095A
PIPING SYSTEMS                1 UNIT
PREREQUISITE: None.
LECTURE: 1 hour per week.
This course focuses on an introduction to piping and piping installation, tubing, hoses, and valves. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
Associate Degree Applicable

MACH 096A
CENTRAL LUBRICATION               1 UNIT
PREREQUISITE: None.
LECTURE: 1 hour per week.
This course focuses on an introduction to central lubrication operations, lubrication concepts, simple series/progressive lubrication, troubleshooting and maintenance. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
Associate Degree Applicable

MACH 097A
MECHANICAL SYSTEMS            2 UNITS
PREREQUISITE: None.
LECTURE: 1 hour per week and LABORATORY: 3 hours per week.
This course focuses on the basic of mechanical drive systems that include mechanical fasteners, measuring instruments, motors, power transmission systems, as well as mechanical drive installation processes. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
Associate Degree Applicable
MACH 120B
MACHINE SHOP THEORY 2 UNITS
PREREQUISITE: None.
LECTURE: 2 hours per week.
The basic cutting concepts of machine tools are described and diagramed with cutting tool geometric and variations examined. New technologies in manufacturing are explored as well as discussion of National Industry Metal Skill Standards (NIMS).
Associate Degree Applicable
Course Credit transfers to CSU.

MACH 123A
MACHINE SHOP III 4 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: MACH 022B.
LECTURE: 2 hours per week and
LABORATORY: 6 hours per week.
Third semester intermediate machine shop practices for majors or non-majors, with a machining background. Emphasis on safety, applied mathematics for tool manufacturing, surface grinding, milling and turning operations and National Industry Metal Skill Standards (NIMS).
Associate Degree Applicable
Course Credit transfers to CSU.

MACH 124A
MACHINE SHOP IV 4 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: MACH 123A.
LECTURE: 2 hours per week and
LABORATORY: 6 hours per week.
Fourth semester of advanced machine shop practices for majors or non-majors with a machining background. Emphasis on safety, special tool grinding, gear cutting, carbide usage and tool manufacturing.
Associate Degree Applicable
Course Credit transfers to CSU.

MACH 129B
MANUFACTURING PROCESSES 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Manufacturing processes, tapping and threading terminology, machining speeds/feeds, basic heat treating, turning processes, tool selection for turning, milling and drilling, processing of plastics and basic machine design.
Associate Degree Applicable
Course Credit transfers to CSU.

MACH 160A
TOOL AND DIE 4 UNITS
PREREQUISITE: MACH 120A.
LECTURE: 3 hours per week and
LABORATORY: 3 hours per week.
The study and design of advanced tools and dies, blanking processes, metal die cutting and forming processes and power presses for stamping and forming metal parts. Duties and standards apply to the National Metal Working Standards (NIMS).
Associate Degree Applicable
Course Credit transfers to CSU.

MACH 198
MACHINIST 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 to earn units using the following formula: For paid work, 75 hours = 1 unit; for volunteer work, 60 hours = 1 unit. Students may earn a total of 16 units toward graduation in Work Experience 198 courses. Students MUST be working for pay or volunteer before registering for a Work Experience class. NOTE: Only one section of Work Experience may be taken during a semester.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.
Sequence of Mathematics Courses at SBVC

You may follow this sequence of courses to develop proficiency in mathematics or
You may be eligible to begin this sequence with MATH 952, MATH 090, MATH 095 or higher depending on results of the SBVC assessment process. (Contact a counselor for details and the Admissions Office for assessment dates.)
The Mathematics Department offers course work in all levels of mathematics from arithmetic through differential equations and linear algebra. Students seeking improvement in their basic mathematical skills and those desiring development of advanced mathematical methods can all find meaningful activities in the mathematics program. While there are job opportunities in pure mathematics, there are even more in education, business, engineering, and other technical fields that rely on mathematics. Students planning to transfer to a four-year institution and major in mathematics or a related field should consult with a counselor regarding the transfer process and lower division requirements.

Core competencies emphasized by courses in this department:
- Read and retain information.
- Employ vocabulary of the subject studied.
- Apply learned knowledge to new situations.
- Apply principles of scientific reasoning to solve problems.

**Mathematics Associate of Science Degree**

An Associate of Science degree with a specialization in Mathematics 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:**
- MATH 151 Precalculus 4
- MATH 250 Single Variable Calculus I 4
- MATH 251 Single Variable Calculus II 4
- MATH 252 Multivariable Calculus 5
- Three units from the list of **Recommended Courses** 3

**Total Units:** 20

**Recommended Courses: 3 Units**
- CS 190 Programming in C++ 4
- MATH 265 Linear Algebra 3
- MATH 266 Ordinary Differential Equations 3

**Courses Offered by the Department of Mathematics:**

**MATH 942**

**Arithmetic** 3 Units

**Prerequisite:** None.

**Lecture:** 3 hours per week.

A basic skills course in arithmetic including the fundamental operations of whole numbers, fractions, decimals, ratios, proportions, and percents.

_Not applicable to the Associate Degree_

**MATH 942A**

**Vocational Arithmetic: Whole Numbers** 1 Unit

**Prerequisite:** None.

**Lecture:** 1 hour per week.

This is the first of a basic skills sequence emphasizing arithmetic. The skills to be learned include addition, subtraction, multiplication and division of whole numbers as they apply to vocational fields.

_Not applicable to the Associate Degree_

**MATH 942B**

**Vocational Arithmetic: Fractions and Decimals** 1 Unit

**Prerequisite:** None.

**Lecture:** 1 hour per week.

This is the second of a basic skills sequence emphasizing arithmetic. The skills to be learned include addition, subtraction, multiplication and division of fractions and decimals as they apply to vocational fields.

_Not applicable to the Associate Degree_

**MATH 942C**

**Vocational Arithmetic: Ratio, Proportions and Percents** 1 Unit

**Prerequisite:** None.

**Lecture:** 1 hour per week.

This is the third of a basic skills sequence emphasizing arithmetic. The skills to be learned include the use of ratios, proportions and percents as they apply to vocational fields.

_Not applicable to the Associate Degree_

**MATH 952**

**Prealgebra** 4 Units

**Prerequisite:** MATH 942 or eligibility as determined through the SBVC assessment process.

**Lecture:** 4 hours per week.

A basic skills course designed to bridge students between arithmetic and algebra with an emphasis on speaking, listening, reading, and writing in communicable mathematics terminology. Topics include constants and variables; simple word problems; linear equations; exponential notation; and appropriate operational rules for rational numbers, whole numbers, and integers.

_Not applicable to the Associate Degree_
MATH 952A
PREALGEBRA (INTEGERS) 1 UNIT
PREREQUISITE: MATH 942 or MATH 942 A, B, C or eligibility as determined through the SBVC assessment process.
LECTURE: 1 hour per week.
Math 952A is a self-paced, computer-assisted program of operations using positive and negative #s. Students will meet with faculty to discuss their progress and will work independently through a series of computer activities. In addition, supplemental materials may be used for further explanation and/or to help the student complete assignments at the level of the computer generated assignments that are typical for this type of course. The skills to be learned include addition, subtraction, multiplication and division of integers; introduction of variables; simplifications of algebraic expressions; addition, subtraction and multiplication of polynomials.
Not Applicable to Associate Degree

MATH 952B
PREALGEBRA (FRACTIONS) 1 UNIT
PREREQUISITE: MATH 952A or eligibility as determined through the SBVC assessment process.
LECTURE: 1 hour per week.
Math 952B is a self-paced, computer-assisted program of operations using fractions. Students will meet with faculty to discuss their progress and will work independently through a series of computer activities. In addition, supplemental materials may be used for further explanation and/or to help the student complete assignments at the level of the computer generated assignments that are typical for this type of course. The skills to be learned include addition, subtraction, multiplication and division of fractions; conversion of fractions to percent and the ability to solve linear equations in 1 variable containing decimals.
Not Applicable to Associate Degree

MATH 952C
PREALGEBRA (LINEAR EQUATIONS IN 1 VARIABLE) 1 UNIT
PREREQUISITE: MATH 952B or eligibility as determined through the SBVC assessment process.
LECTURE: 1 hour per week.
Math 952C is a self-paced, computer-assisted program of linear equations in 1 variable. Students will meet with faculty to discuss their progress and will work independently through a series of computer activities. In addition, supplemental materials may be used for further explanation and/or to help the student complete assignments at the level of the computer generated assignments that are typical for this type of course. The skills to be learned include the use of the properties of equality.
Not Applicable to Associate Degree

MATH 952D
PREALGEBRA (DECIMAL AND PERCENT) 1 UNIT
PREREQUISITE: MATH 952C or eligibility as determined through the SBVC assessment process.
LECTURE: 1 hour per week.
Math 952D is a self-paced, computer-assisted program of decimals and percents. Students will meet with faculty to discuss their progress and will work independently through a series of computer activities. In addition, supplementary materials may be used for further explanation and/or to help the student complete assignments at the level of the computer generated assignments that are typical for this type of course. The skills to be learned include addition, subtraction, multiplication and division of decimals; conversion of decimals to percent and the ability to solve linear equations in 1 variable containing decimals.
Not Applicable to Associate Degree

MATH 090
ELEMENTARY ALGEBRA 4 UNITS
PREREQUISITE: MATH 952, MATH 952D or eligibility for MATH 090 as determined through the SBVC assessment process.
LECTURE: 4 hours per week.
Covers the basic concepts typically introduced in high school algebra including operations on polynomials, exponents, solve linear and quadratic equations, inequalities, word problems, factoring, fractions, and graphing linear equations.
Associate Degree Applicable

MATH 093
PLANE GEOMETRY 3 UNITS
PREREQUISITE: MATH 090 or eligibility for MATH 095 as determined through the SBVC assessment process.
LECTURE: 3 hours per week.
A review of high school geometry including mathematical logic, geometric constructions, congruences, similarities, and other properties of basic closed plane figures.
Associate Degree Applicable

MATH 095
INTERMEDIATE ALGEBRA 4 UNITS
PREREQUISITE: MATH 090 or eligibility for MATH 095 as determined through the SBVC assessment process OR BUSCAL 091.
DEPARTMENTAL ADVISORY: MATH 093, taken concurrently.
LECTURE: 4 hours per week.
A second course in algebra which builds on the skills of solving equations, manipulating polynomials, factoring, and algebraic fractions. This course includes simplifying complex fractions, finding real solutions to quadratic and rational equations, an introduction to linear inequalities, rational exponents and radicals, graphing equations of straight lines, solving linear systems of equations and application problems through the different topics.
Associate Degree Applicable
MATH 102
INTRODUCTION TO COLLEGE ALGEBRA 4 UNITS

PREREQUISITE: MATH 095 or eligibility for MATH 102 as determined through the SBVC assessment process.

LECTURE: 4 hours per week.

Designed for students with a strong foundation in algebra. This course includes the study of absolute value equations and inequalities, quadratic and rational inequalities, in-depth work with rational exponents, radicals and quadratic equations, introduction to functions and their inverses, exponential functions and their graphs, logarithmic functions and their graphs and their algebraic properties, and introduction to sequences, series and the binomial expansion.

Associate Degree Applicable
Course credit transfers to CSU and UC.
Limited transfer to UC; contact a counselor for details.
CAN (California Articulation Number): MATH 10

MATH 103
PLANE TRIGONOMETRY 4 UNITS

PREREQUISITE: MATH 102 or eligibility for MATH 103 as determined through the SBVC assessment process.

DEPARTMENTAL ADVISORY: MATH 093.

LECTURE: 4 hours per week.

The study of trigonometry including trigonometric functions, identities, trigonometric equations, periodicity, graphs of the trigonometric functions, inverse functions, and solution of triangles.

Associate Degree Applicable
Course credit transfers to CSU.
CAN (California Articulation Number): MATH 8

MATH 108
INTRODUCTION TO PROBABILITY AND STATISTICS 4 UNITS

PREREQUISITE: MATH 095 or eligibility for MATH 102 as determined through the SBVC assessment process.

LECTURE: 4 hours per week.

An introduction to probability, descriptive and inferential statistics with application to the natural sciences, business, economics, and behavioral sciences.

Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): STAT 2

Limited Transfer to UC; contact a counselor for details.

MATH 115
IDEAS OF MATHEMATICS 3 UNITS

PREREQUISITE: MATH 095 or eligibility for MATH 102 as determined through the SBVC assessment process.

LECTURE: 3 hours per week.

Designed for liberal arts majors. This transfer-level course includes sets, propositional logic, inductive reasoning and applications such as mathematical patterns, counting methods, finite probability spaces and an introduction to statistics.

Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): MATH 151

MATH 151
PRECALCULUS 4 UNITS

PREREQUISITE: MATH 102 or eligibility for MATH 151 as determined through the SBVC assessment process.

LECTURE: 4 hours per week.

This course provides foundational skills to facilitate success in calculus. Includes inequalities, functions and their graphs, polynomial and rational functions, exponential and logarithmic functions, conics, sequences and series, mathematical induction and the binomial theorem and systems of equations and inequalities.

Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): MATH 16

Limited Transfer to UC; contact a counselor for details.

MATH 222
SPECIAL PROBLEMS IN MATHEMATICS 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 mathematics 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; credit determined after transfer to UC.

MATH 223
SPECIAL PROBLEMS IN MATHEMATICS 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 mathematics 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; credit determined after transfer to UC.

MATH 250
SINGLE VARIABLE CALCULUS I 4 UNITS

PREREQUISITES: MATH 103 and MATH 151.

LECTURE: 4 hours per week.

A first course in calculus including limits, continuity, derivatives of algebraic and trigonometric functions, applications of derivatives, anti-derivatives, definite integrals and their applications.

Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): MATH 18

MATH 251
SINGLE VARIABLE CALCULUS II 4 UNITS

PREREQUISITE: MATH 250.

LECTURE: 4 hours per week.

A second course in calculus including applications of definite integrals, differentiation and integration of transcendental functions, techniques of integration, L'Hospital's rule and improper integrals, infinite sequences and series, power series.

Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): MATH 20
MATH 252
MULTIVARIABLE CALCULUS  5 UNITS
PREREQUISITE: MATH 251.
LECTURE: 5 hours per week.
A third course in calculus including vectors, lines and simple surfaces in 3-dimensional space, some linear algebra topics, vector-valued functions, partial derivatives, multiple integrals, line integrals and Green’s theorem, surface integrals and the theorems of Gauss and Stokes.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): MATH 22

MATH 265
LINEAR ALGEBRA  3 UNITS
PREREQUISITE: MATH 250.
LECTURE: 3 hours per week.
An introduction to linear algebra that complements advanced courses in calculus. Topics include systems of linear equations, matrix operations, determinants, vectors and vector spaces. Eigenvalues and eigenvectors and linear transformations.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): MATH 26

MATH 266
ORDINARY DIFFERENTIAL EQUATIONS  3 UNITS
PREREQUISITE: MATH 251.
DEPARTMENTAL ADVISORY: MATH 252, taken concurrently.
LECTURE: 3 hours per week.
An introduction to differential equations that complements advanced courses in calculus. Topics include first-order differential equations and applications, linear differential equations and some applications of second order differential equations, linear systems, an introduction to series solutions and the Laplace Transform.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): MATH 24

MATH 285
HONORS IN MATHEMATICS I  3 UNITS
PREREQUISITE: MATH 095 or MATH 102.
LECTURE: 2 hours per week and LABORATORY: 2 hours per week.
An introduction to algebraic concepts and functional properties necessary for understanding limits and the application of those limits to their derivative functions in calculus.
Associate Degree Applicable
Course credit transfers to CSU and UC.

MATH 286
HONORS IN MATHEMATICS II  3 UNITS
PREREQUISITE: MATH 285.
LECTURE: 2 hours per week and LABORATORY: 2 hours per week.
Further study and application of the derivative function in calculus, exponential and logarithmic functions and their applications, properties and applications of the integral, and simple differential equations, their solutions and application to mathematics models in nature.
Associate Degree Applicable
Course credit transfers to CSU and UC.

MATH 287
HONORS IN MATHEMATICS III  3 UNITS
PREREQUISITE: MATH 286.
LECTURE: 2 hours per week and LABORATORY: 2 hours per week.
Further study and application of the derivative function in calculus, exponential and logarithmic functions and their applications, properties and applications of the integral, and simple differential equations, their solutions and application to mathematics models in nature.
Associate Degree Applicable
Course credit transfers to CSU and UC.

MATH 288
HONORS IN MATHEMATICS IV  3 UNITS
PREREQUISITE: MATH 287.
LECTURE: 2 hours per week and LABORATORY: 2 hours per week.
Further study and application of the derivative function in calculus, exponential and logarithmic functions and their applications, properties and applications of the integral, and simple differential equations, their solutions and application to mathematics models in nature.
Associate Degree Applicable
Course credit transfers to CSU and UC.

MATH 289
HONORS IN MATHEMATICS V  3 UNITS
PREREQUISITE: MATH 288.
LECTURE: 2 hours per week and LABORATORY: 2 hours per week.
Further study and application of the derivative function in calculus, exponential and logarithmic functions and their applications, properties and applications of the integral, and simple differential equations, their solutions and application to mathematics models in nature.
Associate Degree Applicable
Course credit transfers to CSU and UC.

MATHEMATICS APPLIED
See the Department of BUSINESS CALCULATIONS or Technical Calculations courses within the Department of ELECTRICITY/ELECTRONICS

MICROBIOLOGY
See courses within the BIOLOGY DEPARTMENT

MODERN LANGUAGES
FOR COURSES IN MODERN LANGUAGES, SEE:
AMERICAN SIGN LANGUAGE, FRENCH, AND SPANISH

MUSIC
DIVISION: Humanities
DIVISION DEAN: Marjorie Price, M.A., M.Ed.
DEPARTMENT HEAD: Leticia Hector, M.A.
Liberal Arts 239
(909) 384-8618
OTHER FACULTY: Mate Scully, M.M.
DIVISION SECRETARIES: Kelly Adcock
(909) 384-8906
Cheryl Benner
(909) 384-8633
DIVISION OFFICE: North Hall 236
(909) 384-4445
LIAISON COUNSELOR: Juan Zepeda, M.S.
(909) 384-4404

Music is one of the most rewarding of all human endeavors, and the faculty and students in the Department of Music share a deep love for their art and a common desire to achieve excellence in it. The curriculum provides basic preparation for careers in music or further study, and is designed to provide a balanced education in the many facets of musical experience. It is the goal of the Music Department to help students develop their musical and intellectual potential to the highest possible level.

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

Core competencies emphasized by courses in this department:
• Read and retain information.
• Employ vocabulary of the subject studied.
• Demonstrate active listening skills.
• Apply learned knowledge to new situations.
• Evaluate diverse artistic works.
• Demonstrate creative thought through original expression.
• Demonstrate knowledge of and respect for other cultures.
• Demonstrate knowledge of and respect for one’s own culture.

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

144
REQUIRED COURSES:               UNITS
MUS 101 Music Theory I: Fundamentals 3
MUS 102 Music Theory II: Harmony 3
MUS 103 Musicianship 3
MUS 121 Appreciation of Music Literature I 3
MUS 122 Appreciation of Music Literature II 3
MUS 130 Elementary Voice 3
MUS 133 Beginning Piano 3
Two semester units from the following performance courses: MUS 150x4, 152x4, 154x4, 156x4, 158x4, 160x2, 170x4, 171x4, 174x4, 176x4, 178x4
TOTAL UNITS: 23

RECOMMENDED COURSES:               UNITS
MUS 104 History of Rock and Roll 3
MUS 105 American Popular Music 3
MUS 107 Music of the World 3
MUS 117x4 Guitar Instruction 1
MUS 123 Beginning MIDI Workstation 3
MUS 131 Intermediate Voice 3
MUS 134 Intermediate Piano 3
MUS 141x4 Applied Music 2
MUS 285 Honors in Music 3

ELECTRONIC MUSIC
This certificate is designed to provide students with the fundamentals of computer (electronic) music, with emphasis on the structure and artistic dimension of music in addition to the practical applications of MIDI (musical instrument digital interface). 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 105 Small Business Management 3
CIT 101 Introduction to Computer Literacy 3*
MUS 101 Music Theory I: Fundamentals 3
MUS 102 Music Theory II: Harmony 3
Two of the following:
MUS 104 History of Rock and Roll (3)
MUS 105 American Popular Music (3)
MUS 107 Music of the World (3)
MUS 123 Beginning MIDI Workstation 3
MUS 124 MIDI Workstation: Songs and Styles 3
MUS 125 MIDI Workstation: TV and Film 3
MUS 127x4 MIDI Workstation: Practicum Laboratory 1
MUS 136 Introduction to Jazz Rock Piano 3*
TOTAL UNITS: 31

RECOMMENDED COURSES:               UNITS
MUS 126 History and Appreciation of Electronic Music 3
MUS 127x4 MIDI Workstation: Practicum Laboratory 1

* CIT 101 and MUS 136 may be waived if proficiency can be demonstrated to the department head.

COURSES OFFERED BY THE DEPARTMENT OF MUSIC:

MUS 100  INTRODUCTION TO MUSIC  3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
This course introduces students to music and methods of music listening. Included in this course will be guidelines for music selection, cross-cultural studies in music, a discussion of patrons and audiences, consideration of the roles of women in creating music, and a history of popular music.
Associate Degree Applicable
Course credit transfers to CSU and UC.

MUS 101  MUSIC THEORY I: FUNDAMENTALS  3 UNITS
PREREQUISITE: MUS 101L.
LECTURE: 3 hours per week.
Designed to teach music terminology, rhythm, pitch, notation, meter, key signatures, scales, chords, and keyboard geography. Includes a study of the role that music plays in society, its aesthetic impact, and some of the music of important composers in the development of music including J.S. Bach, Mozart, Beethoven, Brahms, Wagner, and Copland.
Associate Degree Applicable
Course credit transfers to CSU and UC.

MUS 101L  MUSICIANSHIP I  1 UNIT
PREREQUISITE: None.
COREQUISITE: MUS 101.
LECTURE: None.
LABORATORY: 3 hours per week.
A general study of the components of musicianship, this course explores how musical sounds are represented on paper through the use of graphic symbols and the basic ways in which they relate to each other in music composition. This course further explores how the musician interprets these symbols.
Associate Degree Applicable
Course credit transfers to CSU.

MUS 102  MUSIC THEORY II: SCALES AND MODES  3 UNITS
PREREQUISITES: MUS 101 and MUS 101L
COREQUISITE: MUS 102L.
LECTURE: 3 hours per week and
Designed to teach analytical and compositional techniques through a progressive study of the following: counterpoint, harmony, modulation, voice leading, harmonic and formal analysis, and 20th century atonality. Examines key words by important composers in the development of music such as J.S. Bach, Beethoven, Debussy, Schoeberg and Stravinsky and the impact these pieces have made in our society and its aesthetic development.
Associate Degree Applicable
Course credit transfers to CSU and UC.
MUS 102L
MUSICIANSHIP II 1 UNIT
PREREQUISITES: MUS 101 and MUS 101L.
COREQUISITE: MUS 102.
LECTURE: None.
LABORATORY: 3 hours per week.
Continues to focus on the study of musicianship through its components. Explores dictation skills (the notation of aural impressions), the continued use of solfeggio syllables to discern pitches within a tonal framework, and keyboard fundamentals designed to elevate students’ levels of musicianship.
Associate Degree Applicable
Course credit transfers to CSU.

MUS 104
HISTORY OF ROCK AND ROLL 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
A chronological survey of rock music styles including origins, development, effects on today’s society, and major artists.
Associate Degree Applicable
Course credit transfers to CSU and UC.

MUS 105
AMERICAN POPULAR MUSIC 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
This course traces the social history of America through its music by comparing the works of outstanding musicians and examining them in detail to demonstrate similarities and differences among the various styles.
Associate Degree Applicable
Course credit transfers to CSU and UC.

MUS 106
HISTORY OF JAZZ 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Provides the student with a chronological survey of jazz music styles, including origins, development, effects on today’s society, and major artists and styles. Concepts such as musical structure and form are explored.
Associate Degree Applicable
Course credit transfers to CSU and UC.

MUS 107
MUSIC OF THE WORLD 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
A survey of the traditional and folk music of the Americas, Europe, Near-Middle-Far East and sub-Sahara Africa. Live and filmed performances introduce students to the instrumental and vocal techniques, musical structures and performance contexts within selected cultures of these areas. Includes the impact of western influences. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
Associate Degree Applicable
Course credit transfers to CSU and UC.

MUS 117x4
GUITAR INSTRUCTION 1 UNIT
PREREQUISITE: None.
LABORATORY: 3 hours per week.
A progressive study of the guitar beginning with stringing, tuning and fingerings, and continuing with the development of playing techniques, notation, reading guitar music, playing melodies, chord construction, and accompaniment. Students must provide their own instruments. This course may be taken four times.
Associate Degree Applicable
Course credit transfers to CSU and UC.

MUS 121
MUSIC LITERATURE I – MIDDLE AGES THROUGH CLASSICISM 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
An overview of music’s historical development from the Middle Ages through Classicism. Emphasis is on appreciation of musical form and the role of music in a multicultural society to political and artist events.
Associate Degree Applicable
Course credit transfers to CSU and UC.

MUS 122
MUSIC LITERATURE II – CLASSICISM TO PRESENT 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
An overview of music’s historical development from Classicism to the present. Emphasis is on appreciation of musical form and the role of music in a multicultural society to political and artist events.
Associate Degree Applicable
Course credit transfers to CSU and UC.

MUS 123
BEGINNING MIDI WORKSTATION 3 UNITS
PREREQUISITE: None.
LECTURE: 2 hours per week and LABORATORY: 3 hours per week.
An introduction to MIDI and its applications, the use of computers, MIDI interface, synthesizers, drum machine and tape recorder in developing musical projects. This course will emphasize developing competency in music sequencing and the use of graphics software.
Associate Degree Applicable
Course credit transfers to CSU.

MUS 124
MIDI-WORKSTATION: SONGS AND STYLES 3 UNITS
PREREQUISITE: MUS 123.
DEPARTMENTAL ADVISORY: Concurrent enrollment in MUS 127x4.
LECTURE: 2 hours per week and LABORATORY: 3 hours per week.
Practical experience in MIDI (Musical Instrument Digital Interface) and its applications, with an emphasis on song writing and constructing stylistic demonstrations similar to those used in the music and film industries. Competencies in music sequencing and the use of graphics software will be developed.
Associate Degree Applicable
Course credit transfers to CSU.
MUS 125  
MIDI WORKSTATION: TV AND FILM  3 UNITS  
**PREREQUISITE: MUS 123.**  
**DEPARTMENTAL ADVISORY: Concurrent enrollment in MUS 127x4.**  
**LECTURE: 2 hours per week and LABORATORY: 3 hours per week.**  
Advanced practical experience in MIDI and its applications. Emphasis will be placed on advanced projects in musical composition and film scoring. Students will use computers, synthesizers, samplers, audio and video equipment.  
Associate Degree Applicable  
Course credit transfers to CSU.

MUS 126  
HISTORY AND APPRECIATION OF ELECTRONIC MUSIC  3 UNITS  
**PREREQUISITE: None.**  
**LECTURE: 2 hours per week and LABORATORY: 3 hours per week.**  
This course is an exploration of the theory and techniques of electronic/computer composition. Topics will include electronics and acoustics, knowledge of synthesizer modules, computer programs, and recording techniques. Weekly compositional and technical projects will be realized in the electronic/computer music studio. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.  
Associate Degree Applicable  
Course credit transfers to CSU.

MUS 127x4  
MIDI WORKSTATION: PRACTICUM LABORATORY  1 UNIT  
**PREREQUISITE: MUS 123.**  
**LABORATORY: 3 hours per week.**  
Practical experience in MIDI and its applications. Workstation format will provide the basis for MIDI instruction, benefiting both the beginner and experienced user. Subsequent enrollment will provide the student an opportunity for developing additional skill and competency in the subject matter. This course may be taken four times.  
Associate Degree Applicable  
Course credit transfers to CSU.

MUS 130  
ELEMENTARY VOICE  3 UNITS  
**PREREQUISITE: None.**  
**LECTURE: 2 hours per week and LABORATORY: 2 hours per week.**  
An introduction and progressive study of vocal techniques including muscular aspects, sound producing properties of the vocal mechanism with emphasis on singing and vocal projection used in a speech and drama and standard vocal literature.  
Associate Degree Applicable  
Course credit transfers to CSU and UC.

MUS 131  
INTERMEDIATE VOICE  3 UNITS  
**PREREQUISITE: MUS 130.**  
**DEPARTMENTAL ADVISORY: Concurrent enrollment in MUS 141x4.**  
**LECTURE: 2 hours per week and LABORATORY: 2 hours per week.**  
This course is designed for the singer who has had formal vocal training and wishes to pursue additional training for a career in the vocal arts. Emphasis is on vocal technique, voice quality, expression, style, interpretation, stage presence, and multi-language diction.  
Associate Degree Applicable  
Course credit transfers to CSU and UC.

MUS 133  
BEGINNING PIANO  3 UNITS  
**PREREQUISITE: None.**  
**DEPARTMENTAL ADVISORY: Concurrent enrollment in MUS 101.**  
**LECTURE: 2 hours per week and LABORATORY: 2 hours per week.**  
This course teaches practical keyboard facility, sight reading, elementary improvisation and harmonization of folk melodies, and leads to the performance of simple piano selections. This course will be useful for those desiring to learn to play the piano, organ, or electronic keyboards.  
Associate Degree Applicable  
Course credit transfers to CSU and UC.

MUS 134  
INTERMEDIATE PIANO  3 UNITS  
**PREREQUISITE: MUS 133.**  
**DEPARTMENTAL ADVISORY: MUS 102.**  
**LECTURE: 2 hours per week and LABORATORY: 2 hours per week.**  
This course focuses on the improvement of keyboard facility and sight reading abilities, advances improvisation and harmonization skills, and directs the performance of complex piano selections. This course will be useful for those desiring to strengthen current keyboard skills.  
Associate Degree Applicable  
Course credit transfers to CSU and UC.

MUS 136  
INTRODUCTION TO JAZZ ROCK PIANO  3 UNITS  
**PREREQUISITE: MUS 133.**  
**LECTURE: 2 hours per week and LABORATORY: 2 hours per week.**  
An introduction to the contemporary styles of piano performance with an emphasis on jazz, rock, Latin and pop. Includes contemporary theory, ear training and improvisation skills.  
Associate Degree Applicable  
Course credit transfers to CSU and UC.

MUS 141x4  
APPLIED MUSIC  1 UNIT  
**PREREQUISITE: None.**  
**LABORATORY: 3 hours per week.**  
Applied music study in piano, voice and orchestral instruments with an approved off-campus instructor. Students are required to have 16 one-hour lessons during the semester, and are responsible for the cost of private instruction. At the end of the semester, each student will perform before the music faculty to determine semester grade. This course may be taken four times. AT LEAST THREE YEARS OF PREVIOUS STUDY ON INSTRUMENT OR VOICE IS REQUIRED.  
Associate Degree Applicable  
Course credit transfers to CSU and UC.
MUS 150x4
MIXED CHORUS 1 UNIT
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: Concurrent enrollment in MUS 101 or MUS 130.
LABORATORY: 3 hours per week.
Foundational techniques in such aspects of choral music as breathing, posture, tone production, enunciation and musicianship, especially recommended for education and liberal arts majors who desire vocal training. Includes choral music from a variety of stylistic periods including classical, spiritual, folk and musical theatre. This course may be taken four times.
Associate Degree Applicable
Course credit transfers to CSU and UC.

MUS 152x4
CHAMBER SINGERS 2 UNITS
PREREQUISITES: None.
LABORATORY: 6 hours per week.
Study and performance of a wide variety of outstanding music literature from all periods suitable to a chamber group including classical genres and contemporary art music as well as musical theater and opera excerpts. This course may be taken four times. PREVIOUS CHORAL EXPERIENCE AND/OR ABILITY TO READ MUSIC IS REQUIRED.
Associate Degree Applicable
Course credit transfers to CSU and UC.

MUS 154x4
COLLEGE SINGERS 2 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: Choral experience and/or MUS 101 or MUS 130 or equivalent.
LABORATORY: 6 hours per week.
Study, rehearsal and performance of college level choral literature from various style periods. The performance schedule includes both on and off campus concerts throughout the semester. This course may be taken four times.
Associate Degree Applicable
Course credit transfers to CSU and UC.

MUS 156x4
CONCERT CHOIR 2 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: Choral experience or MUS 101.
LABORATORY: 6 hours per week.
Progressive study and performance of outstanding representative choral works from all periods of music history. This course may be taken four times.
Associate Degree Applicable
Course credit transfers to CSU and UC.

MUS 158x4
GOSPEL CHOIR 1 UNIT
PREREQUISITE: None.
LABORATORY: 3 hours per week.
For students interested in the performance of a unique genre of African-American music; emphasis is on the evolutionary aspects of gospel as reflected in the growth of American civilization. This course may be taken four times.
Associate Degree Applicable
Course credit transfers to CSU and UC.

MUS 160x2
INTRODUCTION TO WOODWIND BRASS AND PERCUSSION ENSEMBLE 2 UNITS
PREREQUISITE: None.
LABORATORY: 4 hours per week.
Study, rehearsal, and performance of standard literature for chamber ensembles. Composition of the ensemble depends on students' interests and abilities. This course may be taken two times.
Associate Degree Applicable
Course credit transfers to CSU and UC.

MUS 162x2
INTRODUCTION TO STRING ENSEMBLE 2 UNITS
PREREQUISITE: None.
LABORATORY: 4 hours per week.
Study of music literature for the performing string ensemble (violin, viola, violoncello, contra bass), with an emphasis on appreciation, improvement of playing technique, performance styles, and performance of chamber and orchestral works for this type of ensemble. TWO YEARS EXPERIENCE PLAYING A STRINGED INSTRUMENT (VIOLIN, VIOLA, CELLO, BASS) IS REQUIRED. This course may be taken two times. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
Associate Degree Applicable
Course credit transfers to CSU and UC.

MUS 168x4
JAZZ ENSEMBLE 2 UNITS
PREREQUISITE: None.
LABORATORY: 4 hours per week.
This course provides an opportunity to learn the techniques and repertoire of current commercial bands. It will assist players in sight reading, improvisation, and contemporary music theory as relates to jazz/rock/Latin and ethnic styles of music. BAND EXPERIENCE OR THE ABILITY TO PERFORM MUSIC OF MODERATE DIFFICULTY ON STANDARD BAND INSTRUMENTS IS REQUIRED. This course may be taken four times.
Associate Degree Applicable
Course credit transfers to CSU and UC.

MUS 170x4
COLLEGE BAND 2 UNITS
PREREQUISITE: None.
LABORATORY: 4 hours per week.
Study, rehearsal and performance of current and historical scores in the style of the Sousa Band. Performances are required. Designed for non-music majors and community players. BAND EXPERIENCE OR ABILITY TO PERFORM MUSIC OF MODERATE DIFFICULTY ON STANDARD BAND INSTRUMENTS IS REQUIRED. This course may be taken four times.
Associate Degree Applicable
Course credit transfers to CSU and UC.

MUS 171x4
STAGE BAND: KICKS BIG BAND 2 UNITS
PREREQUISITE: None.
LABORATORY: 4 hours per week.
Study, rehearsal and performance of commercial dance band music, emphasizing the styles of the 1930s and 1940s. INTERMEDIATE OR ADVANCED JAZZ IDIOM READING SKILLS ON A "BIG BAND" INSTRUMENT IS REQUIRED. This course may be taken four times.
Associate Degree Applicable
Course credit transfers to CSU and UC.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Prerequisites</th>
<th>Laboratory Hours</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 174x4</td>
<td>Wind Symphony</td>
<td>2</td>
<td>None.</td>
<td>4 hours per week</td>
<td>The comprehensive study of wind band repertoire of the last 100 years along with transcriptions of the orchestral classics. Formal concert participation is required. Designed for students majoring or minoring in music. BAND EXPERIENCE OR THE ABILITY TO PERFORM MUSIC OF MODERATE DIFFICULTY ON STANDARD BAND INSTRUMENTS IS REQUIRED. This course may be taken four times.</td>
</tr>
<tr>
<td>MUS 176x4</td>
<td>Orchestra</td>
<td>2</td>
<td>None.</td>
<td>4 hours per week</td>
<td>Rehearsal and performance of orchestral literature, with an emphasis on performance styles, appreciation, and performance techniques for the orchestral ensemble (strings, winds, brass, percussion). A COLLEGE-LEVEL COURSE IN INSTRUMENTAL INSTRUCTION OR A DEPARTMENTAL AUDITION IS REQUIRED. This course may be taken four times. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.</td>
</tr>
<tr>
<td>MUS 178x4</td>
<td>Chamber Music</td>
<td>2</td>
<td>None.</td>
<td>4 hours per week</td>
<td>Rehearsal, study and performance of chamber music literature, with an emphasis on performance styles, appreciation, and performance techniques for the small chamber ensemble. TWO YEARS EXPERIENCE PLAYING AN INSTRUMENT AND AN AUDITION IS REQUIRED. This course may be taken four times.</td>
</tr>
<tr>
<td>MUS 201</td>
<td>Music Theory III: Basic Harmony</td>
<td>3</td>
<td>MUS 102 and MUS 102L.</td>
<td></td>
<td>A complete study of diatonic harmonies, including a review of triad formations and principles of voice-leading. Beginning study of seventh chords, secondary dominants, realization of figured bass lines, beginning formal analysis and intermediate ear-training (two-part dictation) and sight-singing of harmonic parts in chorales. Includes analysis of the chorales by J.S. Bach, sight-singing chorale parts, and taking two-part dictation of melodic and harmonic lines from such chorales.</td>
</tr>
<tr>
<td>MUS 201L</td>
<td>Musicianship III</td>
<td>1</td>
<td>MUS 201 and MUS 201L.</td>
<td></td>
<td>Emphasis on further development of skills in sight singing melodies which contain all intervals, melodic dictation which contains modulation, harmonic identification of all diatonic seventh chords and harmonic dictation of chorale phrases which modulate, rhythmic dictation with quarter and eighth beat values and in compound meters.</td>
</tr>
<tr>
<td>MUS 202</td>
<td>Music Theory IV: Harmony</td>
<td>3</td>
<td>MUS 201 and MUS 201L.</td>
<td></td>
<td>A conclusive study of diatonic harmonies, including further work with secondary dominant chord structures and figured bass line realizations. An extensive study of ninth chords (complete, incomplete, and dominant ninth), Neapolitan and augmented sixth chords as well as a study of irregular resolution will be undertaken. Conclusive study of Bach Chorales and other brief forms will be undertaken.</td>
</tr>
<tr>
<td>MUS 202L</td>
<td>Musicianship IV</td>
<td>1</td>
<td>MUS 201 and MUS 201L.</td>
<td></td>
<td>Emphasis on further development of skills in sight singing modal melodies and melodies containing larger leaps and non-diatonic tones, dictation of melodies with non-diatonic tones and modal melodies, harmonic identification of secondary dominants and augmented sixth and Neapolitan sixth chord, rhythmic dictation with changing meters and super triplets.</td>
</tr>
<tr>
<td>MUS 222</td>
<td>Independent Study in Music</td>
<td>1-3</td>
<td>None.</td>
<td></td>
<td>Assigned projects involving research and analysis of selected topics or directed study for students who are interested in furthering their knowledge of music 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.</td>
</tr>
</tbody>
</table>

Associate Degree Applicable
Course credit transfers to CSU and UC.

Limited transfer to UC; credit determined after transfer to UC.
MUS 285
HONORS IN MUSIC          3 UNITS
PREREQUISITE: MUS 101 or MUS 121 or MUS 122.
LECTURE: 3 hours per week.
A study of selected topics from musical literature ranging from Gregorian Chant to Twentieth Century composition, focusing on the analysis of structure, thematic material and, in some cases, literary relationships.
Associate Degree Applicable
Course credit transfers to CSU and UC.

NURSING
DIVISION: Health Science
DIVISION DEAN: Marilyn Johnson, M.N.
DEPARTMENT HEAD: Priscilla Taylor, M.S.N.
(909) 384-8925
OTHER FACULTY: June Hill, M.S.
Laura Leedahl, Ed.D.
Tamara Maurizi, M.S.N.
Marion Meines, M.S.N.
Violeta Obra, M.S.
Geoff Schroder, M.S.N.
Monica Temple, M.S.
Judith Tobin, M.S.N.
Alicia Tovida, M.N.
Sandra Waters, M.S.N.
Rebecca Whitfield, M.S.N.
Christie Winter, M.S.
DIVISION SECRETARY: Dorothy N. Fierro
DIVISION OFFICE: Health and Life Science 101
(909) 384-8550
LIAISON COUNSELOR: Juan Zepeda, M.S.
(909) 384-4404

The Nursing Department offers a sequence of courses leading to an Associate of Science degree with a major in nursing. Students learn to function in a variety of health care settings and aid patients, through the nursing process, attain or maintain their optimum level of wellness. Graduates are eligible to take the national licensing exam and become licensed as a Registered Nurse in the state of California.

Learning activities are conducted on the San Bernardino Valley College campus and in local hospitals and community agencies. After completion of prerequisites, students must apply and be accepted. Prerequisite courses and the admission process is explained below as well as in a pamphlet available in the Health Science Division Office and the Counseling Center, Registered Nursing Program: How to Prepare for R.N. Licensure. The program is accredited by the California State Board of Registered Nursing and the National League for Nursing Accrediting Commission, 61 Broadway – 33rd Floor, New York, NY 10006.

Licensed Vocational Nurses may also take courses leading to Registered Nursing licensure. See the following section, on OPTIONS FOR LICENSED VOCATIONAL NURSES. A pamphlet is available in the Health Science Division Office, LVN to RN Nursing Program.

A background check is required for admission. California law allows for denial of the Registered Nurse (R.N.) license based on any conviction or legal action related to nursing practice. Admission may be denied based on a history of prior convictions related to nursing practice which would include Medicare/Medicaid fraud, and/or sex offenses. If convictions exist, proof of rehabilitation is required. For further information: www.rn.ca.gov.

Core competencies emphasized by courses in this department:
- Read and retain information.
- Find and interpret information.
- Apply learned knowledge to new situations.
- Apply principles of scientific reasoning to solve problems.
- Accept responsibility for own actions.
- Exhibit personal, professional and academic honesty.
- Display behavior consistent with ethical standards within a discipline.
- Set goals for educational, personal and professional development.

PREREQUISITES FOR THE NURSING PROGRAM:

1. Graduation from high school or its equivalent (G.E.D. or the California State High School Proficiency Exam), or Bachelor degree.
2. Demonstrate competency in English and mathematics by satisfying the following criteria:
   a. Competency in English is demonstrated by completion of ENGL 015 or ENGL 101 with a grade of C or higher.
   b. Competency in mathematics is demonstrated by:
      i. Completion of MATH 090 or a higher level course in mathematics with a grade of C or higher.
      or
      ii. 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.
      or
      iii. Completion of BUSCAL 091 or TECALC 097 with a grade of C or higher.
3. Prerequisite courses listed below must be completed before entry into the nursing program. A grade of C or better and a minimum G.P.A. of 2.75 must be earned in prerequisite courses below.

   BIOL 250 and BIOL 251 Human Anatomy and Physiology I and II
   or
   BIOL 260 and BIOL 261 Human Anatomy and Human Physiology
   BIOL 270 Microbiology
   PSYCH 100 Psychology

NOTE:
- BIOL 261 (or BIOL 250 and 251) and BIOL 270 must be taken within 5 years of admission to nursing courses.
- BIOL 251 has a prerequisite of BIOL 250.
- BIOL 261 has a prerequisite of BIOL 260 and CHEM 101.
- BIOL 270 has prerequisites of BIOL 250 or 260 or 261 and CHEM 101.
- CHEM 101 has a prerequisite of MATH 090.
REQUIRED SUPPORT COURSES FOR THE NURSING PROGRAM

The following courses must be completed prior to graduation, or may be completed before entering the nursing program. A grade of C or better must be earned in each:

- ENGL 101 Freshman Composition
- SPEECH 100 Elements of Public Speaking
- or
- SPEECH 111 Interpersonal Communication
- SOC 100 Introduction to Sociology
- or
- ANTHRO 102 Cultural Anthropology

The full-time program consists of 4 semesters of Monday thru Friday, day-time classes with day or evening labs. Students are admitted in the Fall and Spring semesters.

STEPS TO APPLY FOR THE NURSING PROGRAM:

Applications for the Nursing program should be submitted in the semester when prerequisites are being completed and must be received by February 1 for entry in the Fall semester OR by September 1 for entry in the Spring semester. Incomplete applications will not be accepted.

- Application and admission to San Bernardino Valley College (Admissions & Records Office, Administration/Student Services Building.)
- Submit to the Nursing Department:
  a. "Application For Admission" form (available in the Health Science Division).
  b. Official college transcripts from all colleges or universities attended except for SBVC or Crafton Hills College showing prerequisites that meet the required G.P.A. (If transcripts are from a foreign country, it must be evaluated (see Admissions Clerk.) If prerequisite courses are in progress at the time of application, the student must arrange to have the instructor submit the final grade that maintains the required G.P.A.
  c. Documents showing competency in English and mathematics (if not showing on transcript).
  d. High School completion document (transcript, or diploma, or G.E.D. score, or Calif. High School Proficiency exam score) or Bachelor degree.

ADMISSION TO THE NURSING PROGRAM

Applications will be evaluated according to the program requirements stated above. Students meeting all prerequisites will be considered for acceptance dependent upon space availability. If there are more students with prerequisites met than spaces available, students will be randomly ranked and accepted in the program. Students who have previously met the requirements will be accepted into the program first, followed by the current applicants who have met the requirements until the class is filled. Only if space is available will late applications be considered. Incomplete applications will not be considered.

OPTIONS FOR LICENSED VOCATIONAL NURSES

Students with a current California Vocational Nursing License who wish to become Registered Nurses may select one of the following:

Regular Nursing Program: complete prerequisites and support courses listed above, apply and be accepted into the regular Nursing Program.

Option 1. LVN to RN Bridge: Complete prerequisites and support courses for RN program listed above, and general breadth requirements for the Associate of Science Degree. Apply by January 5 (March entry) and be accepted into the LVN to RN Bridge program. Complete each of the following courses with a grade of C or higher: NURS 108, 109 (includes challenge exams to determine eligibility to enter the following courses) 200, 202, 210, 211, 212, and 217.

Option 2. LVN to RN, 30 Unit Option (This option fulfills the minimum requirements to take the RN licensing exam, but students who complete this option are not graduates of the program, do not earn a degree, and may not be eligible to be licensed in states other than California). Complete each of the following prerequisites with a grade of C or higher: BIOL 261 (or BIOL 250 and 251) and BIOL 270. Apply by January 5 (March entry) and be accepted into the LVN to RN, 30 Unit Option Program. Complete each of the following courses with a grade of C or higher: NURS 108, 109 (includes challenge exams to determine eligibility to enter the following courses) 200, 210, 211, 212, and 217.

NURSING ASSOCIATE OF SCIENCE DEGREE

To graduate with a major in Nursing, students must complete each of the following courses plus the general education requirements for the Associate of Science Degree with a grade of C or higher.

REQUIRED NURSING COURSES: UNITS

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 100 Introduction to the Associate Degree Nursing Program</td>
<td>1</td>
</tr>
<tr>
<td>NURS 102 Fundamentals of Nursing</td>
<td>4.5</td>
</tr>
<tr>
<td>NURS 104 Medical-Surgical Nursing I</td>
<td>5</td>
</tr>
<tr>
<td>NURS 108 Pharmacology for Nurses</td>
<td>1</td>
</tr>
<tr>
<td>NURS 110 Medical-Surgical Nursing II</td>
<td>5.5</td>
</tr>
<tr>
<td>NURS 112 Maternity Nursing</td>
<td>5</td>
</tr>
<tr>
<td>NURS 200 Medical-Surgical Nursing III</td>
<td>5.5</td>
</tr>
<tr>
<td>NURS 202 Pediatric Nursing</td>
<td>4.75</td>
</tr>
<tr>
<td>NURS 210 Nursing Care of the Critically Ill</td>
<td>2.5</td>
</tr>
<tr>
<td>NURS 211 Medical-Surgical Nursing IV</td>
<td>3.75</td>
</tr>
<tr>
<td>NURS 212 Psychiatric Nursing</td>
<td>2.75</td>
</tr>
<tr>
<td>NURS 217 Advanced Ethical and Legal Aspects of Nursing</td>
<td>1</td>
</tr>
</tbody>
</table>

TOTAL UNITS: 42.25

COURSES OFFERED BY THE DEPARTMENT OF NURSING:

Registration in the following nursing courses is limited to students who have completed prerequisites and have been accepted into the Nursing Program.
NURS 100
INTRODUCTION TO THE ASSOCIATE DEGREE NURSING PROGRAM 1 UNIT
PREREQUISITE: None.
LECTURE: 1 hour per week.
Introduction to core concepts of the nursing curriculum conceptual framework, anxiety/stress, defense mechanisms, crisis intervention, death and dying, and nursing ethics. Includes student learning responsibilities and strategies for success in the nursing program. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE COMPLETED PROGRAM PREREQUISITES AND HAVE BEEN ACCEPTED INTO THE NURSING PROGRAM.
Associate Degree Applicable
Course credit transfers to CSU.

NURS 101
APPLICATION OF CRITICAL THINKING TO FIRST LEVEL NURSING PRACTICE 1 UNIT
PREREQUISITE: None.
COREQUISITES: NURS 102 or NURS 104.
LECTURE: 0.5 hour per week and LABORATORY: 1.5 hours per week.
Designed to facilitate development of critical thinking and the application of first level medical-surgical nursing theory. Includes analysis of clinical situations, practice of selected first level nursing skills, basic mathematical nursing problems, learning techniques and use of the nursing process. Graded on Credit/No Credit basis only. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE COMPLETED PROGRAM PREREQUISITES AND HAVE BEEN ACCEPTED INTO THE NURSING PROGRAM.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

NURS 102
FUNDAMENTALS OF NURSING 4.5 UNITS
PREREQUISITES: BIOL 250 and BIOL 251 (or BIOL 260, BIOL 261 and BIOL 270) and PSYCH 100 and ENGL 015.
COREQUISITE: NURS 100.
DEPARTMENTAL ADVISORY: READ 970.
LECTURE: 2.5 hours per week and LABORATORY: 6 hours per week.
Introduction to the nursing care of adult and elder adult clients with basic alterations in the psychological variable. Includes fundamental nursing concepts/skills and beginning application of the nursing process to assist clients attain or maintain their optimum level of wellness. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE COMPLETED PROGRAM PREREQUISITES AND HAVE BEEN ACCEPTED INTO THE NURSING PROGRAM.
Associate Degree Applicable
Course credit transfers to CSU.

NURS 103
APPLICATION OF CRITICAL THINKING TO SECOND LEVEL NURSING PRACTICE 1 UNIT
PREREQUISITE: None.
COREQUISITES: NURS 110 or NURS 112.
LECTURE: 0.5 hour per week and LABORATORY: 1.5 hours per week.
Designed to facilitate development of critical thinking and the application of second level medical-surgical and maternity nursing theory. Includes analysis of clinical situations, practice of selected second level nursing skills, mathematical nursing programs and use of the nursing process. Graded on Credit/No-Credit basis only. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE COMPLETED PROGRAM PREREQUISITES AND HAVE BEEN ACCEPTED INTO THE NURSING PROGRAM.
Associate Degree Applicable
Course credit transfers to CSU.

NURS 104
MEDICAL-SURGICAL NURSING I 5 UNITS
PREREQUISITE: NURS 102.
LECTURE: 2.75 hours per week and LABORATORY: 6.75 hours per week.
First level medical-surgical nursing focuses on the physiological, sociocultural and developmental variables as they relate to selected alterations in integumentary, immunological, metabolism, reproduction, and musculoskeletal subsystems. Application of the nursing process to assist clients to attain and maintain their optimum level of wellness. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE COMPLETED PROGRAM PREREQUISITES AND HAVE BEEN ACCEPTED INTO THE NURSING PROGRAM.
Associate Degree Applicable
Course credit transfers to CSU.

NURS 108
PHARMACOLOGY FOR NURSES 1 UNIT
PREREQUISITE: NURS 102.
LECTURE: 1 hour per week.
Fundamental principles of pharmacology that govern the action of drugs on the human body. Overview of major classifications of drug therapy in relation to the physiological and developmental variables. Includes role of drug therapy in assisting clients to attain and maintain their optimal level of wellness. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE COMPLETED PROGRAM PREREQUISITES AND HAVE BEEN ACCEPTED INTO THE NURSING PROGRAM.
Associate Degree Applicable
Course credit transfers to CSU.

NURS 109
VOCATIONAL TO PROFESSIONAL NURSE TRANSITION 2 UNITS
PREREQUISITES: BIOL 250 and BIOL 251 (or BIOL 260 and BIOL 261), and BIOL 270 and PSYCH 100.
DEPARTMENTAL ADVISORIES: READ 015 and ENGL 015.
LECTURE: 1.5 hours per week and LABORATORY: 1.5 hours per week.
 Prepares Licensed Vocational Nurses to transition into the Registered Nursing program. Includes role transition content including: Nursing Process, Standards of Practice, and Critical Thinking in nursing. Challenge examinations covering first & second semester medical-surgical and maternity nursing content will determine eligibility for placement in the program. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE A CURRENT CALIFORNIA LVN LICENSE AND HAVE BEEN ACCEPTED INTO THE LVN TO RN NURSING PROGRAM.
Associate Degree Applicable
Course credit transfers to CSU.
NURS 110
MEDICAL-SURGICAL NURSING II      5.5 UNITS
PREREQUISITE: NURS 104.
LECTURE: 3.25 hours per week and
LABORATORY: 6.75 hours per week.
Second level medical-surgical nursing focusing on the
physiological, sociocultural and developmental variables
as they relate to selected alterations in oxygenation,
digestion and bowel elimination, metabolism and
cerebral/peripheral neurological innervation subsystems.
Application of the nursing process to assist clients to attain
and maintain their optimum level of wellness.
REGISTRATION IS LIMITED TO STUDENTS WHO HAVE
COMPLETED PROGRAM PREREQUISITES AND HAVE BEEN
ACCEPTED INTO THE NURSING PROGRAM.
Associate Degree Applicable
Course credit transfers to CSU.

NURS 112
MATERNITY NURSING             5 UNITS
PREREQUISITE: NURS 104.
LECTURE: 2.75 hours per week and
LABORATORY: 6.75 hours per week.
Maternity nursing focuses on the physiological,
psychological, sociocultural and developmental variables.
Applicable of the nursing process to assist childbearing
families to attain and maintain their optimum level of
wellness. REGISTRATION IS LIMITED TO STUDENTS WHO
HAVE COMPLETED PROGRAM PREREQUISITES AND HAVE BEEN
ACCEPTED INTO THE NURSING PROGRAM.
Associate Degree Applicable
Course credit transfers to CSU.

NURS 118
NURSING CARE PLAN ENRICHMENT   1 UNIT
PREREQUISITE: NURS 102.
LECTURE: 1 hour per week.
Supplementary course to assist students to increase
understanding and improve ability to construct client-
focused nursing care plans using the case analysis
method. REGISTRATION IS LIMITED TO STUDENTS WHO
HAVE COMPLETED PROGRAM PREREQUISITES AND HAVE BEEN
ACCEPTED INTO THE NURSING PROGRAM.
Associate Degree Applicable
Course credit transfers to CSU.

NURS 198
NURSING 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 to earn units using the following formula:
For paid work, 75 hours = 1 unit; for volunteer work, 60
hours = 1 unit. Students may earn a total of 16 units
toward graduation in Work Experience 198 courses.
Students MUST be working for pay or volunteer before
registering for a Work Experience class. NOTE: Only one
section of Work Experience may be taken during a
semester.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

NURS 200
MEDICAL-SURGICAL NURSING III     5.5 UNITS
PREREQUISITES: NURS 108 and NURS 110 and
NURS 112.
LECTURE: 3.25 hours per week and
LABORATORY: 6.75 hours per week.
Third level medical-surgical nursing focusing on the
physiological, psychological, sociocultural and
developmental variables as they relate to specific
alterations in urinary elimination, circulation, metabolism,
immunological and hematological subsystems Application
of the nursing process to assist clients to attain and
maintain their optimum level of wellness. REGISTRATION
IS LIMITED TO STUDENTS WHO HAVE COMPLETED
PROGRAM PREREQUISITES AND HAVE BEEN ACCEPTED
INTO THE NURSING PROGRAM.
Associate Degree Applicable
Course credit transfers to CSU.

NURS 201
APPLICATION OF CRITICAL THINKING TO THIRD
LEVEL NURSING PRACTICE       1 UNIT
PREREQUISITE/COREQUISITE: NURS 200 or NURS 202.
LECTURE: 0.5 hour per week and
LABORATORY: 1.5 hours per week.
Designed to facilitate development of critical thinking and the
application of third level medical-surgical and pediatric nursing
theory. Includes analysis of clinical situations, practice of third
level skills, mathematical nursing problems and use of the
nursing process. Graded on Credit/No Credit basis only.
REGISTRATION IS LIMITED TO STUDENTS WHO HAVE
COMPLETED PROGRAM PREREQUISITES AND HAVE BEEN
ACCEPTED INTO THE NURSING PROGRAM.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

NURS 202
PEDIATRIC NURSING          4.75 UNITS
PREREQUISITES: NURS 108 and NURS 110 and
NURS 112.
LECTURE: 2.75 hours per week and
LABORATORY: 6 hours per week.
A family-centered approach to the nursing care of infants
and children. Application of the nursing process to
pediatric clients with commonly occurring alterations in the
physiological, psychological, sociocultural and
developmental variables to assist them to attain and
maintain their optimum level of wellness. REGISTRATION
IS LIMITED TO STUDENTS WHO HAVE COMPLETED
PROGRAM PREREQUISITES AND HAVE BEEN ACCEPTED
INTO THE NURSING PROGRAM.
Associate Degree Applicable
Course credit transfers to CSU.
NURS 203
APPLICATION OF CRITICAL THINKING TO FOURTH LEVEL NURSING PRACTICE  1 UNIT
PREREQUISITE: None.
COREQUISITE: NURS 210 or NURS 211 or NURS 212.
LECTURE: 0.5 hour per week and LABORATORY: 1.5 hours per week.
Designed to facilitate development of critical thinking and the application of fourth level medical-surgical, psychiatric and critical care nursing theory. Includes analysis of complex clinical situations, NCLEX style test taking practice, complex mathematical nursing problems and use of the nursing process. Graded on Credit/No-Credit basis only. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE COMPLETED PROGRAM PREREQUISITES AND HAVE BEEN ACCEPTED INTO THE NURSING PROGRAM.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

NURS 210
NURSING CARE OF THE CRITICALLY ILL  2.5 UNITS
LECTURE: 1.5 hours per week and LABORATORY: 3 hours per week.
Advanced medical-surgical nursing with a focus on the physiological, psychological, sociocultural and developmental variables. Application of the nursing process to adult clients with single or multiple subsystem failure to reestablish equilibrium and assist critically ill clients to attain their optimum level of wellness. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE COMPLETED PROGRAM PREREQUISITES AND HAVE BEEN ACCEPTED INTO THE NURSING PROGRAM.
Associate Degree Applicable
Course credit transfers to CSU.

NURS 211
MEDICAL-SURGICAL NURSING IV  3.75 UNITS
PREREQUISITES/COREQUISITE: NURS 210 and NURS 212.
LECTURE: 1 hour per week and LABORATORY: 8.25 hours per week.
Fourth level medical-surgical nursing focusing on the physiological, psychological, sociocultural and developmental variables. Application of the nursing process to the management of groups of clients to assist them to attain and maintain their optimum level of wellness. Included are advanced concepts in nursing leadership, home health care, disaster nursing, and aging. Includes preparation for the NCLEX examination and explores employment opportunities. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE COMPLETED PROGRAM PREREQUISITES AND HAVE BEEN ACCEPTED INTO THE NURSING PROGRAM.
Associate Degree Applicable
Course credit transfers to CSU.

NURS 212
PSYCHIATRIC NURSING  2.75 UNITS
LECTURE: 1.5 hours per week and LABORATORY: 3.75 hours per week.
Introduction to psychiatric nursing with a special focus on neurobiological theory and application of the nursing process to clients with alterations in the psychological variable. Other topics include suicide, substance abuse and domestic violence. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE COMPLETED PROGRAM PREREQUISITES AND HAVE BEEN ACCEPTED INTO THE NURSING PROGRAM.
Associate Degree Applicable
Course credit transfers to CSU.

NURS 217
ADVANCED ETHICAL AND LEGAL ASPECTS OF NURSING  1 UNIT
LECTURE: 1 hour per week.
Explores ethical, legal, and professional aspects related to nursing practice. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE COMPLETED PROGRAM PREREQUISITES AND HAVE BEEN ACCEPTED INTO THE NURSING PROGRAM.
Associate Degree Applicable
Course credit transfers to CSU.

OCEANOGRAPHY
DIVISION: Science and Math
DIVISION DEAN: Haragewen Kinde, Ed.D.
DEPARTMENT HEAD: Jerry Horne, Ph.D.
DIVISION SECRETARY: Rose Garcia
DIVISION OFFICE: Chemistry 121
(909) 384-8645
LIAISON COUNSELOR: Rafael Herrera, M.S.
(909) 384-4404
Oceanography courses provide a sound introduction to the marine environment which comprises 71% of the earth’s surface. The courses are designed for both science and non-science majors and are fundamental for students planning to major in oceanography.
Students planning to transfer to a four-year institution and major in oceanography should consult with a counselor regarding the transfer process and lower division requirements.

COURSES OFFERED BY THE DEPARTMENT OF OCEANOGRAPHY:
OCEAN 100
INTRODUCTION TO OCEANOGRAPHY 4 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week and
LABORATORY: 3 hours per week.
An introduction to the study of the oceans including the
geological processes that created the ocean basins; the
type and character of ocean sediments; the chemistry of
sea water; the physical motions of the oceans; waves,
tides, and circulation; a survey of the variety of life in the
oceans and the interrelationships of biological
communities with their physical environments. Laboratory
activities are coordinated with lecture topics.
Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; contact a counselor for details.

OCEAN 101
ELEMENTS OF OCEANOGRAPHY 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
The lecture portion of OCEAN 100 without the required
laboratory.
Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; contact a counselor for details.

OCEAN 111
INVESTIGATIONS IN OCEANOGRAPHY 1 UNIT
PREREQUISITE/Corequisite: OCEAN 101.
LABORATORY: 3 hours per week.
Techniques of oceanography including bathymetry, charts,
and methods of studying the physical ocean environment.
Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; contact a counselor for details.

PARALEGAL STUDIES
ASSOCIATE OF ARTS DEGREE

REQUIRED COURSES: UNITS
PARLGL 100 Law Office Management for the Paralegal 3
PARLGL 110 Legal Research Methods: Federal & California 3
PARLGL 111 Legal Writing and Analysis 3
PARLGL 200 Civil Litigation Procedures 3
PARLGL 220 Legal Ethics 3
PARLGL 230 Torts 3
BUSAD 210 Business Law I 3
BUSAD 211 Business Law II 3
CIT 020 Word Processing: Microsoft Word 3

Select three courses from the list of RECOMMENDED COURSES: 7-11

RECOMMENDED COURSES: UNITS
ACCT 200 Principles of Accounting 4
ADJUS 103 Concepts of Criminal Law 3
BUSAD 198 Business Administration Work Exp 1-4
PARLGL 120 Wills, Probate and Estate Planning 3
PARLGL 130 Family Law 3
PARLGL 205 Legal Remedies 3
PARLGL 240 Bankruptcy Law and Procedures 3
REALST 215 Legal Aspects of Real Estate 3

TOTAL UNITS: 35-39

PLUS completion of the general education graduation requirements as described in the catalog.
*Pending approval from the California Community College Chancellor’s Office

COURSES OFFERED BY THE DEPARTMENT OF PARALEGAL STUDIES:

PARLGL 100
LAW OFFICE MANAGEMENT FOR THE PARALEGAL 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
This course covers the organization and structure of the law office as well as the critical role of the paralegal in
handling time management and maintaining the accuracy of accounting systems used in law firms. Other topics
covered include: malpractice avoidance; strategic planning and marketing; records management; technology in the
law office.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

PARLGL 110
LEGAL RESEARCH METHODS: FEDERAL AND CALIFORNIA 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Provides instruction in the use of different research tools relevant to state statutes and case law, including the use of Shepard's Citations.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.
PARLGL 111
LEGAL WRITING AND ANALYSIS 3 UNITS
PREREQUISITE: PARLGL 110.
DEPARTMENTAL ADVISORY: ENGL 101.
LECTURE: 3 hours per week.
Designed to help a student develop skills in writing a variety of legal documents, including interoffice research memorandums, memorandums of points and authorities, motions and responses, and trial briefs. Assists in the development of the ability to critically analyze and apply case law.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

PARLGL 120
WILLS, PROBATE AND ESTATE PLANNING 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
An in-depth study of the laws affecting wills, trusts, and probate in California. Emphasis is placed on interstate succession, probate avoidance, and practical matters that occur on death. Procedures for preparing legal forms are highlighted.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

PARLGL 130
FAMILY LAW 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
An in-depth study of the laws affecting domestic relations in California with an emphasis on marriage, divorce (dissolution), separation, annulment, Marvin actions, paternity, and adoptions.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

PARLGL 200
CIVIL LITIGATION AND PROCEDURES 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: BUSAD 210
LECTURE: 3 hours per week.
Designed to help the student develop an understanding of the procedural rules and laws that apply to the area of civil litigation. Topics covered include territorial and subject matter jurisdiction and scope of discovery.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

PARLGL 205
LEGAL REMEDIES 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: PARLGL 200.
LECTURE: 3 hours per week.
Designed to help a student develop an understanding of the various remedies that are available in the area of civil litigation. Topics covered include tort vs. contract damages; equitable remedies; injuries to property, business, commercial and personal interests; and breach of contract.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

PARLGL 220
LEGAL ETHICS 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
This class is designed to equip paralegal students with the tools to face ethical dilemmas on the job. It provides a comprehensive description of attorney rules of ethics and how these rules apply to the lawyers and non-lawyers whom the attorneys supervise.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

PARLGL 230
TORTS 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: PARLGL 100.
LECTURE: 3 hours per week.
This course is designed to develop an overview of tort law for the paralegal. Topics include: intentional torts; negligence; absolute liability; product liability; the role of the paralegal in preparing tort cases for litigation.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

PARLGL 240
BANKRUPTCY LAW AND PROCEDURES 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: CIT 031 or ENGL 015.
LECTURE: 3 hours per week.
An in-depth look into bankruptcy and the laws which govern its use. Includes a review of voluntary and involuntary bankruptcies filed under Chapters 7, 11, and 13 of the United States Code, and an overview of the paralegal's role in evaluating bankruptcy information and in preparing and filing petitions and claims.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

PHARMACY TECHNOLOGY

DIVISION: Health Science
DIVISION DEAN: Marilyn Johnson, M.N.
DEPARTMENT CHAIR: Marilyn Johnson, M.N.
OTHER FACULTY: Judith Tobin, M.S.N.
DIVISION SECRETARY: Dorothy N. Fierro
DIVISION OFFICE: Health and Life Science 101
(909) 384-8550
LIAISON COUNSELOR: Ailsa Aguilar-Kitibutr, Psy.D.
(909) 384-4404

The Pharmacy Technology Program is a 10-month certificate program that prepares students to work in pharmacies to fill prescriptions, stock supplies, and sell to the public under the supervision of a pharmacist. Students are admitted in the Fall and Spring semesters. Students may also earn an Associate Degree. A background check is required by some clinical sites. The California Board of Pharmacy requires a background check and may deny the Pharmacy Technician licensure based on convictions substantially related to Pharmacy Technology practice.

Core competencies emphasized by courses in this department:
• Read and retain information.
• Employ vocabulary of the subject studied.
• Apply learned knowledge to new situations.
• Apply principles of scientific reasoning to solve problems.
• Accept responsibility for own actions.
• Work effectively in group settings.

PHARMACY TECHNOLOGY
ASSOCIATE OF SCIENCE DEGREE

To earn an Associate Degree with a specialization in Pharmacy Technology, students must complete the following required courses plus the general breadth requirements (minimum total = 60 units)

REQUIRED COURSES: UNITS
Complete the following courses with a grade of C or better:
PHT 020 Introduction to Pharmacy Technology 2
PHT 030 Pharmacology 3
PHT 031 Pharmacy Calculations 3
PHT 041 Pharmacy Systems 3
PHT 042 Pharmacy Intern Seminar 1
PHT 043 Pharmacy Clinical Experience 4
TOTAL UNITS: 16

RECOMMENDED COURSES:
ANTHRO 102 Cultural Anthropology 3
BIOL 100 General Biology 4
CHEM 101 Introductory Chemistry 4
ENGL 101 Freshman Composition 4
or
ENGL 015 Preparation for College Writing (4)
MATH 090 Elementary Algebra 4
PSYCH 100 General Psychology 3
SPAN 101 College Spanish I 5
SPEECH 111 Interpersonal Communication 3

PHARMACY TECHNOLOGY CERTIFICATE

This certificate is designed to prepare the student for entry-level employment as a pharmacy technician, assisting pharmacists to provide medication and other healthcare products to patients; receiving and verifying written prescriptions, requests for prescription refills from patients, or electronic prescriptions sent from doctors’ offices; retrieving, counting, pouring, weighing, measuring, and sometimes mixing medications; and preparing containers and labels for medications. Technicians may also establish and maintain patient profiles, prepare insurance claim forms, and stock and take inventory of prescription and over-the-counter medications. 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
Complete the following courses with a grade of C or better:
PHT 020 Introduction to Pharmacy Technology 2
PHT 030 Pharmacology 3
PHT 031 Pharmacy Calculations 3
PHT 041 Pharmacy Systems 3
PHT 042 Pharmacy Intern Seminar 1
PHT 043 Pharmacy Clinical Experience 4
MATH 952 Prealgebra 4
or
MATH 090 Elementary Algebra (4)

COURSES OFFERED BY THE DEPARTMENT OF PHARMACY TECHNOLOGY:

PHT 020
INTRODUCTION TO PHARMACY TECHNOLOGY 2 UNITS

PREREQUISITE: None.
LECTURE: 2 hours per week.
An introduction to the role of the Pharmacy Technician in the delivery of pharmacy services in acute and ambulatory care settings. Emphasizes pharmaceutical terminology, distribution systems, and pharmacy standards. Includes ethical, legal, and professional issues.

Associate Degree Applicable

PHT 030
PHARMACOLOGY 3 UNITS

PREREQUISITE: None.
LECTURE: 2 hours per week and
LABORATORY: 3 hours per week.
An introduction to the mechanisms of actions and therapeutic uses of drugs within broad classifications. Includes physical, chemical and pharmacological incompatibilities and adverse reactions of drugs. Emphasizes common drug dosages, dosage forms, and recognition of inconsistencies in drug orders.

Associate Degree Applicable

PHT 031
PHARMACY CALCULATIONS 3 UNITS

PREREQUISITE/Corequisite: MATH 952.
LECTURE: 3 hours per week.
Designed to assist students in applying mathematical skills in calculating accurate dosages of medications and intravenous solutions. Includes the application of business calculations in pharmacy operations.

Associate Degree Applicable

PHT 041
PHARMACY SYSTEMS 3 UNITS

PREREQUISITES: PHT 030 and PHT 031.
LECTURE: 2 hours per week and
LABORATORY: 3 hours per week.
This course focuses on the application of advanced distribution and dispensing methods for medications within a laboratory setting. Emphasizes advanced concepts of inventory control and repackaging systems.

Associate Degree Applicable

PHT 042
PHARMACY INTERN SEMINAR 1 UNIT

PREREQUISITE/Corequisite: PHT 041.
LECTURE: 1 hour per week.
This course emphasizes the application of methods for dispensing medications, inventory control and repackaging systems within a laboratory setting. Serves as lecture-based support for the students’ clinical experience.

Associate Degree Applicable

*Pending approval from the California Community College Chancellor’s Office

ENGL 015 Preparation for College Writing 4
or
ENGL 101 Freshman Composition (4)

TOTAL UNITS: 24

PENDING APPROVAL FROM THE CALIFORNIA COMMUNITY COLLEGE CHANCELLOR’S OFFICE
PHILOSOPHY / RELIGIOUS STUDIES

DIVISION: Humanities
DIVISION DEAN: Marjorie Price, M.A., M.Ed.
DEPARTMENT HEAD: Julius Jackson, Ph.D.
Liberal Arts 119
(909) 384-8595

OTHER FACULTY: Leonard Lopez, J.D.
DIVISION SECRETARIES: Kelly Acdock
(909) 384-8906
Cheryl Benner
(909) 384-8633

DIVISION OFFICE: North Hall 236
(909) 384-4445

LIAISON COUNSELOR: Juan Zepeda, M.S.
(909) 384-4404

Whatever the vocational goal, students benefit from completing courses in philosophy and religious studies. Nearly everyone is concerned with the kinds of questions and experiences studied in philosophy and religion. Both fields of study are concerned with the nature of reality, truth and value, the human response to death and suffering, and those perennial human questions: Who am I? Why am I here? And where am I going?

Philosophy and religious studies courses require critical analysis, clarity, and understanding. These skills are achieved through careful and close reading of texts, images, and symbols as well as through descriptive and analytic writing. These are invaluable skills transferable to most vocations.

Philosophy and religion courses require the study of diverse and often competing belief systems. This is a challenging and exciting endeavor that can help us make sense of the events taking place in the world around us.

Students planning to transfer to a four-year institution and major in philosophy or religious studies should consult a counselor regarding the transfer process and lower division requirements.

Core competencies emphasized by courses in this department:
- Read and retain information.
- Write clearly.
- Find and interpret information.

COURSES OFFERED BY THE DEPARTMENT OF PHILOSOPHY / RELIGIOUS STUDIES:

PHIL 101
INTRODUCTION TO PHILOSOPHY 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
General introduction to the major problems of philosophy with attention directed to classical and modern philosophical literature as a basis for discussion of epistemology, metaphysics, ethics and/or aesthetics.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): PHIL 2

PHIL 101H
INTRODUCTION TO PHILOSOPHY – HONORS 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
General introduction to the major problems of philosophy, with attention directed to classical and modern literature as a basis for discussion of issues such as epistemology, metaphysics, ethics, and aesthetics. Enrollment is limited to students eligible for the Honors Program.
Associate Degree Applicable
Course credit transfers to CSU.

PHIL 102
CRITICAL THINKING AND WRITING 3 UNITS
PREREQUISITE: ENGL 101 or ENGL 101H.
LECTURE: 3 hours per week.
An introduction to critical thinking focusing on argument and evidence and the ability to write coherent argumentative essays. Topics include recognition of the structures of reasoning in natural language, the evaluation of such reasoning (including informal fallacies), the uses and abuses of language, and an investigation of the rhetorical devices common in our culture. Students practice critical thinking by writing substantive arguments and essays.
Associate Degree Applicable
Course credit transfers to CSU and UC.

PHIL 103
INTRODUCTION TO LOGIC: ARGUMENT AND EVIDENCE 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Introduction to the techniques of critical thought including language analysis, inductive and deductive logic, symbolic logic and the development of scientific method.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): PHIL 6

PHIL 105
INTRODUCTION TO ETHICS 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Moral philosophy with an analysis of the basic ideas and principles involved in moral conduct and including the concepts of good, right, obligation and conscience. Problems of truthfulness, race, sex, marriage and war are examined in relation to moral philosophy. Special attention is given to contemporary problems of value pertinent to the interests of students majoring in medical arts and in administration of justice.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): PHIL 4
PHIL 112
PHILOSOPHY IN LITERATURE 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Ethical and metaphysical themes as presented in literature from the classical to the modern period with emphasis on the literary treatment of such problems as freedom and determinism, the nature of virtue, the meaning of death, the individual's relationship to the state and the structure of reality.
Associate Degree Applicable
Course credit transfers to CSU and UC.

PHIL 180
DEATH AND DYING 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
A study of dying, death, and bereavement. Medical, ethical, legal, philosophical, and religious considerations will be explored. 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. This course is also offered as RELIG 180.
Associate Degree Applicable
Course credit transfers to CSU and UC.

RELIG 100
INTRODUCTION TO RELIGIOUS STUDIES 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
An introductory study of religion with emphasis on religious experience, the origins and function of religion and religious and theological modes of expression, drawing on Eastern and Western, ancient and modern religious phenomena.
Associate Degree Applicable
Course credit transfers to CSU and UC.
Limited transfer to UC; contact a counselor for details.

RELIG 100H
INTRODUCTION TO RELIGIOUS STUDIES- HONORS 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
An introductory study of religion, with emphasis on religious experience, the origins and function of religion and religious and theological modes of expression, drawing on Eastern and Western, ancient and modern religious phenomena to help in understanding various religions. Enrollment is limited to students eligible for the Honors Program.
Associate Degree Applicable
Course credit transfers to CSU and UC.
Limited transfer to UC; contact a counselor for details.

RELIG 101
INTRODUCTION TO WORLD RELIGIONS 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Introduction to the major traditions of the world with an emphasis on the beliefs, practices, and histories of Buddhism, Christianity, Confucianism, Hinduism, Islam, Judaism, and Taoism.
Associate Degree Applicable
Course credit transfers to CSU and UC.

RELIG 110
TRIBAL AND ETHNIC RELIGIONS 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
A comparative study of supernaturalism in primitive societies, both past and present including witchcraft, magic, totemism, mythology and ritual, nativist 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 ANTHRO 110.
Associate Degree Applicable
Course credit transfers to CSU and UC.

RELIG 135
RELIGION IN AMERICA 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Principal figures, groups, issues and trends in religion from colonial times to the present including such topics as the Puritans, growth of religious liberty in America; religion and social protest; the African-American religious experience; the Catholic, Protestant and Jews, and contemporary religious phenomena. Associate Degree Applicable
Course credit transfers to CSU and UC.

RELIG 150
INTRODUCTION TO MYTHOLOGY 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
An overview of myth and its function in culture through an introduction to origin and end-time stories from many traditions including native American, the classical mythology of Greece and the major living religions. Associate Degree Applicable
Course credit transfers to CSU and UC.

RELIG 175
LITERATURE AND RELIGION OF THE BIBLE 3 UNITS
PREREQUISITE: ENGL 101.
LECTURE: 3 hours per week.
The English Bible as literature and as religion including an examination of the types of literature found in the Bible, the historical and religious context in which the literature was developed and an extensive reading of the two testaments. This course is also offered as ENGL 175.
Associate Degree Applicable
Course credit transfers to CSU and UC.

RELIG 176
JESUS AND HIS INTERPRETERS 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
A study of images and interpretations of Jesus with three principle divisions: Jesus and the gospels or biblical tradition; Jesus and the historians including the quest of historians and theologians for the Jesus of history; and Jesus and the arts (Jesus in art, music, film, and the literary arts, such as novels, poems, and plays). Associate Degree Applicable
Course credit transfers to CSU and UC.
RELIG 180
DEATH AND DYING  3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
A study of dying, death, and bereavement. Medical, ethical, legal, philosophical, and religious considerations will be explored. This course qualifies for continuing education credit for nurses. Approved by the California Board of Registered Nursing, provider number 01480, for 45 contact hours. This course is also offered as PHIL 180. Associate Degree Applicable
Course credit transfers to CSU and UC.

PHOTOGRAPHY
See courses within the ART Department

PHYSICAL EDUCATION AND ATHLETICS
DIVISION: Physical Education and Athletics
DIVISION DEAN: Dan Bridges, Ph.D.
FACULTY: Dawn Adler, M.S.
Ken Blumenthal, M.A.
Dan Clauss, M.Ed.
Ingrid Dahlgren, M.S.
Marie Hollis, M.A.
Philip Mathews, M.Ed.
David Rubio, M.A.
Cindy Runyon, M.A.
DIVISION SECRETARY: Atrina Sloan
DIVISION OFFICE: Snyder Gym 28
(909) 384-8514
LIAISON COUNSELOR: Andre Wooten
(909) 384-8511

Courses in the Physical Education Department are designed to increase students' skills in activities that produce physiological results and promote lifelong habits of fitness.

Within this department, courses are grouped in two areas: Health Education and Physical Education.

Four-year graduates in Health Education, Physical Education, and Athletics qualify for employment in private industry and recreational agencies and are prepared to seek teaching credentials in elementary or secondary education.

Students planning to transfer to a four-year institution and major in physical education or related fields should consult with a counselor regarding the transfer process and lower division requirements.

Core competencies emphasized by courses in this department:
- Read and retain information.
- Employ vocabulary of the subject studied.
- Apply learned knowledge to new situations.
- Accept responsibility for own actions.
- Exhibit personal, professional and academic honesty.
- Display behavior consistent with ethical standards within a discipline.
- Recognize own strengths and weaknesses.

- Set goals for educational, personal and professional development.
- Set goals to create balance in personal and professional life.

COURSES OFFERED BY THE DEPARTMENT OF PHYSICAL EDUCATION AND ATHLETICS:

HEALTH EDUCATION

HEALTH 101
HEALTH EDUCATION  3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
The meaning of health as a fundamental quality of human life with emphasis on the importance of participation in a positive health program for the individual and the community.
Associate Degree Applicable
Course credit transfers to CSU and UC.

HEALTH 103
INTRODUCTION TO HOLISTIC HEALTH  3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
An introduction to health and healing practices involving the integration of physical, mental, spiritual, and social resources. Students explore ancient disciplines of Ayurveda, Yoga, and Chinese Medicine, as well as modern Western health systems like Biofeedback, Swedish Massage, Reiki, Meditation, Guided Imagery, Herbalism, Humor and Music Therapy. Emphasis is placed on health promotion and prevention of disease, and how we become self-advocates in promoting our own well being with the assistance of health care professionals.
Associate Degree Applicable
Course credit transfers to CSU.

PHYSICAL EDUCATION

PE 198
PHYSICAL EDUCATION 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 to earn units using the following formula: For paid work, 75 hours = 1 unit; for volunteer work, 60 hours = 1 unit. Students may earn a total of 16 units toward graduation in Work Experience 198 courses. Students MUST be working for pay or volunteer before registering for a Work Experience class. NOTE: Only one section of Work Experience may be taken during a semester.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.
PE 200
INTRODUCTION TO PHYSICAL EDUCATION AND KINESIOLOGY 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
A formal introduction into the heritage, programs, philosophies, and potential careers in physical education and kinesiology. Emphasis is on describing and assessing this multifaceted field and the career potential it offers. An understanding of how the philosophies and programs of physical education evolved is stressed.
Associate Degree Applicable
Course credit transfers to CSU and UC.

PE 201
MENTAL SKILLS FOR SPORT PERFORMANCE 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Developing an understanding of the mental aspects of sport performance and learning mental skills that can be used to enhance sport performance.
Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; contact a counselor for details.

PE 210
SPORTS OFFICIATING 2 UNITS
PREREQUISITE: None.
LECTURE: 2 hours per week.
Instruction in and analysis of the rules, techniques, and mechanics of officiating the sports of soccer, football, basketball, and baseball.
Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; contact a counselor for details.

PE 220
INDEPENDENT STUDY IN PHYSICAL EDUCATION 1-3 UNITS
PREREQUISITE: None.
INDEPENDENT STUDY: 3-9 hours per week.
Assigned problems involving research and analysis of selected topic or directed study for students who are interested in furthering their knowledge of physical education and athletics on an independent study basis. For each unit earned, students are required to devote three hours per week 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; credit determined after transfer to UC.

PE 223
LIFEGUARD TRAINING 2 UNITS
PREREQUISITE: None.
LECTURE: 1 hour per week and LABORATORY: 3 hours per week.
Provide lifeguard candidates with the skills, knowledge, duties, and responsibilities to keep the patrons of aquatic facilities safe around the water. Designed to prevent accidents and rescue others. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
Associate Degree Applicable
Course credit transfers to CSU and UC.

PE 231
FIRST AID AND CPR 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
The emergency care and treatment of illnesses and injuries including training in cardiopulmonary resuscitation. Students who successfully pass all National Safety Council requirements will receive a First Aid Certificate. Students who successfully pass all CPR requirements will receive a CPR Certificate.
Associate Degree Applicable
Course credit transfers to CSU and UC.

PE 232
PREVENTION AND CARE OF ATHLETIC INJURIES 3 UNITS
PREREQUISITE: None.
LECTURE: 2 hours per week.
LABORATORY: 3 hours per week.
An introductory course in recognition, assessment, management, care, and prevention of injuries occurring in physical activities. Basic taping techniques as well as the proper selection and use of treatment modalities will be included.
Associate Degree Applicable
Course credit transfers to CSU.

PE 236
STRESS MANAGEMENT AND WELLNESS 3 UNITS
PREREQUISITE: None.
LECTURE: 2 hours per week and LABORATORY: 3 hours per week.
A study of stress with emphasis on the physiological, psychological, and sociological issues throughout the lifespan. Topics include: recognition and analysis of symptoms of stress, scientific studies, assessment tools, fitness programs, meditation, yoga, nutrition, weight control, and healthy habits that enhance health and well-being.
Associate Degree Applicable
Course credit transfers to CSU.

PE 282
PROFESSIONAL ACTIVITIES: BASEBALL 2 UNITS
PREREQUISITE: None.
LECTURE: 1 hour per week and LABORATORY: 3 hours per week.
Designed to prepare individuals to more effectively play and coach the sport of baseball. Instruction in various techniques, rules, regulations, team strategy, and etiquette of the game will be included. This course may be taken two times.
Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; contact a counselor for details.

PE 283
PROFESSIONAL ACTIVITIES: BASKETBALL 2 UNITS
PREREQUISITE: None.
LECTURE: 1 hour per week and LABORATORY: 3 hours per week.
Designed to prepare individuals to more effectively play and coach the sport of basketball. Instruction in various techniques, rules, regulations, team strategy, and etiquette of the game will be included. This course may be taken two times.
Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; contact a counselor for details.
PE 285x2
PROFESSIONAL ACTIVITIES: FOOTBALL 2 UNITS
PREREQUISITE: None.
LECTURE: 1 hour per week and
LABORATORY: 3 hours per week.
An introduction to the physical, mental and emotional aspects of playing and coaching football. Instruction and practical experience for prospective players, coaches and teachers. This course may be taken two times.
Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; contact a counselor for details.

PE 288x2
PROFESSIONAL ACTIVITIES: SOFTBALL 2 UNITS
PREREQUISITE: None.
LECTURE: 1 hour per week and
LABORATORY: 3 hours per week.
Designed to prepare individuals to more effectively play and coach the sport of softball. Instruction in various techniques, rules, regulations, team strategy, and etiquette of the game will be included. This course may be taken two times.
Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; contact a counselor for details.

PE 291x2
PROFESSIONAL ACTIVITIES: TRACK & FIELD 2 UNITS
PREREQUISITE: None.
LECTURE: 1 hour per week and
LABORATORY: 3 hours per week.
A study of track and field focusing on both participating in event-specific skills and learning the rules and regulations of the sport. Students, interested in physical education as a major, will also acquire skills in coaching track and field. This course may be taken two times.
Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; contact a counselor for details.

PE 293x2
PROFESSIONAL ACTIVITIES: VOLLEYBALL 2 UNITS
PREREQUISITE: None.
LECTURE: 1 hour per week and
LABORATORY: 3 hours per week.
Designed to prepare individuals to more effectively play and coach the sport of volleyball. Instruction in various techniques, rules, regulations, team strategy, and etiquette of the game will be included. This course may be taken two times.
Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; contact a counselor for details.

INDIVIDUAL/ DUAL ACTIVITIES AND SPORTS

PEI 103x4
BADMINTON 1 UNIT
PREREQUISITE: None.
LABORATORY: 3 hours per week.
Introduction in the skills, techniques, strategy, etiquette, and rules of badminton. The course is designed to improve physical fitness, and to teach carryover skills. Each course includes beginning, low intermediate, high intermediate and advanced levels of instruction. This course may be taken four times.
Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; contact a counselor for details.

PEI 105x4
LOW IMPACT AEROBICS 1 UNIT
PREREQUISITE: None.
LABORATORY: 3 hours per week.
An introductory level course teaching either a lifelong activity or sport. The course will emphasize the principles and techniques or skills and rules required in each activity or sport. This course may be taken four times.
Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; contact a counselor for details.

PEI 107x4
CROSS COUNTRY SKIING 1 UNIT
PREREQUISITE: None.
LABORATORY: 3 hours per week.
An introductory level course teaching either a lifelong activity or sport. The course will emphasize the principles and techniques or skills and rules required in each activity or sport. This course may be taken four times. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; contact a counselor for details.

PEI 108x4
WEIGHT TRAINING 1 UNIT
PREREQUISITE: None.
LABORATORY: 3 hours per week.
The course is designed to teach safe and proper technique for resistance exercises. Students will use free weights and universal machines to develop muscle strength and endurance. Students of all ability levels will receive individual instruction and personally tailored programs. This course may be taken four times.
Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; contact a counselor for details.

PEI 110x4
FOIL FENCING 1 UNIT
PREREQUISITE: None.
LABORATORY: 3 hours per week.
An introductory level course teaching either a lifelong activity or sport. The course will emphasize the principles and techniques or skills and rules required in each activity or sport. This course may be taken four times.
Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; contact a counselor for details.

PEI 111x4
MOUNTAIN BIKING 1 UNIT
PREREQUISITE: None.
LABORATORY: 3 hours per week.
An introductory level course teaching either a lifelong activity or sport. The course will emphasize the principles and techniques or skills and rules required in each activity or sport. This course may be taken four times.
Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; contact a counselor for details.
2. PE/I 115x4
   EPEE-SABRE FENCING 1 UNIT
   PREREQUISITE: None.
   DEPARTMENTAL ADVISORY: PE/I 110x4
   LABORATORY: 3 hours per week.
   An introductory level course teaching either a lifelong activity or sport. The course will emphasize the principles and techniques or skills and rules required in each activity or sport. This course may be taken four times.
   Associate Degree Applicable
   Course credit transfers to CSU.
   Limited transfer to UC; contact a counselor for details.

3. PE/I 116x4
   EPEE FENCING 1 UNIT
   PREREQUISITE: None.
   LABORATORY: 3 hours per week.
   History, rules, terminology and skills of Epee Fencing. The selection, use and care of Epee equipment. Basic skills of footwork, attacks, defenses, bouting, refereeing and judging. Mental preparation and strategies for competition will also be taught. This course may be taken four times.
   Associate Degree Applicable
   Course credit transfers to CSU and UC.
   Limited transfer to UC; contact a counselor for details.

4. PE/I 127x4
   WALKING FOR FITNESS 1 UNIT
   PREREQUISITE: None.
   LABORATORY: 3 hours per week.
   An introductory level course teaching either a lifelong activity or sport. The course will emphasize the principles and techniques or skills and rules required in each activity or sport. This course may be taken four times.
   Associate Degree Applicable
   Course credit transfers to CSU.
   Limited transfer to UC; contact a counselor for details.

5. PE/I 138x4
   PHYSICAL FITNESS 1 UNIT
   PREREQUISITE: None.
   LABORATORY: 3 hours per week.
   A structured exercise class designed to develop a balanced exercise program including cardiovascular, strength and flexibility training. Instructor guided equipment orientation, fitness testing, exercise technique, and individualized programming are provided. Class is appropriate for all fitness levels. This course may be taken four times.
   Associate Degree Applicable
   Course credit transfers to CSU.
   Limited transfer to UC; contact a counselor for details.

6. PE/I 143x4
   WATER POLO 1 UNIT
   PREREQUISITE: None.
   LABORATORY: 3 hours per week.
   This course introduces the fundamental offensive techniques, defensive techniques, and conditioning skills necessary for the game of water polo. Activities will be designed to enhance skills in each of these areas. Enrollment is limited to students who can swim the front crawl stroke 200 yards without stopping. This course may be taken four times. Note: It is not anticipated that this course will be offered during the current academic year.
   Please contact the Division Office for more information.
   Associate Degree Applicable
   Course credit transfers to CSU.
   Limited transfer to UC; contact a counselor for details.

7. PE/I 144x4
   RACQUETBALL 1 UNIT
   PREREQUISITE: None.
   LABORATORY: 3 hours per week.
   Instruction in the skills, techniques, strategies, etiquette, and rules of racquetball. Instruction designed for beginning, low intermediate, high intermediate and advanced levels directed toward improving overall physical fitness. This course may be taken four times.
   Associate Degree Applicable
   Course credit transfers to CSU.
   Limited transfer to UC; contact a counselor for details.

8. PE/I 148x4
   TENNIS 1 UNIT
   PREREQUISITE: None.
   LABORATORY: 3 hours per week.
   Instruction in the skills, techniques, strategies, etiquette and rules of tennis. Instruction designed for beginning, low intermediate, high intermediate and advanced levels directed toward improving overall physical fitness. This course may be taken four times.
   Associate Degree Applicable
   Course credit transfers to CSU.
   Limited transfer to UC; contact a counselor for details.

9. PE/I 164x4
   SWIMMING 1 UNIT
   PREREQUISITE: None.
   LABORATORY: 3 hours per week.
   This course is designed to teach swimming skills, techniques, and strategies. A comprehensive coverage of all swimming strokes. Some history, philosophy and psychology of swimming are included. This course is designed to help students have better cardiovascular performance in swimming. The course also includes other aquatic skills such as lifesaving and safety techniques. This course may be taken four times.
   Associate Degree Applicable
   Course credit transfers to CSU.
   Limited transfer to UC; contact a counselor for details.

10. PE/I 168x4
    YOGA 1 UNIT
        PREREQUISITE: None.
        LABORATORY: 3 hours per week.
        This course is designed to provide a comprehensive coverage of all aspects of Yoga, including the history, philosophy, psychology, and social aspects of yoga, particularly Hatha Yoga. Participants also study meditation and how meditation affects performance in daily life. This course may be taken four times.
        Associate Degree Applicable
        Course credit transfers to CSU.
        Limited transfer to UC; contact a counselor for details.

11. PE/I 173x4
    WATER AEROBICS 1 UNIT
        PREREQUISITE: None.
        LABORATORY: 3 hours per week.
        This course in water aerobics is designed to introduce basic fitness concepts as well as basic movement and exercise. Students will develop strength, flexibility, movement memory, balance, coordination, and cardiovascular fitness within a shallow water aerobic format. This course may be taken four times.
        Associate Degree Applicable
        Course credit transfers to CSU and UC.
        Limited transfer to UC; contact a counselor for details.
ADAPTED PHYSICAL EDUCATION 1 UNIT
PE/I 184x4 SWIMMING
PE/I 185x4 SPORTS AND GAMES
PE/I 186x4 STRETCHING AND STRESS REDUCTION
PE/I 187x4 CARDIOVASCULAR FITNESS
PE/I 188x4 FITNESS AND CONDITIONING
PE/I 189x4 WEIGHT TRAINING
PREREQUISITE: None.
LABORATORY: 3 hours per week.
These courses are designed for students with disabilities. An individualized program of appropriate activities is provided. These courses emphasize improving or maintaining range of motion, muscular strength, and cardiovascular endurance. Each course may be taken four times. Note: It is not anticipated courses PE/I 185x4 and PE/I 187x4 will be offered during the current academic year. Please contact the Division Office for more information.
Associate Degree Applicable
Course credit transfers to CSU and UC.
Limited transfer to UC; contact a counselor for details.

PE/I 190x4
TAI CHI 1 UNIT
PREREQUISITE: None.
LECTURE: None.
LABORATORY: 3 hours per week.
This course is designed to study and practice Tai Chi (a moving meditation) from the introductory through advanced levels. The history, research, and benefits of Tai Chi will be examined, and the basic 12, 24, and 42 forms of Tai Chi will be explored. The course will include individual and group instruction and practice.

PE/T 100x4
TEAM SPORTS ACTIVITIES: BASEBALL 1 UNIT
PREREQUISITE: None.
LABORATORY: 3 hours per week.
Instruction in the skills, techniques, strategies, etiquette, and rules of baseball at beginning, low intermediate, high intermediate and advanced levels of performance. Students will improve their overall physical fitness and develop carryover skills. This course may be taken four times.
Associate Degree Applicable
Course credit transfers to CSU and UC.
Limited transfer to UC; contact a counselor for details.

PE/T 104x4
TEAM SPORTS ACTIVITIES: VOLLEYBALL 1 UNIT
PREREQUISITE: None.
LABORATORY: 3 hours per week.
Instruction in the skills, techniques, strategies, etiquette and rules of volleyball at beginning, low intermediate, high intermediate and advanced levels of performance. Students will improve their overall physical fitness and develop carryover skills. This course may be taken four times.
Associate Degree Applicable
Course credit transfers to CSU and UC.
Limited transfer to UC; contact a counselor for details.

PE/T 108x4
TEAM SPORTS ACTIVITIES: FOOTBALL 1 UNIT
PREREQUISITE: None.
LABORATORY: 3 hours per week.
This activity course is designed to introduce students to the skills, techniques, strategy, rules as well as ethics of football. This course may be taken four times.
Associate Degree Applicable
Course credit transfers to CSU and UC.
Limited transfer to UC; contact a counselor for details.

PE/T 116x4
TEAM SPORTS ACTIVITIES: SOCCER 1 UNIT
PREREQUISITE: None.
LABORATORY: 3 hours per week.
Instruction in the skills, techniques, strategies, etiquette and rules of soccer at beginning, low intermediate, high intermediate, and advanced levels of performance. Students will improve their overall physical fitness and develop carryover skills. This course may be taken four times.
Associate Degree Applicable
Course credit transfers to CSU and UC.
Limited transfer to UC; contact a counselor for details.

PE/T 120x4
TEAM SPORTS ACTIVITIES: SOFTBALL 1 UNIT
PREREQUISITE: None.
LABORATORY: 3 hours per week.
Instruction in the skills, techniques, strategies, etiquette and rules of softball at beginning, low intermediate, high intermediate and advanced levels of performance. Students will improve their overall physical fitness and develop certain carryover skills. This course may be taken four times.
Associate Degree Applicable
Course credit transfers to CSU and UC.
Limited transfer to UC; contact a counselor for details.

PE/T 124x4
TEAM SPORTS ACTIVITIES: ADVANCED VOLLEYBALL 1 UNIT
PREREQUISITE: None.
LABORATORY: 3 hours per week.
The course is designed to teach advanced volleyball skills in preparation for intercollegiate competition. Various team offensive systems and team defensive patterns will be studied and analyzed. Enrollment in this course is limited to those with Interscholastic or Intercollegiate experience. This course may be taken two times.
Associate Degree Applicable
Course credit transfers to CSU and UC.
Limited transfer to UC; contact a counselor for details.
PE/V 100-103
INTERCOLLEGIATE SPORTS ACTIVITIES (VARSITY) 2 UNITS

PREREQUISITE: None.
LABORATORY: 10 hours per week.
Physical education credit for such varsity intercollegiate sports as baseball, basketball, cross-country, football, golf, swimming, softball, tennis, track and field, volleyball, water polo, and wrestling (Fall and Spring).
Associate Degree Applicable
Course credit transfers to CSU and UC.
Limited transfer to UC; contact a counselor for details.

PHYSICAL SCIENCES
DIVISION:   Science and Math
DIVISION DEAN:   Haragewen Kinde, Ed.D.
DEPARTMENT HEAD:   John Stanskas, Ph.D.
Chemistry 114
(909) 384-8268
DIVISION SECRETARY:   Rose Garcia
DIVISION OFFICE:   Chemistry 121
(909) 384-8645
LIAISON COUNSELOR:   Rafael Herrera, M.S.
(909) 384-4404

COURSES OFFERED BY THE DEPARTMENT OF PHYSICAL SCIENCE:
PS 101
INTRODUCTION TO PHYSICAL SCIENCE  3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Fundamental concepts of chemistry, physics, and earth sciences (astronomy, geology, and oceanography) as they apply to everyday life.
Associate Degree Applicable
Course credit transfers to CSU and UC.
Limited transfer to UC; contact a counselor for details.

PHYSICS / ASTRONOMY
DIVISION:   Science and Math
DIVISION DEAN:   Haragewen Kinde, Ed.D.
DEPARTMENT HEAD:   Michael Lysak, Ph.D.
Physical Science 234
(909) 384-8529
DEPARTMENT SECRETARY:   Sylvia McDaniel
DEPARTMENT OFFICE:   Physical Science 230
(909) 384-8520
DIVISION SECRETARY:   Rose Garcia
DIVISION OFFICE:   Chemistry 121
(909) 384-8645
LIAISON COUNSELOR:   Rafael Herrera, M.S.
(909) 384-4404

Physics is fundamental science. It is concerned with finding and using the rules that govern everything—from the smallest pieces of the atom to the various collections of atoms—molecules, balls, planets, stars, and more—that compose the myriad contents of the universe.

Physics courses are offered to meet diverse students’ needs: (1) PHYSICS 101: an introductory course which is descriptive and uses little mathematics provides an overview of physics for Liberal Arts and Science majors;

(2) PHYSICS 150A/B: Physics for the Life Sciences presents physics in sufficient depth for students whose careers in life sciences and related fields will require a physics background with some experience with calculus and (3) PHYSICS 200, 201 and 210 provide a rigorous development of physics using calculus to prepare students for further studies in the physical sciences, engineering, and mathematics.

Students majoring in physics will be rewarded on the personal level with a deep understanding of the world around us. On a professional level, physicists find a variety of employment opportunities which are relatively free of ethnic and gender bias, pay well, reward creativity, and are just plain fun.

Astronomy is the study of the vast universe around us. We start on the earth and sweep outward past the moon to the planets of the solar system and our sun, one of the billions of stars in our galaxy. On our journey through the universe, we explore an exciting realm populated by black holes, quasars, red giants, white dwarfs, and more.

Astronomy is taught in a modern planetarium which accurately simulates the nighttime sky, showing the positions and motions of the stars and planets. The real sky can be viewed through the sixteen-inch reflector telescope in the N. A. Richardson Astronomical Observatory.

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

Core competencies emphasized by courses in this department:
• Employ vocabulary of the subject studied.
• Apply learned knowledge to new situations.
• Apply principles of scientific reasoning to solve problems.
• Defend a logical hypothesis to explain observed phenomenon.

PHYSICS
ASSOCIATE OF SCIENCE DEGREE
To graduate with a specialization in Physics, students must complete the following required courses plus the general breadth requirements for the Associate Degree (minimum total = 60 units).

RECOMMENDED COURSES:
CHEM 150 General Chemistry I 5
CHEM 151 General Chemistry II 5
ASTRONOMY
ASSOCIATE OF SCIENCE DEGREE
To graduate with a specialization in Astronomy, students must complete the following required courses plus the general breadth requirements for the Associate Degree (minimum 60 semester units).

REQUIRED COURSES: UNITS
ASTRON 123 Introduction to Astronomy 4
or
ASTRON 120 Introduction to Astronomy (3)
and
ASTRON 125 Astronomy Laboratory (1)
MATH 250 Single Variable Calculus I 4
MATH 251 Single Variable Calculus II 4
MATH 252 Multivariable Calculus 5
PHYSIC 200 Physics I 6
TOTAL UNITS: 23

COURSES OFFERED BY THE DEPARTMENT OF PHYSICS/ASTRONOMY:

PHYSIC 101
BASIC PHYSICS 4 UNITS
PREREQUISITE: MATH 090.
DEPARTMENTAL ADVISORY: ENGL 015 or eligibility for ENGL 101.
LECTURE: 3 hours per week and
LABORATORY: 3 hours per week.
A first course in physics. Topics include motion, forces, energy, waves, light, electricity, magnetism and concepts of modern physics.
Associate Degree Applicable
Course credit transfers to CSU and UC.
Limited transfer to UC; contact a counselor for details.

PHYSIC 150A
GENERAL PHYSICS FOR THE LIFE SCIENCES I 5 UNITS
PREREQUISITE: PHYSIC 101 and MATH 103 and ENGL 015.
LECTURE: 3 hours per week and
LABORATORY: 6 hours per week.
The first course in a two-semester physics sequence designed primarily for students in biology, pharmacology, pre-medicine, physical therapy, allied health services, and physical education. Topics include mechanics, waves, fluids, and thermodynamics. Concepts of calculus will be developed and applied to a variety of situations.
Associate Degree Applicable
Course credit transfers to CSU and UC.
Limited transfer to UC; contact a counselor for details.
CAN (California Articulation Number): PHYS 2

PHYSIC 150B
GENERAL PHYSICS FOR THE LIFE SCIENCES II 5 UNITS
PREREQUISITE: PHYSIC 150A.
LECTURE: 3 hours per week and
LABORATORY: 6 hours per week.
The second course in a two-semester physics sequence designed primarily for students in biology, pharmacology, pre-medicine, physical therapy, allied health services, and physical education. Topics include electricity, magnetism, optics, and modern physics. The needed concepts of calculus will be developed and used where appropriate.
Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; contact a counselor for details.
CAN (California Articulation Number): PHYS 4
Students are required to devote six hours per week to their knowledge of physics on an independent study basis. Assigned problems involving library and laboratory work for selected students who are interested in furthering their knowledge of physics on an independent study basis. Students are required to devote six hours per week to their project throughout the semester. Associate Degree Applicable
Course credit transfers to CSU and UC. Limited transfer to UC; credit determined after transfer to UC.

**ASTRON 120**
INTRODUCTION TO ASTRONOMY 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
An introduction to astronomy, the ultimate adventure. Our very big universe can be described by a small set of knowable rules through a logical method called science, where the excitement of an evolving and sometimes violent universe of stars and galaxies is explored. Topics include the night sky, motions of the Sun, the Moon, and the planets, light, properties and life-cycles of stars with a detailed look at our Sun, galaxies and the origin of the universe.
Associate Degree Applicable
Course credit transfers to CSU and UC.
Limited transfer to UC; contact a counselor for details.

**ASTRON 123**
INTRODUCTION TO ASTRONOMY 4 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week and LABORATORY: 3 hours per week.
An introduction to astronomy, the ultimate adventure. Our very big universe can be described by a small set of knowable rules through a logical method called science, where the excitement of an evolving and sometimes violent universe of stars and galaxies is explored. Topics include the night sky, motions of the Sun, the Moon, and the planets, light, properties and life-cycles of stars with a detailed look at our Sun, galaxies and the origin of the universe. A series of laboratories supplement and enhance topics discussed in lecture.
Associate Degree Applicable
Course credit transfers to CSU and UC.
Limited transfer to UC; contact a counselor for details.

**ASTRON 222**
SPECIAL PROBLEMS IN ASTRONOMY 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 astronomy on an independent study basis. Students are required to devote three hours per week to their project throughout the semester. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
Associate Degree Applicable
Course credit transfers to CSU and UC.
Limited transfer to UC; credit determined after transfer to UC.

**ASTRON 223**
SPECIAL PROBLEMS IN ASTRONOMY 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 astronomy on an independent study basis. Students are required to devote three hours per week to their project throughout the semester. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
Associate Degree Applicable
Course credit transfers to CSU and UC.
Limited transfer to UC; credit determined after transfer to UC.

**PHYSIOLOGY**
See courses within the Department of BIOLOGY

**POLICE SCIENCE**
(also see CRIMINAL JUSTICE)

DIVISION: Criminal Justice
ADMINISTRATIVE DEAN: Gloria Fisher, J.D.
DIVISION SECRETARY: Sharen Chavira
CAMPUS OFFICE: Planetarium, 2nd Floor
(909) 384-4431
GLEN HELEN OFFICE: Sheriff's Training Center
(909) 473-2695
LIAISON COUNSELOR: Joyce Smith, M.A.
(909) 384-4404

One of modern government’s most challenging tasks is the enforcement of laws and the protection of lives and property while respecting constitutional individual rights. Carefully selected, highly trained and motivated peace officers are central in this task. The Police Science program offers three types of training: (1) the Basic Law Enforcement Academy is presented in both an intensive and extended format for students interested in becoming peace officers; (2) reserve officer training is offered, leading to positions as Reserve Deputy Sheriffs or Police Officers; and (3) an advanced training program is offered for those currently employed as peace officers.

The state screening requirements for admission into the Basic Law Enforcement Academy are: A person must have a physical examination, stress EKG, Department of Justice/Federal Bureau of Investigation fingerprint check, a valid California drivers license, and never have been convicted of a felony. The Police Science classes are certified by the California Commission on Peace Officer Standards and Training.
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.

The Police Science courses listed may not be offered every semester due to instructor availability. Please refer to the college semester schedule of class offerings.

Core competencies emphasized by courses in this department:
- Read and retain information.
- Write clearly.
- Speak clearly.
- Employ vocabulary of the subject studied.
- Demonstrate active listening skills.
- Find and interpret information.
- Evaluate authority and bias of information.
- Utilize technology to organize and present information.
- Demonstrate working knowledge of basic computer function.
- Locate, evaluate and select evidence to support or discredit an argument.
- Construct a persuasive argument.
- Apply learned knowledge to new situations.
- Apply principles of scientific reasoning to solve problems.
- Accept responsibility for own actions.
- Demonstrate respect for a diversity of ideas and the rights of others.
- Exhibit personal, professional and academic honesty.
- Display behavior consistent with ethical standards within a discipline.
- Apply lessons from the past to ethical issues faced in the present.
- Evaluate own ethical beliefs in relationship to moral dilemmas.
- Recognize own strengths and weaknesses.
- Set goals to create balance in personal and professional life.
- Demonstrate etiquette in face-to-face and written interactions.
- Work effectively in group settings.
- Utilize conflict resolution skills.
- Demonstrate knowledge of and respect for other cultures.

**BASIC LAW ENFORCEMENT ACADEMY CERTIFICATE**

This certificate is designed for state certified entry-level positions in law enforcement agencies. Successful completion of this program and subsequent completion of the hiring agencies probationary period in a Peace Officers’ Standards and Training (POST) certified agency qualifies the student for a California POST certificate. This program meets Penal Code §832 requirement of training as a peace officer in the state of California. This program is offered in two formats: the Intensive Format (approximately 23 weeks) and the Extended Format (approximately 48 weeks). 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:**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLICE 002</td>
<td>Basic Law Enforcement Academy</td>
</tr>
<tr>
<td>POLICE 100</td>
<td>Criminal Law</td>
</tr>
<tr>
<td>POLICE 101</td>
<td>Procedure and Evidence</td>
</tr>
<tr>
<td>POLICE 102</td>
<td>Community Policing</td>
</tr>
<tr>
<td>POLICE 103</td>
<td>Introduction to Criminal Investigation</td>
</tr>
</tbody>
</table>

**TOTAL UNITS:** 39.75

*Pending approval from the California Community College Chancellor’s Office*

**COURSES OFFERED BY THE DEPARTMENT OF POLICE SCIENCE:**

**POLICE 002**

**BASIC LAW ENFORCEMENT ACADEMY** 27.75 UNITS

**COREREQUISITES:** POLICE 100, POLICE 101, POLICE 102 and POICE 103.

**LECTURE:** 312 hours per semester and
**LABORATORY:** 392 hours per semester.

Basic training for new Law Enforcement Officers including administration of justice, patrol procedures, firearms, defensive tactics, physical training, First Aid, cardiopulmonary resuscitation (CPR), traffic investigation, water safety, and driver training. Enrollment is limited to those students who meet state screening requirements as outlined in the Government Code, California Penal Code and the Commission on Peace Officer Standards and Training Administrative Manual.

**Associate Degree Applicable**

**POLICE 003X20**

**USE OF FORCE-FIRST AID CROWD CONTROL** .25 UNIT

**PREREQUISITE:** CRMJUS 058.

**LECTURE:** 2 hours per semester and
**LABORATORY:** 6 hours per semester.

This course provides use of force training updates and instruction in tactics, law enforcement procedures, and case law, which are essential for the law enforcement professional. This course emphasizes training in CPR/First Aid training, and the use of passive resistor crowd control techniques. This training qualifies as credit toward POST’s 24-hour Continuous Professional Training (CPT) requirement for police officers. This course may be taken twenty times.

**Associate Degree Applicable**

**POLICE 004X20**

**USE OF FORCE-DECISION MAKING LESS** .25 UNIT

**PREREQUISITE:** CRMJUS 058.

**LECTURE:** 2 hours per semester and
**LABORATORY:** 6 hours per semester.

This course provides use of force training updates and instruction in tactics, law enforcement procedures, and case law, which are essential for the law enforcement professional. This course emphasizes training in less lethal systems, as well as critical incident judgment and decision making skills. A variety of subjects are combined to provide the most current training available, training which will also satisfy POST’s 24-hour Continuous Professional Training (CPT) requirement for police officers. This course may be taken twenty times.

**Associate Degree Applicable**
POLICE 005X20
USE OF FORCE-TACTICAL COMMUNICATION AND CHEMICAL AGENTS .25 UNIT
PREREQUISITE: CRMJUS 058.
LECTURE: 2 hours per semester and LABORATORY: 6 hours per semester.
This course provides use of force training updates and instruction in tactics, law enforcement procedures, and case law, which are essential for the law enforcement professional. This course emphasizes training in tactical communication and the use of chemical agents in the field. This course qualifies as credit toward POST's 24-hour Continuous Professional Training (CPT) requirement for police officers. This course may be taken twenty times.
Associate Degree Applicable

POLICE 010
INTERVIEW AND INTERROGATION .50 UNIT
PREREQUISITE: CRMJUS 058.
LECTURE: 8 hours per semester.
The systematic questioning of a suspect including legal constraints; the Miranda warning; absence of coercion; when and where to interrogate; suspect evaluation; interrogation techniques; interviewing victims and witnesses; and developing other sources of information.
REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable

POLICE 015
BASIC MOUNTED PATROL 1.25 UNITS
PREREQUISITE: CRMJUS 059.
LECTURE: 10 hours per semester and LABORATORY: 30 hours per semester.
This course is designed to train mounted personnel with a focus on patrol functions and techniques to control their mounts in various situations. Horse and rider will be exposed to crowd control, congested areas and noise-structured distractions. LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable

POLICE 016
MOUNTED SEARCH AND RESCUE .75 UNIT
PREREQUISITE: None.
LECTURE: 8 hours per semester and LABORATORY: 8 hours per semester.
The intent of this class is to provide the students with an understanding of the responsibilities and functions of mounted personnel for search and rescue. This is a beginning course for students interested in joining a search and rescue mounted team.
Associate Degree Applicable

POLICE 017
MOUNTED PATROL UPDATE .50 UNIT
PREREQUISITE: POLICE 015.
LECTURE: 4 hours per semester and LABORATORY: 12 hours per semester.
This course is designed to update mounted personnel about patrol functions and new techniques to control their mounts in various situations. Horse and rider will be exposed to crowd control, congested areas and noise/structured distractions. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
Associate Degree Applicable

POLICE 018
BUILDING ENTRIES AND SEARCHES .50 UNIT
PREREQUISITE: POLICE 001.
LECTURE: 6 hours per semester and LABORATORY: 2 hours per semester.
This course provides law enforcement officers with the knowledge needed to gather intelligence information, prepare a tactical plan, and execute a proper building entry and search. Officers will participate in open classroom discussion and role-playing exercises. LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable

POLICE 020
GANG AWARENESS 1.25 UNITS
PREREQUISITE: POLICE 001 or CRMJUS 059.
LECTURE: 20 hours per semester and LABORATORY: 4 hours per semester.
This course provides a thorough overview that will enable law enforcement students to apply the information they will learn about street, prison and motorcycle gangs to their positions as field officers or jail deputies. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable

POLICE 021x4
ADVANCED GANG AWARENESS, UPDATE .50 UNIT
PREREQUISITE: POLICE 020.
LECTURE: 8 hours per semester.
This constantly updated course will enable students to apply information they will learn about the most current street, prison and motorcycle gang trends to their daily assignments as law enforcement officers. Officer safety issues will also be addressed. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES. This course may be taken four times.
Associate Degree Applicable

POLICE 025
CLANDESTINE LABORATORY SAFETY .50 UNIT
PREREQUISITE: POLICE 001 or CRMJUS 059.
LECTURE: 8 hours per semester.
Law enforcement officers and other public safety professionals will learn of current trends as well as potential safety concerns, (fire, explosions, poisoning, etc.) related to clandestine drug laboratories. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable

POLICE 027
PASSIVE ALCOHOL SCREENING DEVICE TRAINING .25 UNIT
PREREQUISITES: POLICE 028 or CRMJUS 059.
LECTURE: 3 hours per semester and LABORATORY: 1 hour per semester.
Introduces the proper procedures for conducting an in the field breath test, accuracy check and calibration of the Intoximeter Alco- Sensor IV Passive Alcohol Screening (PAS) device. Officers will receive instruction relating to the laws and recent case law relevant to the PAS device. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable
POLICE 028
BREATHALYZER TRAINING          .25 UNIT
PREREQUISITE: None.
LECTURE: 3 hours per semester and
LABORATORY: 1 hour per semester.
Covers the chemical and psychological effects of alcohol
on the human body, the theory of breath testing, and the
proper use of current breath testing equipment. The
course will also cover legal aspects of breath testing and
courtroom testimony as it applies to breath test results.
Associate Degree Applicable

POLICE 029
DRIVING WHILE INTOXICATED         1.2 UNITS
PREREQUISITE: CRMJUS 058.
LECTURE: 20 hours per semester and
LABORATORY: 4 hours per semester.
All aspects of driving while intoxicated from detection to
courtroom testimony including nystagmus, the field testing
of alcohol and drug use, and recent case law.
REGISTRATION IS LIMITED TO STUDENTS WHO HAVE
SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable

POLICE 030
PERFORMANCE APPRAISALS            .50 UNIT
PREREQUISITE: None.
LECTURE: 8 hours per semester.
This course is designed to help law enforcement
supervisors develop their skills in evaluating subordinate
employees. Topics include the purpose of performance
appraisals; using performance appraisals to manage and
motivate employees; creating the paper trail; elements and
styles of grammar.
Associate Degree Applicable

POLICE 036
SURVIVAL SPANISH FOR LAW ENFORCEMENT  .25 UNIT
PREREQUISITE: CRMJUS 058.
LECTURE: 4 hours per semester and
LABORATORY: 4 hours per semester.
Course enables students to acquire skills to facilitate
communication with Spanish speaking members of the
community. This course emphasizes phrases specific to
officer safety. Focus is on practical phrases, commands and
questions needed by law enforcement in commonly
encountered field situations.
Associate Degree Applicable

POLICE 039
DIVE RESCUE                     1 UNIT
PREREQUISITE: POLICE 001.
LECTURE: 10 hours per semester and
LABORATORY: 14 hours per semester.
Students already possessing a Basic SCUBA certification
and who are interested in joining a dive rescue team will
learn about team organization, cold water rescue, search
patterns, victim retrieval, auto accidents, underwater
retrieval, and media relations. REGISTRATION IS LIMITED
TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED
PROGRAM PREREQUISITES.
Associate Degree Applicable

POLICE 040
BASIC BICYCLE POLICE COURSE       1 UNIT
PREREQUISITE: POLICE 001 or CRMJUS 058.
DEPARTMENTAL ADVISORY: Students must be in
good physical condition and be proficient bicyclers.
LECTURE: 12 hours per semester and
LABORATORY: 20 hours per semester.
This course is designed to improve student's bicycle riding
skills and techniques of bicycle patrolling. The course will
cover topics dealing with skills, equipment, nutrition,
physical fitness and subject/suspect contacts.
REGISTRATION IS LIMITED TO STUDENTS WHO HAVE
SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable

POLICE 041
BICYCLE PATROL INSTRUCTOR COURSE   1.5 UNITS
PREREQUISITE: POLICE 040.
DEPARTMENTAL ADVISORY: Students must be in
good physical condition and be proficient bicyclers.
LECTURE: 14.5 hours per semester and
LABORATORY: 25.5 hours per semester.
This course is designed to give students the skills to teach
courses in bicycle patrolling and an opportunity to improve
their bicycle riding skills. The course will cover topics
dealing with skills, equipment, nutrition, physical fitness,
subject/suspect contacts and curriculum development and
presentation. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE
SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable

POLICE 046
BASIC POLICE RIFLE MARKSMANSHIP    1.5 UNITS
PREREQUISITE: POLICE 001.
LECTURE: 20 hours per semester and
LABORATORY: 20 hours per semester.
This course provides students with the basic rifle
marksmanship skills necessary to effectively perform a
vital component of a police SWAT or tactical operation. The
course will familiarize students with the history, duties,
equipment and skills of the police rifle marksman, and will
also address legal and liability issues. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable

POLICE 047
FIREARMS INSTRUCTOR COURSE        3 UNITS
PREREQUISITE: POLICE 001.
LECTURE: 40 hours per semester and
LABORATORY: 40 hours per semester.
This course is designed to prepare students to become
firearms instructors. Includes both theory and practice in
strategies of firearms training. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable

POLICE 050
NARCOTICS                      .50 UNIT
PREREQUISITE: CRMJUS 058.
LECTURE: 8 hours per semester.
A narcotics update for patrol officers with an emphasis on identification of
narcotics, current street trends, terminology, packaging, price, case
preparation and the effects of drugs on users. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable
POLICE 051
RECOGNIZING NARCOTICS TRAFFICKERS .50 UNIT
PREREQUISITE: CRMJUS 059.
LECTURE: 8 hours per semester.
This course will provide students with the knowledge of
and ability to recognize signs and indicators related to
narcotic/contraband trafficking. Examines recent case law
interpretations related to search and seizure, detentions,
evidence collection and case preparation. REGISTRATION
IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY
COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable.

POLICE 053
DEALING WITH INFORMANTS .25 UNIT
PREREQUISITE: POLICE 001.
LECTURE: 5 hours per semester and
LABORATORY: 3 hours per semester.
Scenarios and basic skills will provide students with
approaches for making day-to-day contact with informants.
Identify potential informant, and deal with department
policy and procedure. REGISTRATION IS LIMITED TO
STUDENTS WHO HAVE SUCCESSFULLY COMPLETED
PROGRAM PREREQUISITES.
Associate Degree Applicable

POLICE 054
SUBJECT CONTACTS .25 UNIT
PREREQUISITE: POLICE 001.
LECTURE: 5 hours per semester and
LABORATORY: 3 hours per semester.
Scenarios and basic skills will provide the law enforcement
officer with some new ideas and approaches to the
eyebay subject contacts. A mixture of lecture and
practical application will reinforce the information
discussed in the classroom. REGISTRATION IS LIMITED TO
STUDENTS WHO HAVE SUCCESSFULLY COMPLETED
PROGRAM PREREQUISITES.
 Associate Degree Applicable

POLICE 055
MDT, VDT AND CAD COMPUTER OPERATIONS .2-4 UNITS
PREREQUISITE: CRMJUS 058.
LECTURE: 4-60 hours per semester.
LABORATORY: 4-60 hours per semester.
Mobile Digital Terminal, Video Display Terminal, and
Computer Aided Dispatch Operations course designed to
train police personnel on computer law enforcement
equipment. REGISTRATION IS LIMITED TO STUDENTS WHO
HAVE SUCCESSFULLY COMPLETED PROGRAM
PREREQUISITES. Note: It is not anticipated that this
course will be offered during the current academic year. Please contact the Division Office for more information.
Associate Degree Applicable

POLICE 057
BASIC LAW ENFORCEMENT REPORT WRITING 2 UNITS
PREREQUISITE: None.
LECTURE: 21 hours per semester and
LABORATORY: 35 hours per semester.
This course is designed to address fundamental problems
in writing reports unique to the law enforcement field.
Focus is on grammar, spelling, sentence structure,
paragraph structure, report writing format, courtroom
requirements, interviewing, scenario writing and crime
scene note taking.
Associate Degree Applicable

POLICE 058
REPORT WRITING AND COURTROOM SURVIVAL .50 UNIT
PREREQUISITE: CRMJUS 058.
LECTURE: 8 hours per semester.
A review of the five major report writing problems and the
solution to each. Includes suggestions for reducing the
time spent writing a report while increasing clarity and
usefulness. Additionally, this course prepares officers to
testify in court including retiral preparation, the role of a
witness, how to handle cross-examination, and the
police/prosecutor relationship. REGISTRATION IS LIMITED TO
STUDENTS WHO HAVE SUCCESSFULLY COMPLETED
PROGRAM PREREQUISITES.
Associate Degree Applicable

POLICE 059
SEARCH WARRANTS .50 UNIT
PREREQUISITE: CRMJUS 058.
LECTURE: 8 hours per semester.
How to assemble and execute a search warrant including
definition, categories of property for which a warrant may
be issued, descriptions of persons and places, description
of property, officer expertise, probable cause, nighttime
search authority, protection of informants, and serving the
warrant. REGISTRATION IS LIMITED TO STUDENTS WHO
HAVE SUCCESSFULLY COMPLETED PROGRAM
PREREQUISITES. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.

POLICE 063
ARREST AND CONTROL .50 UNIT
PREREQUISITE: CRMJUS 058.
LECTURE: 8 hours per semester.
Designed as a review of basic fundamentals for
controlling, searching, and cuffing single and multiple
suspects, this course includes mental preparation and
current techniques for arrest and control. REGISTRATION
IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY
COMPLETED PROGRAM PREREQUISITES.

POLICE 064
IDENTIFICATION, COLLECTION AND PRESERVATION
OF EVIDENCE .50 UNIT
PREREQUISITE: CRMJUS 058.
LECTURE: 8 hours per semester.
The advantages of careful collection and examination of
physical evidence with an emphasis on what constitutes
physical evidence, how to properly collect it, and how
crime labs use the evidence. REGISTRATION IS LIMITED TO
STUDENTS WHO HAVE SUCCESSFULLY
COMPLETED PROGRAM PREREQUISITES.

POLICE 065
CIVIL LIABILITIES .50 UNIT
PREREQUISITE: CRMJUS 058.
LECTURE: 8 hours per semester.
A review of civil liabilities and current judicial thinking
including suggestions for protecting officers from
becoming targets for litigation and other adverse actions.
REGISTRATION IS LIMITED TO STUDENTS WHO HAVE
SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.

Associate Degree Applicable
POLICE 066
PRELIMINARY INVESTIGATION .50 UNIT
PREREQUISITE: CRMJUS 058.
LECTURE: 8 hours per semester.
A review of preliminary investigation techniques including recognition and collection of evidence available at the scene, crime scene sketching and diagramming, latent print collection, and report preparation. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
Associate Degree Applicable

POLICE 070
VEHICLE STOPS .50 UNIT
PREREQUISITE: CRMJUS 058.
LECTURE: 8 hours per semester.
An update of current techniques utilized in car, van, and motorcycle stops including high-risk, low-risk, daytime, nighttime, use of lights, approaches, suspect control and removal of drivers from their vehicles. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable

POLICE 072
BASIC TRAFFIC COLLISION INVESTIGATION 2 UNITS
PREREQUISITE: POLICE 001.
LECTURE: 30 hours per semester and LABORATORY: 10 hours per semester.
Accident investigation from on-the-scene procedures to followup. Practical application of how to use report forms and accident investigation terminology together with the study of vehicle code law, court decisions and other traffic-related subject matter. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable

POLICE 073
INTERMEDIATE TRAFFIC COLLISION INVESTIGATION 1.5 UNITS
PREREQUISITE: POLICE 072.
LECTURE: 22 hours per semester and LABORATORY: 18 hours per semester.
This course is devoted to the basics of tiremark identification and analysis, including case preparation and courtroom testimony; determination of coefficient of friction and drag factor; and speed estimates using various equations. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable

POLICE 074
ADVANCED TRAFFIC COLLISION INVESTIGATION 4 UNITS
PREREQUISITE: POLICE 073.
LECTURE: 56 hours per semester and LABORATORY: 24 hours per semester.
This course is designed for experienced traffic collision investigators. Emphasis is on the applications of mathematics and physics to collision analysis, scene documentation and evaluation. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable

POLICE 075
HOSTAGE SITUATIONS .50 UNIT
PREREQUISITE: CRMJUS 058.
LECTURE: 8 hours per semester.
Designed to provide patrol officers an understanding of the concept of hostage negotiations with emphasis on when to call the negotiation team and how to control the scene until assistance arrives. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable

POLICE 077
TACTICAL PLANNING FOR PATROL .50 UNIT
PREREQUISITE: POLICE 001.
LECTURE: 6 hours per semester and LABORATORY: 2 hours per semester.
Supervising and participating in a critical incident can be, to say the least, challenging. This course is designed for patrol officers and supervisors who will have to plan, coordinate, and participate in tactical operations involving patrol personnel. Sound tactical principles and options, as well as psychological aspects of critical incident response are discussed. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable

POLICE 078
OFFICER SAFETY/FIELD TACTICS 2 UNITS
PREREQUISITE: POLICE 001.
LECTURE: 32 hours per semester and LABORATORY: 8 hours per semester.
Safety awareness and the use of proper field tactics in the performance of peace officer duties. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable

POLICE 079
DEFENSIVE TACTICS AND WEAPONLESS DEFENSE INSTRUCTOR COURSE 2.50 UNITS
PREREQUISITE: POLICE 001.
LECTURE: 20 hours per semester and LABORATORY: 60 hours per semester.
Scenarios and basic skills will provide law enforcement with some new ideas and approaches to delivering the everyday defensive tactics to officers. Topics include physical fitness, assessment tests, handcuffing and searching techniques and active counter measures, LVNR (Lateral Vascular Neck Restraint) case law, liability and instructor development. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable

POLICE 080
FIELD TRAINING OFFICER 2 UNITS
PREREQUISITE: POLICE 001.
LECTURE: 32 hours per semester and LABORATORY: 8 hours per semester.
Instruction in skills and information necessary for competent performance in the role of a Field Training Officer. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable
POLICE 081
PLAIN CLOTHES OFFICER SURVIVAL 1.5 UNITS
PREREQUISITE: POLICE 001 or CRMJUS 060.
LECTURE: 16 hours per semester and
LABORATORY: 24 hours per semester.
This course is designed to expose students to the unique challenges associated with off-duty and plainclothes assignments. Topics discussed will involve tactical considerations, current trends and liability issues.
REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable

POLICE 082
PROBLEM-ORIENTED POLICING .25 UNIT
PREREQUISITE: CRMJUS 058.
LECTURE: 4.5 hours per semester and
LABORATORY: 3.5 hours per semester.
Alternatives to present policing attitudes with an emphasis on crime prevention, problem-solving, and communication skills. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable

POLICE 084
POLICE SUPERVISION 4 UNITS
PREREQUISITE: POLICE 076x4.
LECTURE: 80 hours per semester.
Techniques of police supervision including problems of policy and procedures, leadership and responsibilities, performance evaluation, field problems, instructional and disciplinary methods, motivation, supervisory investigations and reports, and psychological aspects of supervision. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable

POLICE 085
ADVANCED POLICE SUPERVISION 2 UNITS
PREREQUISITE: POLICE 084.
LECTURE: 30 hours per semester and
LABORATORY: 10 hours per semester.
This course will expand on skills learned in the 80-hour Police Supervision course. It will expose new supervisors to incident command management, new training methods, supervisory styles, time management, and problem solving techniques and decision making skills.
REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
Associate Degree Applicable

POLICE 086
DOMESTIC VIOLENCE .50 UNIT
PREREQUISITE: CRMJUS 058.
LECTURE: 8 hours per semester.
An introduction to the psychological state of victims of violence including battering, child abuse, and sexual assault. Emphasis on the development of positive intervention strategies and the identification of agencies designed to assist victims.
REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable

POLICE 087
CHILD ABUSE 2.25 UNITS
PREREQUISITE: CRMJUS 058.
LECTURE: 32 hours per semester and
LABORATORY: 8 hours per semester.
The Child Abuse Investigation course will provide students with the skills to recognize, evaluate and synthesize all aspects of investigating alleged crimes against children. The crimes of child neglect, sexual and physical abuse and exploitation will be analyzed by the students. The course will familiarize officers with the legal rights and responsibilities of all involved parties in these types of crimes. This course also is designed to satisfy Peace Officers Standards and Training's mandates on child abuse per the Penal Code sections 13516 and 13517.
REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable

POLICE 088
HATE AND BIAS CRIMES 1.25 UNITS
PREREQUISITE: POLICE 001.
LECTURE: 16 hours per semester and
LABORATORY: 9 hours per semester.
The goal of the program is to give law enforcement agencies the tools needed to recognize hate/bias crimes. It enhances the effectiveness of law enforcement agencies with investigation and prosecution of hate/bias crimes. Emphasis will be placed on victim and community needs, and initial response on patrol units.
REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable

POLICE 090
TERRORISM: CURRENT THREAT AND RESPONSE .50 UNIT
PREREQUISITE: POLICE 001.
LECTURE: 8 hours per semester.
An advanced officer training course on the nature and severity of the threat by terrorist activities and strategies to mitigate the threat.
REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable

POLICE 091
TERRORISM: BOMBS AND BOMBINGS .25 UNIT
PREREQUISITE: POLICE 001.
DEPARTMENTAL ADVISORY: POLICE 097.
LECTURE: 4 hours per semester.
LABORATORY: 4 hours per semester.
An advanced officer training course on improvised explosive devices and strategies for effectively and safely responding to bomb-related incidents.
REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
Associate Degree Applicable

POLICE 097
CHILD ABUSE STUDENT 1.5 UNITS
PREREQUISITE: CRMJUS 058.
LECTURE: 24 hours per semester.
This course is designed to expose students to the unique challenges associated with off-duty and plainclothes assignments. Topics discussed will involve tactical considerations, current trends and liability issues.
REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.
This course is designed to assist investigators in becoming aware of high tech criminal activity and to increase arrest and conviction rates involving high tech crimes. Officers will learn how to identify, write search warrants for high tech crimes, and explain the procedures in collecting evidence for credit card, computer and cellular phone crimes. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.  Associate Degree Applicable

This course clarifies what constitutes racial profiling, conceptually and legally. Students examine how the civil rights movement redefined the role of law enforcement. It covers the key indices that define culture and show how racial profiling impacts everyone. This course meets the training mandates for 13519.4PC.  Associate Degree Applicable

The purpose of the course is to prepare the new or experienced peace officer for the duties or tasks which are performed by officers in correctional facilities, regardless of location, status or budget of the employing agency. This course will provide the student with the knowledge and skills to combine academic concepts of classroom training with the realities of correctional facility work. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED PROGRAM PREREQUISITES.  Associate Degree Applicable

The historical development and theories associated with criminal law and its contemporary application. This course will focus on the relationship between criminal law and the criminal justice system. Classification of crimes and their application to the criminal justice system will also be covered in the course. ENROLLMENT IS LIMITED TO THOSE STUDENTS WHO MEET THE SCREENING REQUIREMENTS AS OUTLINED IN THE GOVERNMENT CODE, CALIFORNIA PENAL CODE AND THE COMMISSION ON PEACE OFFICER STANDARDS AND TRAINING ADMINISTRATIVE MANUAL.  Associate Degree Applicable

Seminars on selected studies in Police Science designed to address current issues and help peace officers with everyday problems, on topics such as law enforcement for school police, law enforcement bicycle patrol, verbal judo for law enforcement officers, and use of force issues. Note: It is not anticipated that theses courses will be offered during the current academic year. Please contact the Division Office for more information.  Not Applicable to the Associate's Degree
POLITICAL SCIENCE

DIVISION: Social Science & Human Development
DIVISION DEAN: Janice Noble, M.Ed.
DEPARTMENT HEAD: Edward Millican, Ph.D.
DIVISION SECRETARY: To Be Announced
DIVISION OFFICE: Liberal Arts 122
(909) 384-8603
LIAISON COUNSELOR: Laura Gomez, M.A.
(909) 384-4404

The Department of Political Science offers courses which satisfy general education requirements for students who wish to graduate with an Associate of Arts degree and/or transfer to four year institutions in pursuit of a baccalaureate degree. Political science courses satisfy the California State government and institutions requirement for the baccalaureate degree.

Students planning to transfer to a four-year institution and major in political science should consult with a counselor regarding the transfer process and lower division requirements. Political science provides useful preparation for students interested in careers in politics or government service, teaching, law enforcement, and the legal professions.

Core competencies emphasized by courses in this department:
- Read and retain information.
- Write clearly.
- Employ vocabulary of the subject studied.
- Find and interpret information.
- Assume civic, political or social responsibilities.

COURSES OFFERED BY THE DEPARTMENT OF POLITICAL SCIENCE:

POLIT 100
AMERICAN POLITICS 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Basic introduction to American government and politics designed to meet the state requirement in United States and California constitution and government, primarily concerned with American national government. Includes an introduction to democratic political theory, the scope of modern government, and state and local government in California.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): GOVT 2

POLIT 110
INTRODUCTION TO POLITICAL THEORY 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
This course surveys Western political thought from classical times to the contemporary period, and explores such controversial political questions as the nature of justice, the morality of political deception and violence, the proper limits of governmental power, the virtues (and challenges) of political diversity, and the future of the bourgeois state.
Associate Degree Applicable
Course credit transfers to CSU and UC.

POLIT 110H
INTRODUCTION TO POLITICAL THEORY - HONORS 3 UNITS
PREREQUISITE: None.
LECTURE: 3 Hours per week.
This course utilizes selected primary texts to survey Western political thought from classical times to the contemporary period, and explores such controversial political questions as the nature of justice, the morality of political deception and violence, the proper limits of governmental power, the virtues (and challenges) of political diversity, and the future of the bourgeois state. Enrollment is limited to students eligible for the Honors Program.
Associate Degree Applicable
Course transfers to CSU.

POLIT 138
GROUP LEADERSHIP 3 UNITS
PREREQUISITE: None.
LECTURE: 1 hour per week and LABORATORY: 6 hours per week.
Principles and practices for effective work in- group, group processes, and group leadership.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

POLIT 139
COMMUNITY LEADERSHIP 3 UNITS
PREREQUISITE: None.
LECTURE: 1 hour per week and LABORATORY: 6 hours per week.
Principles and practices for effective participation in the larger community, to include communication with public officials, bureaucracies, and other social institutions.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

POLIT 222
SPECIAL PROBLEMS IN POLITICAL SCIENCE I 1 UNIT
PREREQUISITE: None.
INDEPENDENT STUDY: 3 hours per week.
Assignments, research, projects, intern assignments and conferences for selected students who are interested in furthering their knowledge of political science 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 and UC.
Limited transfer to UC; credit determined after transfer to UC.

POLIT 223
SPECIAL PROBLEMS IN POLITICAL SCIENCE II 2 UNITS
PREREQUISITE: None.
INDEPENDENT STUDY: 6 hours per week.
Assignments, research, projects, intern assignments and conferences for selected students who are interested in furthering their knowledge of political science 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 and UC.
Limited transfer to UC; credit determined after transfer to UC.
PSYCHIATRIC TECHNOLOGY

DIVISION: Health Science
DIVISION DEAN: Marilyn Johnson, M.N.
DEPARTMENT HEAD: Mimi Tumang, M.N.
(909) 384-8927
OTHER FACULTY: Marci Alfano-Wyatt, M.A.
Kristine Kattus, M.S.
Marianne Klingstrand, M.A.
DIVISION SECRETARY: Dorothy N. Fierro
DIVISION OFFICE: Health and Life Science 101
(909) 384-8550
LIAISON COUNSELOR: Ailsa Aguilar-Kitibutr, Psy.D.
(909) 384-4404

The Psychiatric Technology program is a one-year vocational program accredited by the California Board of Vocational Nurse and Psychiatric Technician Examiners. This curriculum prepares students for licensure as Psychiatric Technicians through academic course work as well as field experience with developmentally and mentally disabled clients in various local facilities.

To apply for admission to the Psychiatric Technology Program, complete an application available in the Division Office or the Counseling Center. Completed applications must be filed by February 1st for the Fall semester entry and by September 1st for the Spring semester entry. A booklet explaining details of admission is available in the Health Science Division Office.

A background check is required for admission. California law allows for the denial of Psychiatric Technician Licensure on the basis of any conviction or action substantially related to psychiatric technician practice. The California Board of Vocational Nurse and Psychiatric Technician Examiners requires applicants for licensure with prior convictions to provide proof of rehabilitation that establishes fitness for performing psychiatric technician functions. For further clarification, contact the Board of Vocational Nurse and Psychiatric Technician Examiners.

PREREQUISITES FOR ADMISSION TO THE PSYCHIATRIC TECHNOLOGY PROGRAM:

Complete the following courses with a grade of C or better:

BIOL 050 Anatomy and Physiology 4 units
ENGL 015 Preparation for College Writing 4 units
MATH 952 Prealgebra 4 units
PSYCH 100 Psychology 3 units

PSYCHIATRIC TECHNOLOGY ASSOCIATE OF SCIENCE DEGREE

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

REQUIRED COURSES: UNITS
PSYCH 084 Introduction to Psychiatric Technology 17
PSYCH 085 Psychiatric Technology: Nursing Science 12
PSYCH 086 Psychiatric Technology: Behavioral Science 17
BIOL 050 Anatomy and Physiology 4

PSYCH 100 General Psychology 3
PSYCH 112 Child and Adolescent Psychology 3
PSYCH 132 Counseling Techniques 3
or
PSYCH 118 Human Sexual Behavior (3)
PSYCH 103 Psychology of the Personality (3)
SOC 100 Introduction to Sociology 3
or
ANTHRO 102 Cultural Anthropology (3)
ENGL 101 Freshman Composition 4

TOTAL UNITS: 66

PSYCHIATRIC TECHNOLOGY CERTIFICATE

This certificate is designed to prepare the student for entry-level employment caring for mentally impaired or emotionally disturbed individuals, following physician instructions and hospital procedures to monitor patients’ physical and emotional well-being and then report to staff; participate in rehabilitation and treatment programs; help with personal hygiene; and administration of oral medications and hypodermic injections. 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
BIOL 050 Anatomy and Physiology 4
ENGL 015 Preparation for College Writing 4
PSYCH 100 Psychology 3
PSYCH 084 Introduction to Psychiatric Technology 17
PSYCH 085 Psychiatric Technology: Nursing Science 12
PSYCH 086 Psychiatric Technology: Behavioral Science 17

TOTAL UNITS: 57

COURSES OFFERED BY THE DEPARTMENT OF PSYCHIATRIC TECHNOLOGY:

PSYCH 084 INTRODUCTION TO PSYCHIATRIC TECHNOLOGY 17 UNITS

PREREQUISITE: None.
LECTURE: 10 hours per week and
LABORATORY: 21 hours per week.

An introduction to psychiatric technology with a focus on normal growth and development and the causes and types of developmental disabilities. Lectures include current trends, pharmacology, basic nutrition, and preventative measures and intervention. Laboratories include the role of the psychiatric technician, basic nursing principles and administration of prescribed medication of developmentally disabled clients. Students work in clinical settings, caring for developmentally disabled clients of all ages and ethnicities, and with either physical handicaps and/or severe behavior deficits. Students must pass both theory and clinical portions of this class with a 75% or better in each. Failure to do so will necessitate repeating the entire course. REGISTRATION IS LIMITED TO STUDENTS WHO HAVE COMPLETED PROGRAM PREREQUISITES AND HAVE BEEN ACCEPTED INTO THE PSYCHIATRIC TECHNOLOGY PROGRAM.

 Associate Degree Applicable
PSYCH 085
PSYCHIATRIC TECHNOLOGY: NURSING SCIENCE 12 UNITS

PREREQUISITE: PSYCH 084.
LECTURE: 7.22 hours per week and LABORATORY: 12.22 hours per week.
Continuation of basic nursing science concepts and skills with a focus on current interventions for medical and surgical disorders of pediatric, adolescent, adult and geriatric clients. Includes practical applications of theory in caring for physically ill patients of all ages and ethnicities in hospital settings. Students must pass both lecture and clinical portions of this class with a 75% or better in each portion. Failure to do so will necessitate repeating the entire course.
Associate Degree Applicable

PSYCH 086
PSYCHIATRIC TECHNOLOGY: BEHAVIORAL SCIENCE 17 UNITS

PREREQUISITE: PSYCH 084.
LECTURE: 10 hours per week and LABORATORY: 21 hours per week.
A review of psychiatric disorders according to DSM III-R criteria with emphasis on interventions and psychopharmacological agents. Includes age and cultural implications of mental disorders. Practical application of theory includes caring for and administering medications to clients of all ages and ethnicities in acute, community, and state institution settings. Students must pass both theory and clinical with a 75% in each portion of this class. Failure to do so will necessitate repeating entire course.
Associate Degree Applicable

PSYCHOLOGY

DIVISION: Social Science & Human Development
DIVISION DEAN: Janice Noble, M.Ed.
DEPARTMENT HEAD: Terry Maul, Ph.D.
OTHER FACULTY: Frank Bruno, Ph.D.
DIVISION SECRETARY: To Be Announced
DIVISION OFFICE: Liberal Arts 122
(909) 384-8603
LIAISON COUNSELOR: Ailsa Aguilar-Kitibutr, Psy.D.
(909) 384-4404

Psychology is both a natural and a social science concerned with the study of human behavior, thoughts, and emotions. As such, it is a broad discipline which involves both pure science and practical application of science to matters of daily living. Students planning to transfer to a four-year institution and major in psychology should consult with a counselor regarding the transfer process and lower division requirements.

Core competencies emphasized by courses in this department:
- Read and retain information.
- Employ vocabulary of the subject studied.
- Find and interpret information.

COURSES OFFERED BY THE DEPARTMENT OF PSYCHOLOGY:

PSYCH 052
PRACTICAL PSYCHOLOGY 3 UNITS

PREREQUISITE: None.
LECTURE: 3 hours per week.
Study of the principles of psychology as applied to everyday living, communication with others and effective behavior.
Associate Degree Applicable

PSYCH 100
GENERAL PSYCHOLOGY 3 UNITS

PREREQUISITE: None.
LECTURE: 3 hours per week.
Survey of the nature of human behavior and a consideration of theories and principles pertaining to the topics of experimental design, perception, thinking, learning, personality, psychological testing, emotion and motivation. Includes essential features of the biological and neurological bases of behavior.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): PSY 2

PSYCH 100H
GENERAL PSYCHOLOGY – HONORS 3 UNITS

PREREQUISITE: None.
LECTURE: 3 hours per week.
Survey of the nature of human behavior and a consideration of theories and principles pertaining to the topics of experimental design, perception, thinking, learning, personality, psychological testing, emotion and motivation. Includes essential features of the biological and neurological bases of behavior. Enrollment limited to students eligible for the Honors Program.
Associate Degree Applicable
Course credit transfers to CSU and UC.

PSYCH 102
PERSONAL AND SOCIAL ADJUSTMENT 3 UNITS

PREREQUISITE: PSYCH 100.
LECTURE: 3 hours per week.
A look at personal growth and adjustment issues from a variety of theoretical perspectives. This course reviews the characteristics of healthy and unhealthy behavior patterns and discusses management techniques and coping devices by which one can more effectively deal with problems of day-to-day living.
Associate Degree Applicable
Course credit transfers to CSU and UC.

PSYCH 103
PSYCHOLOGY OF PERSONALITY 3 UNITS

PREREQUISITE: PSYCH 100.
LECTURE: 3 hours per week.
Factors contributing to the development of personality and to some of the major ideas found in personality theories; designed to help students become aware of and to better understand their own behavior and the behavior of others.
Associate Degree Applicable
Course credit transfers to CSU and UC.
PSYCH 105
STATISTICS FOR THE BEHAVIORAL SCIENCES 3 UNITS

PREREQUISITE: PSYCH 100.
LECTURE: 3 hours per week.
Statistics as applied to the social sciences including such topics as measurement, frequency distributions, measures of central tendency, measures of variability, the normal distribution curve, correlation, sampling, statistical inference, hypothesis testing and an introduction to analysis of variance.
Associate Degree Applicable
Course credit transfers to CSU.
CAN (California Articulation Number): PSY 6

PSYCH 110
ABNORMAL PSYCHOLOGY 3 UNITS

PREREQUISITE: PSYCH 100.
LECTURE: 3 hours per week.
Survey of the field of mental and emotional disturbances, emphasizing causes and types of disorders. Special attention is paid to the variety of suffering in our culture and the issues raised over classifications of normal and abnormal behavior.
Associate Degree Applicable
Course credit transfers to CSU and UC.

PSYCH 111
DEVELOPMENTAL PSYCHOLOGY: LIFESPAN 3 UNITS

PREREQUISITE: PSYCH 100.
LECTURE: 3 hours per week.
Introduction to the study of lifespan developmental psychology from conception through aging. The focus is on six issues: (1) the nature of change, (2) continuity and discontinuity in development, (3) the influence of genes and social context on growth, (4) the influence of culture, race, and ethnicity on development, (5) the effect of present experience on future outcomes, and (6) current theory and research which contribute to an understanding of human development over the lifespan.
Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; contact a counselor for details.

PSYCH 112
DEVELOPMENTAL PSYCHOLOGY: CHILD AND ADOLESCENT PSYCHOLOGY 3 UNITS

PREREQUISITE: PSYCH 100.
LECTURE: 3 hours per week.
Survey of psychological growth of the normal individual from conception through adolescence with emphasis on stages of development.
Associate Degree Applicable
Course credit transfers to CSU.
Limited transfer to UC; contact a counselor for details.

PSYCH 118
HUMAN SEXUAL BEHAVIOR 3 UNITS

PREREQUISITE: PSYCH 100.
LECTURE: 3 hours per week.
Study of selected factors in human sexual behavior. Emphasis on psychology of sex and an analysis of assumptions and attitudes toward human sexuality.
Associate Degree Applicable
Course credit transfers to CSU and UC.

PSYCH 132
COUNSELING TECHNIQUES 3 UNITS

PREREQUISITE: PSYCH 100.
LECTURE: 3 hours per week.
A general study of interviewing and counseling techniques and theory.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

PSYCH 222
SPECIAL PROBLEMS IN PSYCHOLOGY I 1 UNIT

PREREQUISITE: PSYCH 100.
INDEPENDENT STUDY: 3 hours per week.
Assigned problems involving library and laboratory work for selected students who are interested in furthering their knowledge of psychology 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 and UC.
Limited transfer to UC; credit determined after transfer to UC.

PSYCH 223
SPECIAL PROBLEMS IN PSYCHOLOGY II 2 UNITS

PREREQUISITE: PSYCH 100.
INDEPENDENT STUDY: 6 hours per week.
Assigned problems involving library and laboratory work for selected students who are interested in furthering their knowledge of psychology 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 and UC.
Limited transfer to UC; credit determined after transfer to UC.

RADIO / TELEVISION / FILM

DIVISION: Humanities
DIVISION DEAN: Marjorie Price, M.A., M.Ed.
DEPARTMENT HEAD: Diane M. Dusick, Ph.D.
North Hall 107
(909) 384-8546
DIVISION SECRETARIES: Kelly Adcock
(909) 384-8906
Cheryl Benner
(909) 384-8633
DIVISION OFFICE: North Hall 236
(909) 384-4445
LIAISON COUNSELOR: Mary Beth Barrios, M.S.
(909) 384-4404

The Radio/Television/Film department offers a comprehensive instructional program in radio and television broadcasting, digital film production, and digital audio and video production for use in multimedia and Internet applications. The department provides a two-year curriculum for students majoring in the field resulting in the Associate of Arts Degree and/or transfer to a four-year institution and provides elective courses for students interested in related fields such as marketing, journalism, theater arts, multimedia, web page design, and data communications. The instructional program includes internships at local stations and businesses, on-air experience using the facilities of the student radio station KJRP and public television station KVCR-TV, which is licensed to the San Bernardino Community College District.
Core competencies emphasized by courses in this department:

- Read and retain information.
- Write clearly.
- Employ vocabulary of the subject studied.
- Find and interpret information.
- Utilize technology to organize and present information.
- Demonstrate working knowledge of basic computer function.
- Apply learned knowledge to new situations.
- Demonstrate creative thought through original expression.

RADIO/TELEVISION/FILM
ASSOCIATE OF ARTS DEGREE OR CERTIFICATES

To graduate with an Associate of Arts degree with a specialization in Radio, Television, Film production, or the general RTVF concentration, students must: 1) complete the following core courses, 2) complete either the Radio, Television, Film, or general RTVF concentration, and 3) complete the general breadth requirements for the Associate Degree for a total of 60 units.

To complete a certificate, students must: 1) complete the following core courses, and 2) complete either the Radio, Television, Film, or the general RTVF concentration for a total of 21 units.

REQUIRED for all concentrations: UNITS
RTVF 100 Introduction to Radio, Television, and Film 3
or
SPEECH 135 Mass Media and Society (3)

Complete courses listed for one of the below concentrations:

RTVF Concentration:
RTVF 121 Introduction to Digital Audio 3
RTVF 131 Introduction to Digital Video 3
RTVF 130 Introduction to Studio Production 3
RTVF 240 Fundamentals of Film Production I 3

Television Concentration:
RTVF 131 Introduction to Digital Video 3
RTVF 130 Introduction to Studio Production 3
RTVF 230 Intermediate Studio Production 3
RTVF 231 Advanced Video Production 3

Radio Concentration:
RTVF 120 Introduction to Radio Production 3
RTVF 121 Introduction to Digital Audio 3
RTVF 220 Intermediate Radio Production and Operations 3
RTVF 221 Radio Station Management 3

Film Concentration:
RTVF 131 Introduction to Digital Video Production 3
RTVF 240 Fundamentals of Film Production I 3
RTVF 241 Fundamentals of Film Production II 3
RTVF 242 Fundamentals of Film Production III 3

Plus six units selected from other RTVF offerings: 6

DIGITAL FILM PRODUCTION CERTIFICATE

This certificate is designed to prepare students with the necessary knowledge and skills to obtain entry-level employment in the fields of film and television, working with digital video cameras, sound recording equipment, digital video and audio editing, location lighting techniques, sound effects, and more. 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
RTVF 100 Introduction to Radio, Television, and Film 3
or
SPEECH 135 Mass Media and Society (3)
RTVF 131 Introduction to Digital Video Production 3
RTVF 240 Fundamentals of Film Production I 3
RTVF 241 Fundamentals of Film Production II 3
RTVF 242 Fundamentals of Film Production III 3

Plus six units selected from the following: 6
ART 110 History of American Cinema (3)
ART 111 Studies in Film Appreciation (3)
ENGL 153 Literature and Film (3)
Any additional RTVF offerings (3)

TOTAL UNITS: 21

COURSES OFFERED WITHIN THE DEPARTMENT OF RADIO, TELEVISION AND FILM:

RTVF 100 INTRODUCTION TO RADIO, TELEVISION, AND FILM 3 UNITS

PREREQUISITE: None.
LECTURE: 3 hours per week.
This course presents an overview of the history, structure, and function of the radio, TV, and film industry. It covers the development and nature of radio, television, cable, film, and Internet communications including current social, legal, political, economic and cultural implications of the media; advertising and audience measurement strategies; programming; and employment opportunities.
Associate Degree Applicable
Course credit transfers to CSU

RTVF 104 BASIC WRITING FOR BROADCASTING 3 UNITS
PREREQUISITE: ENGL 914.
DEPARTMENTAL ADVISORY: The ability to type.
LECTURE: 3 hours per week.
Fundamentals of gathering and preparing copy for radio, and preparation of broadcast scripts. Explores responsibilities of broadcast news, history, and broadcast regulations including the Fairness Doctrine. Addresses problems of timing and pacing, conversational expression and word color. Students ill write copy for campus radio station KJRP.
Associate Degree Applicable
Course credit transfers to CSU.
**RTVF 105**  
RADIO AND TELEVISION ADVERTISING  
3 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week.  
Examines the character and composition of radio and television advertising; writing and producing commercials for radio and television; advertising campaigns; the relationship between advertising agencies, stations and networks; audience and consumer ratings; and research techniques.  
Associate Degree Applicable  
Course credit transfers to CSU.

**RTVF 106**  
WRITING FOR TELEVISION AND FILM  
3 UNITS  
**PREREQUISITE:** ENGL 914  
**LECTURE:** 3 hours per week.  
A course designed to introduce students to the various formats of scripting for television and film including television news, episodic comedy, long-form drama and theatrical films.  
Associate Degree Applicable  
Course credit transfers to CSU.

**RTVF 107**  
INTRODUCTION TO COMMUNICATIONS TECHNOLOGY  
3 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 3 hours per week.  
An introduction to the types of current communications technologies, how they are used, and how they interact with and affect one another. Includes telecommunications (phones and phone lines, ISDN, T-1) computers, satellites, television, cable and radio.  
Associate Degree Applicable  
Course credit transfers to CSU.

**RTVF 108**  
INTRODUCTION TO RADIO PRODUCTION  
3 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 1 hour per week and  
**LABORATORY:** 6 hours per week.  
This course is an introduction to the principles of radio and audio aesthetics and production. It provides laboratory practice in conceiving, scripting, developing, and producing a variety of radio programs using a range of field and studio equipment including emerging digital technology.  
Associate Degree Applicable  
Course credit transfers to CSU.

**RTVF 120**  
INTRODUCTION TO DIGITAL AUDIO  
3 UNITS  
**PREREQUISITE:** None.  
**LECTURE:** 1 hour per week and  
**LABORATORY:** 6 hours per week.  
This course introduces students to the theory and practice of audio production as it pertains to radio, television, and film. This course covers live broadcasting, recording, and postproduction editing, emphasizes aesthetics and techniques to ensure high quality sound using primarily digital equipment. Students learn effective digital file management, basic computer technology, and digital sound editing.  
Associate Degree Applicable  
Course credit transfers to CSU.

**RTVF 109**  
INTRODUCTION TO STUDIO PRODUCTION  
3 UNITS  
**PREREQUISITE:** RTVF 120 and RTVF 121.  
**LABORATORY:** 9 hours per week.  
Individual and group production of short- and long-form radio projects such as: Promotional spots, features, magazines, music programming, and news. Project conception, development, management, and implementation, including remote broadcasting. Contact with radio professionals. Student projects air on student radio-station KJRP.  
Associate Degree Applicable  
Course credit transfers to CSU.

**RTVF 110**  
COMMUNICATIONS/BROADCASTING 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 to earn units using the following formula: For paid work, 75 hours = 1 unit; for volunteer work, 60 hours = 1 unit. Students may earn a total of 16 units toward graduation in Work Experience 198 courses. Students MUST be working for pay or volunteer before registering for a Work Experience class. NOTE: Only one section of Work Experience may be taken during a semester.  
Associate Degree Applicable  
Course credit transfers to CSU for elective credit only.

**RTVF 111**  
INTERMEDIATE RADIO PRODUCTION AND OPERATIONS  
3 UNITS  
**PREREQUISITE:** RTVF 120 and RTVF 121.  
**LABORATORY:** 9 hours per week.  
This introductory course covers the organization of the television studio, control room, production language, and studio personnel. Includes sound recording and mixing concepts, shooting composition and aesthetics principles. Students produce and direct television productions. Topics include: camera operation, studio lighting techniques, the use of microphones and audio techniques, basic television graphics, and an introduction to the video switcher.  
Associate Degree Applicable  
Course credit transfers to CSU.

**RTVF 112**  
COMMUNICATIONS/BROADCASTING 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 to earn units using the following formula: For paid work, 75 hours = 1 unit; for volunteer work, 60 hours = 1 unit. Students may earn a total of 16 units toward graduation in Work Experience 198 courses. Students MUST be working for pay or volunteer before registering for a Work Experience class. NOTE: Only one section of Work Experience may be taken during a semester.  
Associate Degree Applicable  
Course credit transfers to CSU for elective credit only.
RTVF 221
RADIOD STATION MANAGEMENT 3 UNITS
PREREQUISITES: RTVF 120 and RTVF 121.
LECTURE: 1 hour per week and LABORATORY: 6 hours per week.
This course deals with radio station management functions, models, and operations. Students will program and manage student radio station KJRP, and produce remote broadcasts. Students gain experience in station management by serving as the program director, music director, production supervisor, and on-air announcers. Students will develop an understanding of the operation of radio stations, of audience rating methods, and their impact on programming design. Associate Degree Applicable Course credit transfers to CSU.

RTVF 222
INDEPENDENT STUDY IN RADIO/TELEVISION/FILM 1-3 UNITS
PREREQUISITE: None.
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 radio, television, or film production 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.

RTVF 230
INTERMEDIATE STUDIO PRODUCTION 3 UNITS
PREREQUISITE: RTVF 130.
LECTURE: 1 hour per week and LABORATORY: 6 hours per week.
The second level course in the techniques of planning, producing, writing, and directing television programs with an emphasis on polishing technical skills, creativity, and teamwork. Explores advanced video switching techniques, the use and interpretation of the waveform monitor and vectorscope, video recording and editing formats, program rundowns, timing, and advanced director’s cues. Students produce interview shows, music videos, and a half hour segmented program, including writing a rundown, front- and back-timing a show, and directing a live program. Associate Degree Applicable Course credit transfers to CSU.

RTVF 231
ADVANCED VIDEO PRODUCTION 3 UNITS
PREREQUISITE: RTVF 131.
LECTURE: 1 hour per week and LABORATORY: 6 hours per week.
In this second-level course students plan, produce, write, shoot, and edit television programs using both studio production and single video camera and editing equipment. The course includes hands on experience using remote video cameras, and linear and nonlinear editing equipment. Students will create their own video production, and assist other students in creating their projects. Students are not required to have their own camera. Associate Degree Applicable Course credit transfers to CSU.

RTVF 240
FUNDAMENTALS OF FILM PRODUCTION I 3 UNITS
PREREQUISITE: RTVF 131.
LECTURE: 1 hour per week and LABORATORY: 6 hours per week.
This course is an introductory study of the aesthetic and technical aspects of digital film production. This course emphasizes a critical awareness of the aesthetics of narrative film techniques as applied in the construction of the students’ productions. In this course, students produce their own narrative films and assist other students in other aspects of narrative film production including camera operation, set design, lighting, casting, and acting as a grip. Students should have a basic knowledge of digital video cameras and non-linear editing prior to taking this course. Associate Degree Applicable Course credit transfers to CSU.

RTVF 241
FUNDAMENTALS OF FILM PRODUCTION II 3 UNITS
PREREQUISITE: RTVF 240.
LECTURE: 1 hour per week and LABORATORY: 6 hours per week.
This course is an intermediate study of the technical aspects of film production. This course explores scripts, shot lists, treatments, sound and directing as applied in the construction of the students’ productions. In this course, students produce their own narrative films and assist other students in other aspects of narrative film production including camera operation, set design, lighting, casting and working as a grip. Associate Degree Applicable Course credit transfers to CSU.

RTVF 242
FUNDAMENTALS OF FILM PRODUCTION III 3 UNITS
PREREQUISITE: RTVF 241.
LECTURE: 1 hour per week and LABORATORY: 6 hours per week.
This course is an advanced study of the technical aspects of film production. This course explores film scheduling, production, advanced editing techniques, budgeting, and distribution as applied in the construction of the students’ productions. In this course, students produce their own narrative films and assist other students in other aspects of narrative film production including camera operation, set design, lighting, casting, and working as a grip. Associate Degree Applicable Course credit transfers to CSU.

RTVF 222
FUNDAMENTALS OF FILM PRODUCTION I 3 UNITS
PREREQUISITE: RTVF 131.
LECTURE: 1 hour per week and LABORATORY: 6 hours per week.
This course is an introductory study of the aesthetic and technical aspects of digital film production. This course emphasizes a critical awareness of the aesthetics of narrative film techniques as applied in the construction of the students’ productions. In this course, students produce their own narrative films and assist other students in other aspects of narrative film production including camera operation, set design, lighting, casting, and acting as a grip. Students should have a basic knowledge of digital video cameras and non-linear editing prior to taking this course. Associate Degree Applicable Course credit transfers to CSU.

RTVF 241
FUNDAMENTALS OF FILM PRODUCTION II 3 UNITS
PREREQUISITE: RTVF 240.
LECTURE: 1 hour per week and LABORATORY: 6 hours per week.
This course is an intermediate study of the technical aspects of film production. This course explores scripts, shot lists, treatments, sound and directing as applied in the construction of the students’ productions. In this course, students produce their own narrative films and assist other students in other aspects of narrative film production including camera operation, set design, lighting, casting and working as a grip. Associate Degree Applicable Course credit transfers to CSU.

RTVF 242
FUNDAMENTALS OF FILM PRODUCTION III 3 UNITS
PREREQUISITE: RTVF 241.
LECTURE: 1 hour per week and LABORATORY: 6 hours per week.
This course is an advanced study of the technical aspects of film production. This course explores film scheduling, production, advanced editing techniques, budgeting, and distribution as applied in the construction of the students’ productions. In this course, students produce their own narrative films and assist other students in other aspects of narrative film production including camera operation, set design, lighting, casting, and working as a grip. Associate Degree Applicable Course credit transfers to CSU.

RTVF 240
FUNDAMENTALS OF FILM PRODUCTION I 3 UNITS
PREREQUISITE: RTVF 131.
LECTURE: 1 hour per week and LABORATORY: 6 hours per week.
This course is an introductory study of the aesthetic and technical aspects of digital film production. This course emphasizes a critical awareness of the aesthetics of narrative film techniques as applied in the construction of the students’ productions. In this course, students produce their own narrative films and assist other students in other aspects of narrative film production including camera operation, set design, lighting, casting, and acting as a grip. Students should have a basic knowledge of digital video cameras and non-linear editing prior to taking this course. Associate Degree Applicable Course credit transfers to CSU.

RTVF 241
FUNDAMENTALS OF FILM PRODUCTION II 3 UNITS
PREREQUISITE: RTVF 240.
LECTURE: 1 hour per week and LABORATORY: 6 hours per week.
This course is an intermediate study of the technical aspects of film production. This course explores scripts, shot lists, treatments, sound and directing as applied in the construction of the students’ productions. In this course, students produce their own narrative films and assist other students in other aspects of narrative film production including camera operation, set design, lighting, casting and working as a grip. Associate Degree Applicable Course credit transfers to CSU.

RTVF 242
FUNDAMENTALS OF FILM PRODUCTION III 3 UNITS
PREREQUISITE: RTVF 241.
LECTURE: 1 hour per week and LABORATORY: 6 hours per week.
This course is an advanced study of the technical aspects of film production. This course explores film scheduling, production, advanced editing techniques, budgeting, and distribution as applied in the construction of the students’ productions. In this course, students produce their own narrative films and assist other students in other aspects of narrative film production including camera operation, set design, lighting, casting, and working as a grip. Associate Degree Applicable Course credit transfers to CSU.

RAILROAD OPERATIONS

DIVISION: Applied Technology & Transportation
DIVISION DEAN: Thomas Bauman, M.S., P.E.
DIRECTOR: Kevin Anderson, M.B.A.
DEPARTMENT SECRETARY: Amanda Moody
(909) 382-4079
DEPARTMENT OFFICE: 264 S. Leland Norton Way Suite A120, San Bernardino
LIAISON COUNSELOR: Jennifer Mendoza, M.S.
(909) 384-4404

Core competencies emphasized by courses in this department:
Read and retain information.
Employ vocabulary of the subject studied.
Exhibit personal, professional and academic honesty.

GENERAL RAILWAY OPERATIONS
CERTIFICATE
This certificate is designed to provide students with the fundamentals for entry-level employment in the rail transportation industry. Students receive a background in railroad history, development, and industry safety. They are prepared for such tasks as yard labor, train operations, maintenance of equipment, track and structures, and installation of signaling and control systems. 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
RAIL 050 Railroad History 3
RAIL 051 Railroad Technical Careers 3
RAIL 052 Railroad Operations 3
RAIL 053 Railroad Safety, Quality & Environment 3
TOTAL UNITS: 12

Recommended High School Preparation: Courses in English, mathematics, physics, electronics, mechanics and computers are recommended.

COURSES OFFERED WITHIN THE DEPARTMENT OF RAILROAD OPERATIONS:

RAIL 050
RAILROAD HISTORY 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
The primary objective of Railroad History is to provide an opportunity for the student to obtain information about the development and evolution of the railroad industry in North America. The course study will focus on the geographical expansion, technical advancements, sociological influences, government involvement, and economic impacts of the railroads and related businesses in the United States, Canada, and Mexico.
Associate Degree Applicable

RAIL 051
RAILROAD TECHNICAL CAREER 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
The primary objective of Railroad Careers is to examine the various technical positions and work groups responsible for the day-to-day operations of a railroad. Students will have an opportunity to learn about the typical organizational structure of a railroad, the inter and intra-departmental relationships, and the purposes, responsibilities, accountabilities, tasks, challenges, conditions, requisite skills, physical requirements, tools and challenges of several specific positions. The course of study will focus on railroad jobs involved with train operations, maintenance of equipment (locomotives and cars), track and structures, and installation of signaling and control systems.
Associate Degree Applicable

RAIL 052
RAILROAD OPERATIONS 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
This course examines the railroad industry's assets, organizational structure, and typical operations. Emphasis is placed on the current characteristics of North American railroads, basic operating processes in the transportation, mechanical and engineering functional areas, and administrative processes in the non-operating areas.
Associate Degree Applicable

RAIL 053
RAILROAD SAFETY, QUALITY AND ENVIRONMENT 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours.
This course covers the importance of safety, quality, and environmental awareness to the railroad industry and emphasizes the tools and techniques for improving these conditions on the job.
Associate Degree Applicable
Sequence of Reading Courses at SBVC

In order to graduate with an associate degree, you must complete READ 015 with a grade of C or better or assess into READ 100

Or

Complete all courses required to satisfy minimum graduation requirements in Categories I, II, or III with an overall grade point average of 2.0 or higher.

You may follow this sequence of courses to develop proficiency in reading or you may be eligible to begin this sequence with READ 950 or higher depending on results of the SBVC assessment process.

(Contact a counselor for details and the Admissions Office for assessment dates.)
READING AND STUDY SKILLS

DIVISION: Humanities
DIVISION DEAN: Marjorie Price, M.A., M.Ed.
DEPARTMENT HEAD: Helen M. Garcia, Ph.D.
Liberal Arts 215
(909) 384-8627
OTHER FACULTY: Carolyn Allen-Roper, M.A.
DIVISION SECRETARIES: Kelly Adcock
(909) 384-8906
Cheryl Benner
(909) 384-8633
DIVISION OFFICE: North Hall 236
(909) 384-4445
LIAISON COUNSELOR: Juan Zepeda, M.S.
(909) 384-4404

The Reading and Study Skills Department offers courses in reading improvement and study skills designed to help students succeed in college. Entering students can use their assessment scores to select the appropriate reading class. Courses in the Basic Reading Skills series (READ 910, 920, 950, 015) prepare students for college-level reading with an intensive program of instruction and laboratory practice. These courses also prepare students to satisfy one of the two options for fulfilling the reading competency requirement for the Associate Degree. READ 100 and 102 teach college-level reading and study skills.

Core competencies emphasized by courses in this department:
- Read and retain information.
- Employ vocabulary of the subject studied.
- Find and interpret information.

COURSES OFFERED BY THE DEPARTMENT OF READING AND STUDY SKILLS:

READ 910
READING FUNDAMENTALS 4 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week and
LABORATORY: 3 hours per week.
A reading fundamentals course which provides an individualized beginning reading program, including reading readiness, phonics, word perception, dictionary usage, syllabication, context clues, spelling, verbal and written expressions, and beginning comprehension skills. Not applicable to Associate Degree

READ 920
READING SKILLS I 4 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week and
LABORATORY: 3 hours per week.
A comprehensive, diagnostic-prescriptive program for students requiring basic reading skills, including instruction in phonics, vocabulary development, and literal and inferential comprehension skills. Not applicable to Associate Degree

READ 950
READING SKILLS II 4 UNITS
PREREQUISITE: READ 920 or eligibility for READ 950 as determined through the SBVC assessment process.
LECTURE: 3 hours per week and
LABORATORY: 3 hours per week.
Designed to assist students in improving reading through an emphasis on word attack skills, vocabulary development, general comprehension skills, and study skills. Not applicable to Associate Degree

READ 015
PREPARATION FOR COLLEGE READING 4 UNITS
PREREQUISITE: READ 950 or eligibility for READ 015 as determined through the SBVC assessment process.
LECTURE: 3 hours per week and
LABORATORY: 3 hours per week.
Designed to foster general reading improvement with an emphasis on reading comprehension and vocabulary. Required laboratory practice assignments are based on diagnostic tests, which identify strengths and weaknesses. Associate Degree Applicable

READ 100
COLLEGE ACADEMIC READING 3 UNITS
PREREQUISITE: READ 015 or eligibility for READ 100 as determined through the SBVC assessment process.
LECTURE: 3 hours per week.
Designed to help students improve analytical reading and critical thinking required for reading college textbooks as well as works of literature, including advanced, college-level vocabulary, comprehension improvement, the relationship of language to thinking, drawing sound inferences, distinguishing between fact and opinion, understanding bias and propaganda, and evaluation of evidence in addition to literal comprehension skills. Associate Degree Applicable
Course credit transfers to CSU.

READ 102
CRITICAL READING AS CRITICAL THINKING 3 UNITS
PREREQUISITE: READ 100 or ENGL 101.
LECTURE: 3 hours per week.
This course explores the relationship of critical reading and critical thinking, including emphasis on the development of critical thinking skills with application in the interpretation, analysis, criticism, and advocacy of ideas encountered in academic reading. Associate Degree Applicable
Course credit transfers to CSU.

REAL ESTATE/ESCROW

DIVISION: Business & Information Technology
DIVISION DEAN: Margaret Ortiz, M.A.
DEPARTMENT HEAD: Nickolas Zoumbos, M.S.
Business 100D
(909) 384-8912
OTHER FACULTY: Michael Durrett, M.B.A.
DIVISION SECRETARY: Chris Williams
DIVISION OFFICE: Business 101
(909) 384-8908
LIAISON COUNSELOR: Marco Cota, M.A.
(909) 384-4404
There are a variety of reasons why people study real estate. Some wish to become real estate agents, and some people student real estate to be better-informed consumers as they work with agents to buy or sell a personal residence. Still others study real estate as a way to acquire long-term investments that could generate rental income for their retirement years. Whatever the reason, this curriculum provides a strong basis for understanding the real estate market.

The Real Estate curriculum is designed to provide students with the course requirements for pre-qualification for the real estate sales or brokers examinations.

Core competencies emphasized by courses in this department:

- Read and retain information.
- Write clearly.
- Employ vocabulary of the subject studied.

REAL ESTATE/ESCROW ASSOCIATE OF ARTS DEGREE

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

REQUIRED COURSES: UNITS
ESCROW 101 Escrow Procedures I 3
REALST 100 Real Estate Principles 3
REALST 210 Real Estate Finance 3
REALST 215 Legal Aspects of Real Estate 3
REALST 230 Real Estate Economics 3
or
ECON 100 Introduction to Economics 3
Six units from one of the following areas of concentration 6
TOTAL UNITS: 21

1. REAL ESTATE CONCENTRATION
REALST 200 Real Estate Practice 3
REALST 205 Real Estate Appraisal: Residential 3

2. ESCROW CONCENTRATION
ESCROW 102 Escrow Procedures II 3
ESCROW 103 Escrow Procedures III 3

RECOMMENDED COURSES FOR BOTH CONCENTRATIONS:
ACCT 200 Principles of Accounting I 4
BUSAD 100 Introduction to Business 3
BUSAD 210 Business Law 3
BUSAD 106 Principles of Selling 3
BUSCAL 050 Quantitative Methods in Business 3
CIT 010 Beginning Keyboarding 3

REAL ESTATE/ESCROW 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. ESCROW CERTIFICATE
This certificate qualifies students for entry-level employment in title and escrow companies, mortgage companies, savings and loans, and related firms.

2. REAL ESTATE CERTIFICATE
This certificate qualifies students for entry-level employment in title and escrow companies, mortgage companies, savings and loans, and related firms. 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
REALST 100 Real Estate Principles 3
REALST 200 Real Estate Practice 3
REALST 205 Real Estate Appraisal: Residential 3
REALST 210 Real Estate Finance 3
REALST 215 Legal Aspects of Real Estate 3
or
ACCT 100 Introduction to Accounting I 4
Six units from the list of RECOMMENDED COURSES 6
TOTAL UNITS: 24-25

RECOMMENDED COURSES: UNITS
ACCT 100 Introduction to Accounting I 4
or
ACCT 200 Principles of Accounting I 4
BUSAD 100 Introduction to Business 3
BUSAD 110 Human Resource Management 3
BUSAD 210 Business Law 3
BUSCAL 050 Quantitative Methods in Business 3
CIT 010 Beginning Keyboarding 3
CIT 031 Business English 3
REALST 200 Real Estate Practice 3
REALST 205 Real Estate Appraisal: Residential 3

COURSES OFFERED BY THE DEPARTMENT OF REAL ESTATE/ESCROW:
REALST 100
REAL ESTATE PRINCIPLES    3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Fundamentals of real estate covering basic laws and principles of California real estate. Includes the background and terminology necessary for advanced study of real estate. Mandatory prerequisite for the real estate sales license examination.
Associate Degree Applicable
Course credit transfers to CSU.

REALST 101
REAL ESTATE LOAN PROCESSING FUNDAMENTALS    3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: REALST 100.
LECTURE: 3 hours per week.
This course covers the fundamentals of processing real estate mortgage loans. Course content includes the basics of processing a conforming mortgage loan, from the application submission to the funding and closing of the mortgage loan. It is designed for entry-level employment into the real estate field.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

REALST 102
GOVERNMENTAL AND NON-CONFORMING LOAN PROCESSING    3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORIES: REALST 100 and REALST 101.
LECTURE: 3 hours per week.
This course provides in-depth training in the processing of nonconforming, FHA, and VA real estate mortgages. The student will learn the basics of processing sub-prime loans, jumbo loans, second mortgage, FHA, and VA mortgages. The full documentation, limited documentation, and stated income loan files will be covered.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

REALST 103
COMPUTERIZED REAL ESTATE LOAN PROCESSING    3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORIES: REALST 100 and REALST 101.
LECTURE: 2 hours per week and LABORATORY: 2 hours per week.
An introduction to computerized loan processing software in the field of real estate loans. This course is designed for mortgage originators, processors, and other mortgage professionals. Topics include working with loan files, amortization schedules, loan application processing, compliance, preparing good faith estimates, government forms, and processing various types of loan packages.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

REALST 200
REAL ESTATE PRACTICE    3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: REALST 100.
LECTURE: 3 hours per week.
Day-to-day operations in real estate; overview of brokerage procedures and the various roles of the employee. Mandatory prerequisite to real estate broker’s examination.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

REALST 205
REAL ESTATE APPRAISAL: RESIDENTIAL    3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: REALST 100.
LECTURE: 3 hours per week.
Purposes of appraisals, appraisal process and the different methods, approaches and techniques used to determine the value of various types of property. Mandatory prerequisite to real estate broker’s examination.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

REALST 210
REAL ESTATE FINANCE    3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: REALST 100.
LECTURE: 3 hours per week.
Analysis of real estate financing including lending policies and problems in financing transactions in residential, apartment, commercial and special purpose properties, emphasizing methods of financing properties. Mandatory prerequisite to real estate broker’s examination.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

REALST 211
ADVANCED REAL ESTATE FINANCING    3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORIES: REALST 100 and REALST 210.
LECTURE: 3 hours per week.
An in-depth study of real property financing, risk analysis, negotiations, land development, construction financing, feasibility, analytical financing tools and other topics necessary to develop skills needed for real estate decision-making. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

REALST 215
LEGAL ASPECTS OF REAL ESTATE    3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: REALST 100.
LECTURE: 3 hours per week.
Study of California real estate law with emphasis on applications in real estate brokerage and related fields. Mandatory prerequisite to real estate broker’s examination.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.
REALST 220
PROPERTY MANAGEMENT 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: REALST 100.
LECTURE: 3 hours per week.
Professional approach to the principles and practices of managing income properties, leasing, collections, rent schedules, budgets, purchasing, market economics, evictions, maintenance, taxation and record keeping. Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

REALST 230
REAL ESTATE ECONOMICS 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORIES: REALST 100 and REALST 200.
LECTURE: 3 hours per week.
Intensive study of factors which influence changes in real estate values. Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

REALST 901
REAL ESTATE PRE-LICENSE 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Preparation for the Real Estate Sales License examinations given weekly by the California Department of Real Estate. California real estate law, listing and deposit receipts, appraising, financing and taxation and mathematics of real estate. Not Applicable to the Associate Degree

REALST 902
BROKER'S LICENSE REVIEW 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: Sales License or equivalent.
LECTURE: 3 hours per week.
A review for students who qualify to take the California Real Estate Broker’s examination. Includes legal procedure, law, contracts, appraising, financing, taxation, business practices, syndication subdivision, liens and practice test questions. Not Applicable to the Associate Degree

ESCROW 101
ESCROW PROCEDURES I 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Methods and techniques of escrow procedures for various types of business transactions with emphasis on the legal and ethical responsibilities of professionals engaged in escrow and real estate work. Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

ESCROW 102
ESCROW PROCEDURES II 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: ESCROW 101.
LECTURE: 3 hours per week.
Advanced study of the more unusual and difficult types of escrows with evaluations of possible solutions designed to increase the knowledge and efficiency of escrow personnel. Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

ESCROW 103
ESCROW PROCEDURES III 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: ESCROW 102.
LECTURE: 3 hours per week.
Case studies of unusual and difficult types of escrows with emphasis on escrows in which conflicts or disputes arise. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information. Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

REFRIGERATION AND AIR CONDITIONING

DIVISION: Applied Technology & Transportation
DIVISION DEAN: Thomas Bauman, M.S., P.E.
DEPARTMENT HEAD: Edward Szumski, M.A.
Technical 108
(909) 384-8501
OTHER FACULTY: Carlos Busselle, B.A.
Ralph Dennington, A.S.
DIVISION SECRETARY: Patsy Martinez
(909) 384-8902
DIVISION OFFICE: Technical 108
(909) 384-4451
LIAISON COUNSELOR: Wendy Whitney, M.S.
(909) 384-4404

The Refrigeration and Air Conditioning Department prepares students for employment in the field of refrigeration and air conditioning. Employment of air conditioning and refrigeration technicians is expected to increase rapidly during the next decade. While air conditioning in offices, stores, hospitals, schools and other non-residential building has become commonplace, anticipated increases in rising personal incomes point to continued rapid growth in home air conditioning. Refrigeration is also necessary for the production, storage, and marketing of food and other perishables.

Students interested in preparing for employment in this field may begin their studies any semester. The course of study designed by SBVC’s Department of Refrigeration and Air Conditioning may lead to an Associate of Science degree or a vocational certificate in Refrigeration and Air Conditioning.

Core competencies emphasized by courses in this department:
- Read and retain information.
- Employ vocabulary of the subject studied.
- Find and interpret information.
- Demonstrate etiquette in face-to-face and written interactions.

REFRIGERATION AND AIR CONDITIONING ASSOCIATE OF SCIENCE DEGREE

To graduate with a specialization in Refrigeration and Air Conditioning, students must complete all requirements for the certificate with a grade of C or better plus the general breadth requirements for the Associate Degree (minimum total = 60 units).
REFRIGERATION AND AIR CONDITIONING
CERTIFICATE
This certificate is designed to prepare students with the necessary knowledge and skills to obtain entry-level employment in the field of refrigeration and air conditioning, installing, maintaining, and repairing such systems. 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
TECALC 087 Technical Calculations 4
REFRIG 101x3 Refrigeration I 4
REFRIG 102x3 Refrigeration II 4
REFRIG 103x3 Refrigeration III 4
REFRIG 104x3 Refrigeration Electricity I 4
REFRIG 105x3 Refrigeration Electricity II 4
REFRIG 106x3 Air Conditioning & Heating 4
WELD 123 Oxy-Acetylene Welding 3
EPA Universal Certification (608) 4
TOTAL UNITS: 31

RECOMMENDED COURSES: UNITS
Students are encouraged to take this course as part of their General Education program:
AUTO 056 Auto Heating & Air Conditioning 4

COURSES OFFERED BY THE DEPARTMENT OF REFRIGERATION AND AIR CONDITIONING:
Course descriptions for REFRIG 050A-Z through REFRIG 068A-Z follow the description for REFRIG 198.

REFRIG 101x3
REFRIGERATION I 4 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week and LABORATORY: 3 hours per week.
A study of the basic principles of refrigeration, refrigerants, refrigeration components and tools. Repair and testing of refrigeration units. Basic brazing and soldering. This course may be taken three times.
Associate Degree Applicable
Course credit transfers to CSU.

REFRIG 102x3
REFRIGERATION II 4 UNITS
PREREQUISITE: REFRIG 101x3.
LECTURE: 3 hours per week and LABORATORY: 3 hours per week.
Principles of refrigeration compression systems, operations and controls, refrigeration and freezer construction, piping and parts layout. Included in the lab work are trouble shooting and servicing domestic refrigeration units. This course may be taken three times.
Associate Degree Applicable
Course credit transfers to CSU.

REFRIG 103x3
REFRIGERATION III 4 UNITS
PREREQUISITE: REFRIG 101x3.
LECTURE: 3 hours per week and LABORATORY: 3 hours per week.
Theory of compressor construction and operation. Principle of all types of refrigerant controls and multi-stage control devices pertaining to commercial and industrial refrigeration. Includes practical lab work. This course may be taken three times.
Associate Degree Applicable
Course credit transfers to CSU.

REFRIG 104x3
REFRIGERATION ELECTRICITY I 4 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week and LABORATORY: 3 hours per week.
Fundamentals of direct and alternating current circuits, test equipment, electric motors of all types, wiring and control devices used in modern refrigeration equipment. Includes practical lab work with electrical refrigeration trainers and projects. This course may be taken three times.
Associate Degree Applicable
Course credit transfers to CSU.

REFRIG 105x3
REFRIGERATION ELECTRICITY II 4 UNITS
PREREQUISITE: REFRIG 104x3.
LECTURE: 3 hours per week and LABORATORY: 3 hours per week.
A study of solid state control systems, emphasizing schematic reading and electrical trouble shooting pertaining to refrigeration equipment. Includes practical lab work with electrical refrigeration trainers and projects. This course may be taken three times.
Associate Degree Applicable
Course credit transfers to CSU.

REFRIG 106x3
AIR CONDITIONING AND HEATING 4 UNITS
PREREQUISITE: REFRIG 101x3.
LECTURE: 3 hours per week and LABORATORY: 3 hours per week.
Theory of multiple-stage systems and multiple-control devices; emphasis on condensing and evaporation equipment, heavy duty piping layout, forced-air heating, ventilation and air conditioning. Includes lab work with refrigeration trainers and projects. This course may be taken three times.
Associate Degree Applicable
Course credit transfers to CSU.

REFRIG 198
REFRIGERATION AND AIR CONDITIONING 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 to earn units using the following formula:
For paid work, 75 hours = 1 unit; for volunteer work, 60 hours = 1 unit.
Students may earn a total of 16 units toward graduation in Work Experience 198 courses. Students MUST be working for pay or volunteer before registering for a Work Experience class. NOTE: Only one section of Work Experience may be taken during a semester.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.
REFRIG 050A-Z through REFRIG 068A-Z are based on course material supplied by the Refrigeration Engineering Society and are designed for upgrading journeymen.

REFRIG 050A  
REFRIGERATION AND AIR CONDITIONING I  3 UNITS  
**PREREQUISITE:** None.  
**DEPARTMENTAL ADVISORY:** HVAC Refrigeration Work Experience  
**LECTURE:** 3 hours per week.  
This is the first term of a three-term national training course offered by the Refrigeration Service Engineers Society and is a comprehensive study of the principles of refrigeration. This course is designed to help certify journeymen-level refrigeration technicians and keep their knowledge current. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.

REFRIG 051A  
REFRIGERATION AND AIR CONDITIONING II  3 UNITS  
**PREREQUISITE:** None.  
**DEPARTMENTAL ADVISORY:** HVAC Refrigeration Work Experience  
**LECTURE:** 3 hours per week.  
This is the second term of a three-term national training course offered by the Refrigeration Service Engineers Society and is a comprehensive study of compressors, condensers and accessories. This course is designed to help certify journeymen-level refrigeration technicians and keep their knowledge current. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.

REFRIG 052A  
REFRIGERATION AND AIR CONDITIONING III  3 UNITS  
**PREREQUISITE:** None.  
**DEPARTMENTAL ADVISORY:** HVAC Refrigeration Work Experience  
**LECTURE:** 3 hours per week.  
This is the third term of a three-term national training course offered by the Refrigeration Service Engineers Society and is a comprehensive study of air conditioning. This course is designed to help certify journeymen-level refrigeration technicians and keep their knowledge current. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.

REFRIG 055A  
REFRIGERATION HEATING I  3 UNITS  
**PREREQUISITE:** None.  
**DEPARTMENTAL ADVISORY:** HVAC Refrigeration Work Experience  
**LECTURE:** 3 hours per week.  
This is the first term of a three-term national training course offered by the Refrigeration Service Engineers Society and is a comprehensive study of heating systems. This course is designed to help certify journeymen-level refrigeration technicians and keep their knowledge current. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.

REFRIG 056A  
REFRIGERATION HEATING II  3 UNITS  
**PREREQUISITE:** None.  
**DEPARTMENTAL ADVISORY:** HVAC Refrigeration Work Experience  
**LECTURE:** 3 hours per week.  
This is the second of a three-term national training course offered by the Refrigeration Service Engineers Society and is a comprehensive study of heating sources and distribution. This course is designed to help certify journeymen-level refrigeration technicians and keep their knowledge current. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.

REFRIG 057A  
REFRIGERATION HEATING III  3 UNITS  
**PREREQUISITE:** None.  
**DEPARTMENTAL ADVISORY:** HVAC Refrigeration Work Experience  
**LECTURE:** 3 hours per week.  
This is the third term of a three-term national training course offered by the Refrigeration Service Engineers Society and is a comprehensive study of heating controls and filtering and cleaning equipment. This course is designed to help certify journeymen-level refrigeration technicians and keep their knowledge current. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.

REFRIG 060A  
REFRIGERATION AND A/C ELECTRICITY I  3 UNITS  
**PREREQUISITE:** None.  
**DEPARTMENTAL ADVISORY:** HVAC Refrigeration Work Experience  
**LECTURE:** 3 hours per week.  
This is the first term of a three-term national training course offered by the Refrigeration Service Engineers Society and is a comprehensive study of fundamental electricity. This course is designed to help certify journeymen-level refrigeration technicians and keep their knowledge current. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
REFRIG 061A
REFRIGERATION AND A/C ELECTRICITY II 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: HVAC Refrigeration Work Experience
LECTURE: 3 hours per week.
This is the second term of a three-term national training course offered by the Refrigeration Service Engineers Society and is a comprehensive study of alternating current and applications. This course is designed to help certify journeymen-level refrigeration technicians and keep their knowledge current.
Associate Degree Applicable

REFRIG 062A
REFRIGERATION AND A/C ELECTRICITY III 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: HVAC Refrigeration Work Experience
LECTURE: 3 hours per week.
This is the third term of a three-term national training course offered by the Refrigeration Service Engineers Society and is a comprehensive study of solid state and electrical control circuits. This course is designed to help certify journeymen-level refrigeration technicians and keep their knowledge current.
Associate Degree Applicable

REFRIG 065A
HEAT-PUMP THEORY 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: HVAC Refrigeration Work Experience
LECTURE: 3 hours per week.
This is a single term of a national training course offered by the Refrigeration Service Engineers Society and is a comprehensive study of refrigeration heat-pump theory. This course is designed to help certify journeymen-level refrigeration technicians and keep their knowledge current.
Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
Associate Degree Applicable

REFRIG 066A
CONTROLS I 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: HVAC Refrigeration Work Experience
LECTURE: 3 hours per week.
This is the first term of a three-term national training course offered by the Refrigeration Service Engineers Society and is a comprehensive study of refrigeration pneumatic controls. This course is designed to help certify journeymen-level refrigeration technicians and keep their knowledge current.
Associate Degree Applicable

REFRIG 067A
CONTROLS II 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: HVAC Refrigeration Work Experience
LECTURE: 3 hours per week.
This is the second term of a three-term national training course offered by the Refrigeration Service Engineers Society and is a comprehensive study of refrigeration electric controls. This course is designed to help certify journeymen-level refrigeration technicians and keep their knowledge current.
Associate Degree Applicable

REFRIG 068A
CONTROLS III 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: HVAC Refrigeration Work Experience
LECTURE: 3 hours per week.
This is the third term of a three-term national training course offered by the Refrigeration Service Engineers Society and is a comprehensive study of refrigeration electronic controls. This course is designed to help certify journeymen-level refrigeration technicians and keep their knowledge current.
Associate Degree Applicable

RELIGIOUS STUDIES
See the Department of PHILOSOPHY/RELIGIOUS STUDIES

RESTAURANT MANAGEMENT/FOOD SERVICE
DIVISION: Business & Information Technology
DIVISION DEAN: Margaret Ortiz, M.A.
DEPARTMENT HEAD: E. Robert Baldwin
Campus Center 110
(909) 384-8695

OTHER FACULTY: Michael Durrett, M.B.A.
DIVISION SECRETARY: Chris Williams
DIVISION OFFICE: Business 101
(909) 384-8908

LIAISON COUNSELOR: Marco Cota, M.A.
(909) 384-4404

The Restaurant Management/Food Service curriculum prepares students for careers in restaurant management, food services, and other hospitality career fields. Hospitality is the second largest employing industry in the state of California and the United States.

Successful completion of one of the vocational certificates qualifies students for certification and membership in the American School Food Service Association. Students completing the associate degree are prepared to transfer to a baccalaureate program at a four-year institution.

RESTAURANT MANAGEMENT ASSOCIATE OF ARTS DEGREE

To graduate with a specialization in Restaurant Management, students must complete the following required courses plus the general breadth requirements for the Associate Degree (total = 60 units).
REQUIRED COURSES:  UNITS
RM/FS 101 Introduction to Restaurant Management/ Food Service 3
RM110x3 Restaurant Internship I 1.5 - 10
RM111x2 Restaurant Internship II 1.5 - 10
RM 160 Introduction to Foods 3
RM/FS 161 Quantity Food Preparation 3
RM/FS 201 Food Service Operations and Restaurant Problems 3
RM/FS 225 Sanitation and Safety 3
RM 235 Menu Planning 3
RM/FS 240 Purchasing 3
RM 275 Food and Beverage Cost Control 3
ACCT 100 Introduction to Accounting I 4
BUSAD 100 Introduction to Business 3
BUSCAL 050 Quantitative Methods in Business 3
TOTAL UNITS: 30-47

RESTAURANT MANAGEMENT/FOOD SERVICE CERTIFICATES

1. DINING ROOM SERVICE CERTIFICATE
The Dining Room Service Certificate is designed to prepare students for entry-level employment in the front-of-the-house of the Restaurant/Hospitality industry. 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
RM/FS 101 Introduction to Restaurant Management/ Food Service 3
RM110x3 Restaurant Internship I 1.5 - 10
RM111x2 Restaurant Internship II 1.5 - 10
RM/FS 161 Quantity Food Preparation 3
RM/FS 225 Sanitation and Safety 3
RM 250 Dining Room Service 3
RM 275 Food and Beverage Cost Control 3
BUSCAL 050 Quantitative Methods in Business 3
TOTAL UNITS: 18-35

2. FOOD PREPARATION CERTIFICATE
The Food Preparation Certificate is designed to prepare students for entry-level employment in food preparation. 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
RM/FS 101 Introduction to Restaurant Management/ Food Service 3
RM110x3 Restaurant Internship I 1.5 - 10
RM111x2 Restaurant Internship II 1.5 - 10
RM/FS 161 Quantity Food Preparation 3
RM/FS 225 Sanitation and Safety 3
RM 250 Dining Room Service 3
BUSCAL 050 Quantitative Methods in Business 3
TOTAL UNITS: 31

3. FOOD SERVICE CERTIFICATE
The Food Service Certificate is designed for students interested in employment at commercial restaurants, institutions, health care facilities, school food services, and related food service industries. 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
RM/FS 101 Introduction to Restaurant Management/ Food Service 3
RM110x3 Restaurant Internship I 1.5 - 10
RM111x2 Restaurant Internship II 1.5 - 10
RM 160 Food Preparation 3
RM/FS 161 Quantity Food Preparation 3
RM/FS 225 Sanitation and Safety 3
RM/FS 240 Purchasing 3
BUSCAL 050 Quantitative Methods in Business 3
TOTAL UNITS: 21-38

4. RESTAURANT MANAGEMENT CERTIFICATE
The Restaurant Management Certificate is designed for students who are interested in entering middle-management positions within the Restaurant/Hospitality industry. 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
RM/FS 101 Introduction to Restaurant Management/ Food Service 3
RM110x3 Restaurant Internship I 1.5 - 10
RM111x2 Restaurant Internship II 1.5 - 10
RM 160 Food Preparation 3
RM/FS 161 Quantity Food Preparation 3
RM/FS 201 Food Service Operations and Restaurant Problems 3
RM/FS 225 Sanitation and Safety 3
RM 235 Menu Planning 3
RM/FS 240 Purchasing 3
RM 275 Food and Beverage Cost Control 3
ACCT 100 Introduction to Accounting I 4
BUSAD 100 Introduction to Business 3
BUSCAL 050 Quantitative Methods in Business 3
FCS 162 Nutrition 3
TOTAL UNITS: 40-60

COURSES OFFERED BY THE DEPARTMENT OF RESTAURANT MANAGEMENT/FOOD SERVICE:

RM/FS 101 INTRODUCTION TO RESTAURANT MANAGEMENT/FOOD SERVICE 3 UNITS
PREREQUISITE: None.
COREQUISITE: RM 110x3 or RM 111x2.
LECTURE: 3 hours per week.
History of restaurant management and food service industries showing progress, change and future opportunities. Introduction to the economics of restaurants, coffee shops, cafeterias and institutional feeding.
Associate Degree Applicable
Course credit transfers to CSU.
RM/FS 161
QUANTITY FOOD PREPARATION 3 UNITS
PREREQUISITE: RM 160 or FCS 160.
LECTURE: 3 hours per week.
Introduction to the scientific theory of the application of heat, and the changes that takes place in food during the cooking process. Includes handling of kitchen tools and equipment, analysis of budgets, and the proper techniques of preparing food for quantity production. This course is also listed as FCS 161.
Associate Degree Applicable
Course credit transfers to CSU.

RM/FS 111x2
RESTAURANT INTERNSHIP II 1.5 - 10 UNITS
PREREQUISITE: None.
LABORATORY: 4.5 - 30 hours per week.
The laboratory is an operational restaurant. Includes the language of food and food preparation techniques (American and French); strategies for catering; and techniques for preparing soups, sauces, and stocks. This course may be taken twice.
Associate Degree Applicable
Course credit transfers to CSU.

RM 160
INTRODUCTION TO FOODS 3 UNITS
PREREQUISITE: None.
LECTURE: 2 hours per week and
LABORATORY: 3 hours per week.
Introduction to food science principles and food preparation techniques. Emphasis on ingredient functions and interactions; technique, production and sensory evaluation standards, food safety, sanitation, nutrient values, and food presentation. This course is also listed as FCS 160.
Associate Degree Applicable
Course credit transfers to CSU.

RM 235
MENU PLANNING 3 UNITS
PREREQUISITE: RM/FS 101 or RM/FS 161 or FCS 160.
LECTURE: 3 hours per week.
Principles of menu planning with emphasis on development, types, organization, and significance of menus. Includes cost and pricing of menu items, and current legislation regarding truth in advertising. This course is also offered as FCS 235.
Associate Degree Applicable
Course credit transfers to CSU.

RM 240
PURCHASING 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Policies, procedures, controls and their implementation in purchasing merchandise and supplies including food, beverage, equipment, serveware, furniture, fixtures, and contract services. Students write and analyze reports of purchasing procedures, manuals, and receiving reports. This course is also offered as FCS 240.
Associate Degree Applicable
Course credit transfers to CSU.

RM 198
RESTAURANT MANAGEMENT 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 to earn units using the following formula: For paid work, 75 hours = 1 unit; for volunteer work, 60 hours = 1 unit. Students may earn a total of 16 units toward graduation in Work Experience 198 courses. Students MUST be working for pay or volunteer before registering for a Work Experience class. NOTE: Only one section of Work Experience may be taken during a semester.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

RM 110x3
RESTAURANT INTERNSHIP I 1.5 - 10 UNITS
PREREQUISITE: None.
LABORATORY: 4.5 - 30 hours per week.
The laboratory is an operational restaurant. Includes techniques of preparing entrees, short orders, and desserts in quantity; recipe standardization; determination of need and supplies; organization of work stations; effective use of equipment and time management; and attractive service. This course may be taken three times.
Associate Degree Applicable
Course credit transfers to CSU.
RM 275
FOOD AND BEVERAGE COST CONTROL  3 UNITS
PREREQUISITE: RM/FS 101.
LECTURE: 3 hours per week.
Topics of coverage include: costs, sales, sales prices, profit relationships, break-even analysis, control techniques, food controls, beverage controls and labor controls.
Associate Degree Applicable
Course credit transfers to CSU.

RM 298-299
SPECIAL TOPICS IN RESTAURANT MANAGEMENT .25-3 UNITS
PREREQUISITE: None.
LECTURE: 4-48 hours per semester.
Selected seminars in the field of Restaurant Management developed to meet specific group needs. Topics may include current trends in baking, meat utilization, and techniques for preparing soups and sauces.
Associate Degree Applicable
Course credit transfers to CSU.

SCIENCE LEARNING CENTER

DIVISION: Learning Resources
DIVISION DEAN: Marie Mestas, M.L.S.
DIRECTOR: Jerry Horne
LEARNING RESOURCES ASSISTANT: Angela Grotke

The Science Learning Center is a new program on campus to help students succeed in introductory science courses. It is flexibly designed to teach students methods of study necessary for success in any science class. Students will also be provided with short-term solutions to immediate problems specific to their course of study.

SLC 600
SCIENTIFIC READING AND STUDY SKILLS NON-CREDIT
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: Concurrent enrollment in an introductory, degree-applicable science course.
LECTURE: 2 hours per week.
Designed to investigate the purpose of scientific inquiry, the study skills needed in introductory science courses, and the use of science textbooks and other written material such as tables and graphs. It is intended to help students succeed in introductory science courses. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.

SIGN LANGUAGE
See AMERICAN SIGN LANGUAGE

SOCIOLOGY
DIVISION: Social Science & Human Development
DIVISION DEAN: Janice Noble, M.Ed.
DEPARTMENT HEAD: Janet Pielke Brennecke, M.A.
OTHER FACULTY: Douglas Gultnecht, Ph.D.
DIVISION SECRETARY: To Be Announced
DIVISION OFFICE: Liberal Arts 122
(909) 384-8603
LIAISON COUNSELOR: Laura Gomez, M.A.
(909) 384-4404

Sociology is both a scientific and humanistic discipline. Sociologists examine the systems of social action including single social acts, social relationships, organizations, institutions, communities, and societies. Through analyses of society, its groups, institutions, and processes, sociologists attempt to understand and predict human behavior.

The study of sociology prepares students for further study of and careers in social work, probation, corrections, human services, law enforcement, research, public policy, law and education. Students planning to transfer to a four-year institution and major in sociology should consult with a counselor regarding the transfer process and lower division requirements.

COURSES OFFERED BY THE DEPARTMENT OF SOCIOLOGY:

SOC 100
INTRODUCTION TO SOCIOLOGY  3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Examination of the social influences on human behavior focusing on American social patterns and process; structure and function; conflict and change in society; multicultural conflicts; and a comparison of these processes with international and global patterns.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): SOC 2

SOC 100H
INTRODUCTION TO SOCIOLOGY – HONORS  3.00 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Careful examination of the social influences on human behavior focusing on social patterns and processes; structure and function, conflict and change in society and culture in general with emphasis on American institutions in a multicultural society and their relationship to global patterns. Enrollment limited to students eligible for the Honors Program.
Associate Degree Applicable
Course credit transfers to CSU and UC.
Limited transfer to UC; contact a counselor for details.

SOC 110
CONTEMPORARY SOCIAL ISSUES  3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
An analysis of issues of concern in American society such as crime, racism, sexism, aging, substance abuse, divorce, social inequality and social change.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): SOC 4
SOC 130
MARRIAGE AND THE FAMILY 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
A descriptive and analytical survey of the structure and process of contemporary families and marriages. Includes analysis of these relationships as intimate relationships and social institutions.
Associate Degree Applicable
Course credit transfers to CSU and UC.

SOC 141
RACE AND ETHNIC RELATIONS 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
An analysis of the major sociological perspectives, race, and ethnic relations, domestic and global, with emphasis on the nature and trends in race/ethnic relations in American society and comparative cultures, focusing on inter-ethnic and inter-group conflicts.
Associate Degree Applicable
Course credit transfers to CSU and UC.

SOC 145
SOCIOLOGY OF GENDER 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: ENGL 015 or eligibility for ENGL 101.
LECTURE: 3 hours per week.
Examines the changing roles of women and men in contemporary American society. A sociological and humanistic approach will be utilized to analyze gender roles in major social institutions: the family, religion, education, work, mass media, law, medicine, and political and economic structures.
Associate Degree Applicable
Course credit transfers to CSU and UC.

SOC 150
INTRODUCTION TO GERONTOLOGY: SOCIAL ASPECTS OF AGING 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
This course examines aging and the life course. It explores how the aging process is influenced and shaped by societal forces, covering physical, psychological, and economic as well as social aspects of aging. This course will examine these processes of aging as they affect individuals, families, cohorts and societies.
Associate Degree Applicable
Course credit transfers to CSU and UC.

SOC 285
HONORS IN SOCIOLOGY 3 UNITS
PREREQUISITE: SOC 100.
COREQUISITE: SOC 100.
LECTURE: 3 hours per week.
A treatment of the major paradigms and theories in sociology including structuralism, functionalism, conflict theory, interactionism, and ethnomethodology. Includes research methods and new directions in sociology with emphasis on sociological practice.
Associate Degree Applicable
Course credit transfers to CSU and UC.

SPANISH

DIVISION: Humanities
DIVISION DEAN: Marjorie Price, M.A., M.Ed.
DEPARTMENT HEAD: Nori Sagomonian, M.A.
North Hall 221-222
(909) 384-8544
OTHER FACULTY:
Jose Recinos, Ph.D.
Bert Reins, B.A.
Lydia Barajas-Zapata, M.A.
DIVISION SECRETARIES:
Kelly Adcock
(909) 384-8906
Cheryl Benner
(909) 384-8633
DIVISION OFFICE:
North Hall 236
(909) 384-4445
LIAISON COUNSELOR:
Juan Zepeda, M.S.
(909) 384-4404

The ever-increasing role that the United States takes in global affairs, international trade, and the growing numbers of immigrants dictate the need for knowledge of a modern foreign language. The primary objective of the Modern Languages Department is communication at an acceptably correct level with an understanding of culture.

Teaching methods incorporate critical thinking activities and include the direct oral approach, lectures and language laboratory assignments. Courses are offered in American Sign Language, French, and Spanish.

Students planning to transfer to a four-year institution and major in a modern language should consult with a counselor regarding the transfer process and lower division requirements. Positions for which four-year graduates in modern languages are qualified are teaching, business, foreign services, law enforcement, nursing, hospitality services, and secretarial services.

Core competencies emphasized by courses in this department:
- Read and retain information.
- Write clearly.
- Speak clearly.
- Employ vocabulary of the subject studied.
- Demonstrate active listening skills.
- Apply learned knowledge to new situations.
- Work effectively in group settings.
- Demonstrate knowledge of and respect for other cultures.

SPANISH COURSES OFFERED BY THE DEPARTMENT OF MODERN LANGUAGES:

SPAN 015
CONVERSATIONAL SPANISH I 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Develops conversational skills, listening comprehension and speaking skills in the Spanish language for persons who wish to learn to communicate orally in Spanish for purposes of personal pleasure or business.
Associate Degree Applicable
SPAN 016
CONVERSATIONAL SPANISH II 3 UNITS
PREREQUISITE: SPAN 015.
LECTURE: 3 hours per week.
Develops additional conversational skills, listening comprehension and the ability to speak the Spanish language.
Associate Degree Applicable

SPAN 101
COLLEGE SPANISH I 5 UNITS
PREREQUISITE: None.
LECTURE: 5 hours per week.
Develops the ability to converse, read and write in Spanish. The course includes the study of essentials of pronunciation, vocabulary, idioms and grammatical structures along with an introduction to the cultures of Spanish speaking peoples. This course corresponds to two years of high school study.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): SPAN 2

SPAN 102
COLLEGE SPANISH II 5 UNITS
PREREQUISITE: SPAN 101.
LECTURE: 5 hours per week.
Continues to develop conversational, reading and writing skills in Spanish, with special emphasis on past tense verbs, grammar, vocabulary expansion and cultural applications of the Spanish language.
Associate Degree Applicable
Course credit transfers to CSU and UC.
Limited transfer to UC; contact a counselor for details.
CAN (California Articulation Number): SPAN 4

SPAN 103
COLLEGE SPANISH III 4 UNITS
PREREQUISITE: SPAN 102.
LECTURE: 4 hours per week.
Develops complex conversational, reading and writing skills, with emphasis on the subjunctive and hypothetical situations. Expands vocabulary in the Spanish language and awareness of Hispanic culture through literature.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): SPAN 8
Limited transfer to UC; contact a counselor for details.

SPAN 103H
COLLEGE SPANISH III - HONORS 4 UNITS
PREREQUISITE: SPAN 102.
LECTURE: 4 hours per week.
Develops complex conversational, reading and writing skills, with emphasis on the subjunctive and hypothetical situations. Expands vocabulary in the Spanish language and awareness of Hispanic culture through literature. Enrollment is limited to students eligible for the Honors Program.
Associate Degree Applicable
Course credit transfers to CSU and UC.
Limited transfer to UC; contact a counselor for details.

SPAN 104
COLLEGE SPANISH IV 4 UNITS
PREREQUISITE: SPAN 103 or SPAN 158.
LECTURE: 4 hours per week.
Develops language skills through reading, discussion, analysis, and writing about culturally representative works from Spain and Latin America. Emphasis on composition and literature as an expression of culture.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): SPAN 10

SPAN 119
SPANISH FOR MEDICAL PERSONNEL 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Develops comprehension and communication skills in Spanish for medical personnel working with Spanish speaking patients. Presents interview questions and basic medical terminology and general cultural information essential in the job performance.
Associate Degree Applicable
Course credit transfers to CSU.

SPAN 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 CD 140.
Associate Degree Applicable
Course credit transfers to CSU.

SPAN 157
SPANISH FOR NATIVE SPANISH SPEAKERS I 5 UNITS
PREREQUISITE: None.
LECTURE: 5 hours per week.
A beginning course for the Spanish speaking population. Develops conversational, reading and writing skills in Spanish with special emphasis on past tense verbs, grammar, vocabulary expansion and cultural applications of the Spanish language. Course is conducted primarily in Spanish, producing skills equivalent to SPAN 102.
Associate Degree Applicable
Course credit transfers to CSU and UC.

SPAN 158
SPANISH FOR NATIVE SPANISH SPEAKERS II 4 UNITS
PREREQUISITE: SPAN 157.
LECTURE: 4 hours per week.
A continuation of Spanish 157 designed for students who already communicate in Spanish and who want to develop and strengthen reading and writing skills with special emphasis on vocabulary expansion, proper grammatical usage, cultural and literary applications of the Spanish language. Course is conducted in Spanish, producing skills equivalent to Spanish 103.
Associate Degree Applicable
Course credit transfers to CSU and UC.
Limited transfer to UC; contact a counselor for details.
SPAN 227A
SELECTED STUDIES IN SPANISH: COSTA RICA 2 UNITS

PREREQUISITE: SPAN 104.
LABORATORY: 4 hours per week.
Furthers students' knowledge of the language, history and culture of the host country through study of assigned topics on the host country during a study abroad experience. Explores history and culture of the host country.
Applicable to the Associate Degree
Course credit transfers to CSU.

SPEECH

DIVISION: Humanities
DIVISION DEAN: Marjorie Price, M.A., M.Ed.
DEPARTMENT HEAD: Leticia Hector, M.A.
Liberal Arts 239
(909) 384-8618
OTHER FACULTY: Diane Alblinger, M.A.
Jay Danley, M.A., J.D.
DIVISION SECRETARIES: Kelly Adcock
(909) 384-8906
Cheryl Benner
(909) 384-8633
DIVISION OFFICE: North Hall 236
(909) 384-4445
LIAISON COUNSELOR: Juan Zepeda, M.S.
(909) 384-4404

Courses offered by the Department of Speech are designed to foster practical communication skills. The emphasis is the development of the skills and techniques essential for effective public and interpersonal communication—a prerequisite for both occupational and personal success.

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

Core competencies emphasized by courses in this department:
• Read and retain information.
• Speak clearly.
• Employ vocabulary of the subject studied.
• Demonstrate active listening skills.
• Find and interpret information.
• Give and receive constructive feedback.
• Demonstrate creative thought through original expression.

COURSES OFFERED BY THE DEPARTMENT OF SPEECH:

SPEECH 910
PREPARATION FOR PUBLIC SPEAKING 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Intended for those students who need improvement in basic communication skills prior to enrollment in a transfer-level speech course. Pronunciation drills, interviewing techniques, basic research methods, small group discussion, organizational skills, and techniques for controlling stage fright are addressed. Individual and group presentations are included.
Not applicable to the Associate Degree.

SPEECH 100
ELEMENTS OF PUBLIC SPEAKING 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Training in the application of the concepts, principles, and skills of effective speech communication situations and public speaking.
Associate Degree Applicable
Course credit transfers to CSU and UC.
Limited transfer to UC; contact a counselor for details.
CAN (California Articulation Number): SPCH 4

SPEECH 100H
ELEMENTS OF PUBLIC SPEAKING - HONORS 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
This course focuses on advanced training in the application of the concepts, principles, and skills of effective public speaking. Concepts such as structure, adapting messages to culturally diverse audiences, research principles, and critical evaluation of evidence and arguments are explored. Delivery, listening, and feedback skills are also discussed and practiced in a variety of presentations. Enrollment is limited to students eligible for the Honors Program. This course is also offered as SPEECH 100.
Associate Degree Applicable
Course credit transfers to CSU and UC.
Limited transfer to UC; contact a counselor for details.

SPEECH 110
BEGINNING VOICE AND DICTION 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Techniques of voice production for both public speaking and the stage. Includes theory and practice in developing vocal skills for performance such as breathing, pitch, rate, articulation, volume, and quality. This course is also offered as THART 110. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): SPEECH 110 or THART 110 = DRAM 6

SPEECH 111
INTERPERSONAL COMMUNICATION 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Examines the dynamics of the communication process within the context of interpersonal relationships (those with friends, families, romantic partners, and co-workers.) Influences of self-concept, perception, listening, verbal and non-verbal communication, and emotional expression are explored. Principles of relationship development, communication climate, self-disclosure, and conflict management are also discussed. Rhetorical principles are also practiced and faculty supervised/evaluated in a variety of ways.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): SPCH 8
SPEECH 120
ORAL INTERPRETATION 3 UNITS
PREREQUISITE: SPEECH 100.
LECTURE: 3 hours per week.
Training in the analysis of literature for oral reading with practice in the presentation of materials from the platform. Includes instruction in effective speech skills and the remediation of minor voice problems.
Associate Degree Applicable
Course credit transfers to CSU and UC.

SPEECH 125
CRITICAL THINKING THROUGH ARGUMENTATION AND DEBATE 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: SPEECH 100 or SPEECH 111.
LECTURE: 3 hours per week.
Designed to provide an oral approach to critical thinking skills. Language, argument structure, types of reasoning, evaluation of evidence, fallacies in reasoning, and case development strategies are explored. Individual and group debating experiences are included.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): SPCH 6

SPEECH 130
INTRODUCTION TO COMMUNICATION 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Theory-based introduction to basic concepts in human communication. Provides overview of the field of communication by addressing public, rhetoric, interpersonal, intercultural, group, organizational, mass and mediated communication. Individual and group presentations help students identify and analyze communication patterns and their effects as well as develop strategies for becoming better communicators.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): SPCH 2

SPEECH 135
MASS MEDIA AND SOCIETY 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
An exploration of the history, effects, and role of the mass media in the U.S. The major forms of mass communication are studied (television, radio, film, newspapers and magazines). Focuses on critical analysis of media messages, effects of media on individual and society, and theories of communication. Students move beyond being "consumers" of media to "analysts" of media.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): JOUR 4

SPEECH 140
SMALL GROUP COMMUNICATION 3 UNITS
PREREQUISITE: None.
LECTURE: 3 hours per week.
Explores discussion principles, communication skills, conflict management, participation practices, and leadership within small groups in a variety of contexts. Group formation, verbal and nonverbal communication, listening, and decision-making procedures are also examined. Emphasis is on group participation, group discussion, and group projects/presentations.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): SPCH 10

SPEECH 174
INTERCULTURAL COMMUNICATION 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: ENGL 015 or eligibility for ENGL 101 as determined through the SBVC assessment process.
LECTURE: 3 hours per week.
This course focuses on the communication behavior and values common to all cultures and ethnic groups and on the differences that insulate and divide people. Students will examine influences on the communication process, including stereotyping, perception, prejudice, values, expectations, etc. Students will learn to overcome the communication problems that can result when members of other cultures communicate by evaluating their own intercultural communication patterns and learning skills to increase their effectiveness. Students will also acquire a greater appreciation for others.
Associate Degree Applicable
Course credit transfers to CSU and UC.

SPEECH 176
GENDER DIFFERENCES IN COMMUNICATION 3 UNITS
PREREQUISITE: None
DEPARTMENTAL ADVISORY: ENGL 015 or eligibility for ENGL 101 as determined through the SBVC assessment process.
LECTURE: 3 hours per week.
This course explores the gender differences evident in communication. Students will examine the theories concerning gender differences, issues of gender in a variety of contexts (families, relationships, the workplace, the media, school), and the differences in the communication patterns resulting from gender. Students will evaluate their own communication for evidence of gender patterns, and will discuss effective communication skills.
Associate Degree Applicable
Course credit transfers to CSU and UC.

SPEECH 222
INDEPENDENT STUDY IN SPEECH 1-3 UNITS
PREREQUISITE: None.
INDEPENDENT STUDY: 3-9 hours per week.
Assigned projects involving research and analysis of selected topics or directed study for students who are interested in furthering their knowledge of speech on an independent study bases. 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.
The Student Development (SDEV) curriculum includes courses for students with disabilities, UC Puente Project, academic and career planning strategies, and information about academic strengths and limitations. Courses are designed to help students succeed in college, develop good study habits, learn decision-making models; obtain in-depth information on associate degree and certificate requirements, transfer to universities, campus resources, and prepare for employment.

COURSES OFFERED BY THE DEPARTMENT OF STUDENT DEVELOPMENT:

SDEV 900
ASSESSMENT OF LEARNING DISABILITIES .50 UNIT
PREREQUISITE: None.
LECTURE: .5 hour per week.
Introduction to the history, general characteristics and legal definition of learning disabilities. Includes identification of students’ learning strengths and weaknesses and the determination of students’ eligibility for learning disability services. Emphasis on the LD services at the college and the development of an individualized education plan to compensate for any identified learning disability. Graded on Credit/Non-Credit basis only.
Not applicable to Associate Degree.

SDEV 901X3
INTRODUCTION TO COMPUTER ADAPTIVE TECHNOLOGY 2 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: This course is intended for students with medically verified disability or disabilities (students who must use adaptive computer hardware and software to complete course requirements) and students with access limitations. Instructor may grant permission to non-disabled students who want to explore assistive technology and software. This is an open entry, open exit course.
LECTURE: 1 hour per week and LABORATORY: 3 hours per week.
This course is designed as an introduction to Adaptive Computer Technology. Provides disabled students with an opportunity to evaluate available adaptive technologies and software, as well as appropriateness of accommodations required for parity with peers in regular college classes. Instructor may grant permission to regular students who want to explore adaptive technology and software. This course may be taken three times.
Not applicable to Associate Degree

SDEV 905
SUPPORTIVE LEARNING IN MATHEMATICS 1 UNIT
PREREQUISITE: None.
LABORATORY: 3 hours per week.
Course provides specialized instruction and tutoring to individuals and small groups in basic mathematics. Although this course is designed for students with disabilities as certified through diagnostic testing, all students are welcome to enroll. Support strategies to minimize the effects of the disability in the academic setting are presented to maximize students’ effectiveness in mainstream classes. Graded on a Credit/Non-Credit basis only.
Not applicable to Associate Degree.

SDEV 906
SUPPORTIVE LEARNING IN READING 2 UNITS
PREREQUISITE: None.
LABORATORY: 6 hours per week.
This multi-sensory phonics course provides specialized instruction and tutoring to individuals and small groups in reading. Although this course is designed for students with disabilities as certified through diagnostic testing, all students are welcome to enroll. Support strategies to minimize the effects of the disability in the academic setting are presented to maximize students’ effectiveness in mainstream classes. Graded on a Credit/Non-Credit basis only.
Not applicable to Associate Degree.

SDEV 980
EDUCATION PLANNING .5 UNIT
PREREQUISITE: None.
LECTURE: .5 hours per week.
Develops student ability to create an individualized education plan. Instruction will include UC, CSU, and independent university transfer requirements. Associate degree, certificate, and academic policies will be included. Course is for students who are decided on a college major. Graded on a credit/no credit basis only.
Not applicable to Associate Degree

SDEV 015
PUENTE: STRATEGIES FOR COLLEGE SUCCESS 1 UNIT
PREREQUISITE: None.
LECTURE: 1 hour per week.
Helps students identify their academic strengths and limitations as a first step in long-term educational planning for transfer. In addition, students learn essential skills for creating success in college. This course is paired with ENGL 015 Preparation for College Writing (Puente Project). Enrollment is limited to students in the UC Puente Project.
Associate Degree Applicable
SDEV 101
PUENTE: STRATEGIES FOR COLLEGE AND CAREER SUCCESS
1 UNIT

PREREQUISITE: None.
LECTURE: 1 hour per week.
Designed for students in the UC Puente Project, this course is designed to prepare students for an active role in their education and community. In addition, students learn essential skills for creating success in chosen careers. Includes a mentoring component which links students with community professionals in their major area of study. This course is paired with ENGL 101 Freshman Composition (Puente Project). Enrollment is limited to students in the UC Puente Project.
Associate Degree Applicable
Course credit transfers to CSU.

SDEV 102
COLLEGE TO CAREER
2 UNITS

PREREQUISITE: None.
LECTURE: 2 hours per week.
Designed for students seeking direction in setting academic and career goals. A bio-psycho-social perspective will be used to highlight the person-environment dynamics crucial to a well-rounded preparation for a fulfilling career. Major topics will include evaluation of personal interests, abilities and values, and the utilization of technological resources to identify career choices and labor market trends.
Associate Degree Applicable
Course credit transfers to CSU.

TECHNICAL CALCULATIONS
See courses within the Department of ELECTRICITY/ELECTRONICS

THEATRE ARTS

DIVISION: Humanities
DIVISION DEAN: Marjorie Price, M.A., M.Ed.
DEPARTMENT HEAD: Leticia Hector, M.A.
Liberal Arts 239
(909) 384-8618
OTHER FACULTY: Denise Dale Jacobs, M.F.A.
DIVISION SECRETARIES: Kelly Adcock
(909) 384-8906
Cheryl Benner
(909) 384-8633
DIVISION OFFICE: North Hall 236
(909) 384-4445
LIAISON COUNSELOR: Juan Zepeda, M.S.
(909) 384-4404

Theatre Arts is the study of human expression which culminates in live performance. The play is the medium used to tell a story performed by actors. Theatre Arts includes the study of the literature and related disciplines and technologies required for performances.

The Theatre Arts Department coordinates several student performances each year.

Courses offered by the Theatre Arts Department emphasize individual creativity, personal interaction, and communication skills. Courses are designed to meet the needs of students fulfilling general education requirements and the needs of students who are pursuing theatre as a major. Students planning to transfer to a four-year institution and major in Theatre Arts or a related field should consult with a counselor regarding the transfer process and lower division requirements.

Core competencies emphasized by courses in this department:
- Read and retain information.
- Speak clearly.
- Employ vocabulary of the subject studied.
- Demonstrate active listening skills.
- Find and interpret information.
- Give and receive constructive feedback.
- Demonstrate creative thought through original expression.
- Work effectively in group settings.

COURSES OFFERED BY THE DEPARTMENT OF THEATRE ARTS:

THART 100
INTRODUCTION TO THE THEATRE
3 UNITS

PREREQUISITE: None.
LECTURE: 3 hours per week.
An introduction to theatre from behind-the-scenes to on-stage. In this course students discover the nature of theatre as an art form, how productions are designed and directed, what actors think about in developing roles, where theatre has come from, the directions it has taken, and what its future might be.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): DRAM 18

THART 110
BEGINNING VOICE AND DICTION
3 UNITS

PREREQUISITE: None.
LECTURE: 3 hours per week.
Techniques of voice production for both public speaking and the stage. Includes theory and practice in developing vocal skills for performance such as breathing, pitch, rate, articulation, volume, and quality. This course is also offered as SPEECH 110. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): THART 110 or SPEECH 110 = DRAM 6

THART 114x4
THEATRE PRACTICUM
4 UNITS

PREREQUISITE: None.
LECTURE: 2 hours per week and LABORATORY: 6 hours per week.
Supervised rehearsal and performance of a college musical and/or play production. Focuses on all aspects of theatre presentation, acting, and production. Enrollment in this class is contingent upon an audition for a current theatre production. This course may be taken four times.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): DRAM 16
THART 120
ACTING FUNDAMENTALS I          3 UNITS
PREREQUISITE: None.
LECTURE: 2 hours per week and
LABORATORY: 3 hours per week.
Introduction to acting techniques including foundational performing skills using techniques in relaxation, concentration, improvisation and mime. Practice in non-verbal communication and creative problem-solving working individually and in groups.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): DRAM 8

THART 121
ACTING FUNDAMENTALS II          3 UNITS
PREREQUISITE: THART 120.
LECTURE: 2 hours per week and
LABORATORY: 3 hours per week.
A continuation of THART 120. Includes further practice in relaxation and concentration techniques; the development of character through script analysis with emphasis on physicalization; scene work; and the preparation of monologues.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): DRAM 22

THART 135
DIRECTING FUNDAMENTALS I          3 UNITS
PREREQUISITE: THART 120 or equivalent.
LECTURE: 2 hours per week and
LABORATORY: 2 hours per week.
This course is an introductory study of techniques of directing for the theatre. Topics to be covered include such areas as script analysis and blocking, rehearsal, staging, and the processes to be followed in working with other creative artists in theatre including producers, designers, and crews. Beginning directors will work with beginning and intermediate actors on class projects which may culminate in workshop production.
Associate Degree Applicable
Course credit transfers to CSU and UC.

THART 160x4
THEATRE CRAFTS          3 UNITS
PREREQUISITE: None.
LABORATORY: 9 hours per week.
Study of technical practices in the theatre, including identification and use of tools and hardware; the construction and painting of props and scenery; rigging; the recognition, maintenance, hanging and focusing of lighting instruments; the design of sound systems and effects; the construction and preparation of costumes and make-up; the development of publicity for public performances; stage management; and the understanding and practice of safety in the theatre. This course may be taken four times.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): DRAM 12

THART 165
STAGE MAKEUP          3 UNITS
PREREQUISITE: None.
LECTURE: 2 hours per week and
LABORATORY: 3 hours per week.
Extensive exploration of the theory, design, and application of makeup for the theatre. Students gain experience in applying makeup to both students in the class and students in the college's theatrical productions.
Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.
Associate Degree Applicable
Course credit transfers to CSU and UC.
CAN (California Articulation Number): DRAM 14

THART 222
INDEPENDENT STUDY IN THEATRE          1-3 UNITS
PREREQUISITE: None.
INDEPENDENT STUDY: 3-9 hours per week.
Assigned projects involving character analysis and performance experience, directorial and/or stage management experience, and experience in the state crafts (e.g., lighting, sound, costume, makeup, etc.) or directed study for selected students who are interested in furthering their knowledge of theatre 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; credit determined after transfer to UC.

TRUCK

DIVISION:    Applied Technology & Transportation
DIVISION DEAN:   Thomas Bauman, M.S., P.E.
DIRECTOR:     Kevin Anderson, M.B.A.
DEPARTMENT SECRETARY: Amanda Moody
(909) 382-4079
DEPARTMENT OFFICE:         264 S. Leland Norton Way
Suite A120, San Bernardino
LIAISON COUNSELOR:    Jennifer Mendoza, M.S.
(909) 384-4404

TRUCK 010
HEAVY-DUTY TRUCK AND BUS DRIVING, DMV CLASS "A" WRITTEN EXAMINATION PREPARATION          19 UNITS
PREREQUISITE: None.
PREREQUISITE/COREQUISITE: TRUCK 011x3.
LECTURE: 19 hours per week.
Commercial drivers license requirements, trucking overview, basics, laws, record keeping and inspections. This course will prepare students for the California DMV Class “A” written examination (permit) with all required endorsements. STUDENTS MUST HAVE A VALID CALIFORNIA CLASS “C” (PASSENGER VEHICLE) LICENSE; NO MORE THAN TWO POINTS ON CURRENT DMV RECORD; NO SR-22 REQUIREMENTS; NO PHYSICAL LIMITATIONS THAT MIGHT PRECLUDE THE PASSAGE OF A DOT/DMV PHYSICAL EXAMINATION, AND THE ISSUANCE OF A DOT "MEDICAL CARD"; NO HISTORY OF DUI’S WITHIN THE LAST FIVE YEARS ON DMV RECORD; NO PAROLE RESTRICTIONS THAT
PREVENT TRAVEL OUT OF THE COUNTY; ABILITY TO SPEAK, READ, UNDERSTAND AND CONVERSE IN NORMAL, CONVERSATIONAL ENGLISH; ABILITY TO PASS A DOT/DMV PHYSICAL EXAMINATION (DOT/DMV RANDOM DRUG TESTS REQUIRED-DMV "PULL NOTICE" PROGRAM), AND ABILITY TO DRIVE A STANDARD TRANSMISSION VEHICLE. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.

Associate Degree Applicable

TRUCK 011x3
HEAVY-DUTY TRUCK AND BUS DRIVING, DMV CLASS “A”, PRACTICAL EXAMINATION PREPARATION 8 UNITS
PREREQUISITE: None.
PREREQUISITE/COREQUISITE: TRUCK 010.
LABORATORY: 24 hours per week.
Practical instruction covering the operation of commercial trucking vehicles, student driving with hands on training, and commercial trucking internship leading to the skill and knowledge required for a Class “A” license, including an internship period as a student volunteer driver. STUDENTS MUST HAVE A VALID CALIFORNIA CLASS “C” (PASSENGER VEHICLE) LICENSE; NO MORE THAN TWO POINTS ON CURRENT DMV RECORD; NO SR-22 REQUIREMENTS; NO PHYSICAL LIMITATIONS THAT MIGHT PRECLUDE THE PASSAGE OF A DOT/DMV PHYSICAL EXAMINATION, AND THE ISSUANCE OF A DOT "MEDICAL CARD"; NO HISTORY OF DUI’S WITHIN THE LAST FIVE YEARS ON DMV RECORD; NO PAROLE RESTRICTIONS THAT PREVENT TRAVEL OUT OF THE COUNTY; ABILITY TO SPEAK, READ, UNDERSTAND AND CONVERSE IN NORMAL, CONVERSATIONAL ENGLISH; ABILITY TO PASS A DOT/DMV PHYSICAL EXAMINATION (DOT/DMV RANDOM DRUG TESTS REQUIRED-DMV "PULL NOTICE" PROGRAM), AND ABILITY TO DRIVE A STANDARD TRANSMISSION VEHICLE. This course may be taken three times. Note: It is not anticipated that this course will be offered during the current academic year. Please contact the Division Office for more information.

Associate Degree Applicable

WAREHOUSE

DIVISION: Applied Technology & Transportation
DIVISION DEAN: Thomas Bauman, M.S., P.E.
DIRECTOR: Kevin Anderson, M.B.A.
DEPARTMENT SECRETARY: Amanda Moody
DEPARTMENT OFFICE: 264 S. Leland Norton Way
LIAISON COUNSELOR: Jennifer Mendoza, M.S.

Core competencies emphasized by courses in this department:
- Employ vocabulary of the subject studied.
- Accept responsibility for own actions.
- Exhibit personal, professional and academic honesty.
- Develop time management skills.
- Work effectively in group settings.

WAREHOUSE

DIVISION: Applied Technology & Transportation
DIVISION DEAN: Thomas Bauman, M.S., P.E.
DIRECTOR: Kevin Anderson, M.B.A.
DEPARTMENT SECRETARY: Amanda Moody
DEPARTMENT OFFICE: 264 S. Leland Norton Way
LIAISON COUNSELOR: Jennifer Mendoza, M.S.

Core competencies emphasized by courses in this department:
- Employ vocabulary of the subject studied.
- Accept responsibility for own actions.
- Exhibit personal, professional and academic honesty.
- Develop time management skills.
- Work effectively in group settings.

GENERAL WAREHOUSING CERTIFICATE

This certificate is designed to provide students with the fundamentals for entry-level employment in the warehousing field, including overall warehousing and distribution operations, software systems, safety issues, and forklifts. 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:

WAREHS 020 Introduction to Warehouse Operations 4
WAREHS 021 Forklift Operation and Certification 1
TOTAL UNITS: 5

Recommended High School Preparation: General courses in English, math and computers are recommended.

WAREHS 020 INTRODUCTION TO WAREHOUSE OPERATIONS 4 UNITS

PREREQUISITE: None.
LECTURE: 3 hours per week and
LABORATORY: 3 hours per week.
This course is designed to introduce students to warehouse operations, the objectives of warehousing; software information systems used in warehousing, and warehouse safety. In the laboratory part of the course, students will be exposed to practical activities in a functioning warehouse. Upon completion of the course, students should be well prepared to enter the field of warehousing, distribution, or logistics.

Associate Degree Applicable

WAREHS 021 FORKLIFT OPERATION AND CERTIFICATION 1 UNIT
PREREQUISITE: None.
LECTURE: 0.5 hour per week and
LABORATORY: 1.5 hours per week.
This course provides the student with training in forklift and other industrial powered trucks typically used in the warehousing and distribution industries. Training covers operation, inspection, basic maintenance and safety. Training is provided in accordance with CalOSHA standards, and upon successful completion of the course, the student will receive certification in accordance with CalOSHA to operate forklifts.

Associate Degree Applicable

WATER SUPPLY ENGINEERING

DIVISION: Applied Technology & Transportation
DIVISION DEAN: Thomas Bauman, M.S., P.E.
DIRECTOR: Kevin Anderson, M.B.A.
DEPARTMENT HEAD: William Clarke, Ed.D.
TECHNICAL 108
OTHER FACULTY: Achala Chatterjee, M.S.C.E.
James Watson, M.A.
DIVISION SECRETARY: Patsy Martinez
DIVISION OFFICE: 264 S. Leland Norton Way
LIAISON COUNSELOR: Wendy Whitney, M.S.
DEPARTMENT HEAD: William Clarke, Ed.D.
TECHNICAL 108
OTHER FACULTY: Achala Chatterjee, M.S.C.E.
James Watson, M.A.
DIVISION SECRETARY: Patsy Martinez
DIVISION OFFICE: 264 S. Leland Norton Way
LIAISON COUNSELOR: Wendy Whitney, M.S.
DEPARTMENT HEAD: William Clarke, Ed.D.
TECHNICAL 108
OTHER FACULTY: Achala Chatterjee, M.S.C.E.
James Watson, M.A.
DIVISION SECRETARY: Patsy Martinez
DIVISION OFFICE: 264 S. Leland Norton Way
LIAISON COUNSELOR: Wendy Whitney, M.S.
DEPARTMENT HEAD: William Clarke, Ed.D.
TECHNICAL 108
OTHER FACULTY: Achala Chatterjee, M.S.C.E.
James Watson, M.A.
DIVISION SECRETARY: Patsy Martinez
DIVISION OFFICE: 264 S. Leland Norton Way
LIAISON COUNSELOR: Wendy Whitney, M.S.
DEPARTMENT HEAD: William Clarke, Ed.D.
TECHNICAL 108
OTHER FACULTY: Achala Chatterjee, M.S.C.E.
James Watson, M.A.
DIVISION SECRETARY: Patsy Martinez
DIVISION OFFICE: 264 S. Leland Norton Way
LIAISON COUNSELOR: Wendy Whitney, M.S.
DEPARTMENT HEAD: William Clarke, Ed.D.
TECHNICAL 108
OTHER FACULTY: Achala Chatterjee, M.S.C.E.
James Watson, M.A.
DIVISION SECRETARY: Patsy Martinez
DIVISION OFFICE: 264 S. Leland Norton Way
LIAISON COUNSELOR: Wendy Whitney, M.S.
DEPARTMENT HEAD: William Clarke, Ed.D.
TECHNICAL 108
OTHER FACULTY: Achala Chatterjee, M.S.C.E.
James Watson, M.A.
DIVISION SECRETARY: Patsy Martinez
DIVISION OFFICE: 264 S. Leland Norton Way
LIAISON COUNSELOR: Wendy Whitney, M.S.
DEPARTMENT HEAD: William Clarke, Ed.D.
TECHNICAL 108
OTHER FACULTY: Achala Chatterjee, M.S.C.E.
James Watson, M.A.
DIVISION SECRETARY: Patsy Martinez
DIVISION OFFICE: 264 S. Leland Norton Way
LIAISON COUNSELOR: Wendy Whitney, M.S.
DEPARTMENT HEAD: William Clarke, Ed.D.
TECHNICAL 108
OTHER FACULTY: Achala Chatterjee, M.S.C.E.
James Watson, M.A.
DIVISION SECRETARY: Patsy Martinez
DIVISION OFFICE: 264 S. Leland Norton Way
LIAISON COUNSELOR: Wendy Whitney, M.S.
DEPARTMENT HEAD: William Clarke, Ed.D.
TECHNICAL 108
OTHER FACULTY: Achala Chatterjee, M.S.C.E.
James Watson, M.A.
DIVISION SECRETARY: Patsy Martinez
DIVISION OFFICE: 264 S. Leland Norton Way
LIAISON COUNSELOR: Wendy Whitney, M.S.
DEPARTMENT HEAD: William Clarke, Ed.D.
TECHNICAL 108
OTHER FACULTY: Achala Chatterjee, M.S.C.E.
James Watson, M.A.
DIVISION SECRETARY: Patsy Martinez
DIVISION OFFICE: 264 S. Leland Norton Way
LIAISON COUNSELOR: Wendy Whitney, M.S.
DEPARTMENT HEAD: William Clarke, Ed.D.
TECHNICAL 108
OTHER FACULTY: Achala Chatterjee, M.S.C.E.
James Watson, M.A.
DIVISION SECRETARY: Patsy Martinez
DIVISION OFFICE: 264 S. Leland Norton Way
LIAISON COUNSELOR: Wendy Whitney, M.S.
DEPARTMENT HEAD: William Clarke, Ed.D.
TECHNICAL 108
OTHER FACULTY: Achala Chatterjee, M.S.C.E.
James Watson, M.A.
DIVISION SECRETARY: Patsy Martinez
DIVISION OFFICE: 264 S. Leland Norton Way
LIAISON COUNSELOR: Wendy Whitney, M.S.
The Water Supply Engineering Department offers a curriculum designed to offer pre-service and in-service training in the water supply and reclamation industry. The courses provide technical instructions on dealing with domestic water supply and waste water treatment, and are sequenced to prepare students for the state licensing exam. The Water Supply Engineering Certificate is not equivalent to the State License in Water Supply Engineering.

Core competencies emphasized by courses in this department:
- Read and retain information.
- Find and interpret information.
- Set goals for educational, personal and professional development.

**WATER SUPPLY ENGINEERING ASSOCIATE OF SCIENCE DEGREE**

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

**WATER SUPPLY ENGINEERING CERTIFICATE**

This certificate is designed to prepare students with the necessary knowledge and skills to obtain entry-level employment in the water supply and reclamation industry, including dealing with domestic water supply and waste water treatment. [Note: the Water Supply Engineering Certificate is not equivalent to the State License in Water Supply Engineering.] 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:**

<table>
<thead>
<tr>
<th>Course</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 101 Introductory Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>MATH 090 Elementary Algebra</td>
<td>4</td>
</tr>
<tr>
<td>Or</td>
<td></td>
</tr>
<tr>
<td>MATH 952 Prealgebra</td>
<td>4</td>
</tr>
<tr>
<td>Fifteen units from the following Water Supply Engineering Courses:</td>
<td>15</td>
</tr>
<tr>
<td>WSE 140 Water Utilities Distribution I</td>
<td>3</td>
</tr>
<tr>
<td>WSE 141 Water Utilities Distribution II</td>
<td>3</td>
</tr>
<tr>
<td>WSE 142 Water Quality and Basic Domestic Water Treatment</td>
<td>3</td>
</tr>
<tr>
<td>WSE 143 Advanced Domestic Water and Industrial Water Treatment</td>
<td>3</td>
</tr>
<tr>
<td>WSE 144 Cross Connection Control and Water Safety Engineering</td>
<td>3</td>
</tr>
<tr>
<td>WSE 145 Backflow Prevention Devices</td>
<td>3</td>
</tr>
<tr>
<td>WSE 146 Wastewater Treatment Operations I</td>
<td>3</td>
</tr>
<tr>
<td>WSE 147 Wastewater Treatment Operations II</td>
<td>3</td>
</tr>
<tr>
<td>One course from the list of RECOMMENDED COURSES:</td>
<td>2-3</td>
</tr>
<tr>
<td>TOTAL UNITS:</td>
<td>25-26</td>
</tr>
</tbody>
</table>

**RECOMMENDED COURSES:**

<table>
<thead>
<tr>
<th>Course</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIT 101 Introduction to Computer Literacy</td>
<td>3</td>
</tr>
<tr>
<td>CIT 102 Introduction to Personal Computers</td>
<td>3</td>
</tr>
</tbody>
</table>

**COURSES OFFERED BY THE DEPARTMENT OF WATER SUPPLY ENGINEERING:**

**WSE 140**

**WATER UTILITIES DISTRIBUTION I** 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

A general introduction to the principles and practice of hydraulics and water quality in the field of water supply distribution. Prepares students for the AWWA Grade I exam.

Associate Degree Applicable

Course credit transfers to CSU.

**WSE 141**

**WATER UTILITIES DISTRIBUTION II** 3 UNITS

**PREREQUISITE:** WSE 140.

**LECTURE:** 3 hours per week.

Operation and maintenance of distribution systems.

Associate Degree Applicable

Course credit transfers to CSU.

**WSE 142**

**WATER QUALITY AND BASIC DOMESTIC WATER TREATMENT** 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

Basic knowledge of water quality and domestic water treatment theory and practice. Prepares students for California State certification examinations for Grade I and II Operator's Level.

Associate Degree Applicable

Course credit transfers to CSU.

**WSE 143**

**ADVANCED DOMESTIC WATER AND INDUSTRIAL WATER TREATMENT** 3 UNITS

**PREREQUISITE:** WSE 142.

**LECTURE:** 3 hours per week.

Advanced study of domestic and industrial water quality and treatment. Prepares students for California State certification examinations for Grade III and IV.

Associate Degree Applicable

Course credit transfers to CSU.

**WSE 144**

**CROSS-CONNECTION CONTROL AND WATER SAFETY ENGINEERING** 3 UNITS

**PREREQUISITE:** None.

**LECTURE:** 3 hours per week.

Intricacies of administering a cross-connection program and determining appropriate backflow prevention alternatives for protecting the drinking water system. Instruction toward certificate as a cross-connection control program specialist.

Associate Degree Applicable

Course credit transfers to CSU.

**WSE 145**

**BACKFLOW PREVENTION DEVICES** 3 UNITS

**PREREQUISITE:** WSE 144.

**LECTURE:** 2.50 hours per week and **LABORATORY:** 1.50 hours per week.

Concentrated training in recognition and abatement of cross-connection in water supply and plumbing systems. Hands-on backflow prevention device testing procedures. Instruction toward certificate as a backflow prevention device tester.

Associate Degree Applicable

Course credit transfers to CSU.
WSE 146
WASTEWATER TREATMENT OPERATIONS I
3 UNITS

PREREQUISITE: None.
LECTURE: 3 hours per week.
Fundamentals of treatment plants including arithmetic, basic chemistry and biology, treatment and disposal methods and plant operations. Underlying principles, unit processors, available equipment and most commonly used current wastewater treatment processes. Prepares students for State Certification examinations for Grade I and Grade II operator certificate.

Associate Degree Applicable
Course credit transfers to CSU.

WSE 147
WASTEWATER TREATMENT OPERATIONS II
3 UNITS

PREREQUISITE: WSE 146.
LECTURE: 3 hours per week.
In-depth review of the operation of wastewater treatment facilities with emphasis on how the municipal water treatment plant works to protect the environment and the health and welfare of the community. Prepares students for the State of California examinations for Grade III and IV operator certificate.

Associate Degree Applicable
Course credit transfers to CSU.

WELDING TECHNOLOGY

DIVISION: Applied Technology & Transportation
DIVISION DEAN: Thomas Bauman, M.S., P.E.
DEPARTMENT HEAD: William Kastner, M.S.
Technical 108
(909) 384-8290
OTHER FACULTY: Jesus Galaviz, A.S.
DIVISION SECRETARY: Patsy Martinez
(909) 384-8902
DIVISION OFFICE: Technical 108
(909) 384-4451
LIAISON COUNSELOR: Wendy Whitney, M.S.
(909) 384-4404

The Welding Technology curriculum is designed to provide students with the knowledge and skills necessary to pass a written and performance test for the Department of Building and Safety of Los Angeles or San Bernardino.

The written test is administered by the Los Angeles Department of Building and Safety. It is necessary for students to apply for testing at the Department of Building and Safety, Room 495, License Division, Los Angeles City Hall. The fee is $54, plus $64.80 upon successfully passing the exam.

San Bernardino Valley College is a test center for the performance certification test. The structural (2-plate test) fee is $90 and the light gauge (4-plate test) is $100. These fees entitle applicants to a maximum of 8 hours lab practice prior to test. Retest fee is $50 for each repeat plate.

Persons applying for welding positions in large industrial companies must have a Certification Card before contacting the employment office.

Students may pursue either Associate of Science degrees or certificates in Welding Technology or Consolidated Welding.

WELDING TECHNOLOGY
ASSOCIATE OF SCIENCE DEGREE
To graduate with a specialization in Welding Technology, students must complete all requirements for one of the following certificates (General Welding or Consolidated Welding) plus the general breadth requirements for the Associate Degree (minimum total = 60 units).

WELDING 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. GENERAL WELDING CERTIFICATE
This certificate is designed to provide students with an understanding of the terminology, concepts, procedures and skills used in the welding field to equip them with the fundamental skills necessary for entry- and intermediate-level employment.

Students must complete all of the REQUIRED COURSES plus ONE of the RESTRICTED ELECTIVES courses.

REQUIRED COURSES:
TECALC 950 Shop Calculations or higher level math course 3
WELD 123 Oxy-Acetylene Welding 3
WELD 145 Shielded Metal Arc Welding 3
WELD 146 Intermediate Arc Welding 3
WELD 060 Layout Fitter I 3
WELD 066A Los Angeles City Welding Cert 3
WELD 070x4 Tig Welding 1
WELD 077x4 Continuous Wire Welding 1
WELD 127 Strength of Materials Testing: Destructive 3

TOTAL UNITS: 23
Select one of the following Restricted Electives Courses:

WELD 061 Layout Fitter II 3
WELD 065A Welding Inspection Visual (4)
WELD 128 Strength of Materials Testing: Non-Destructive (3)

2. CONSOLIDATED WELDING CERTIFICATE
This certificate is designed to provide students with comprehensive training in all welding areas including oxy-acetylene, SMAW, GMAW, FCAW and GTAW. Upon completing this certificate, students will be certified in accordance with the American Welding Society standards and have an understanding of the terminology, concepts and skills necessary to secure a job in the welding profession.

Students must complete a minimum of 26 units in any combination of the following welding courses.
REQUIRED COURSES:     UNITS
WELD 062  Consolidated Welding  2-13
or
WELD 063  Consolidated Welding  2-13
or
WELD 064x4 Consolidated Welding  2-13
WELD 127  Strength of Materials Testing: 3
            Destructive
TOTAL UNITS:  29

3. FLUX CORE ARC WELDING (FCAW) CERTIFICATE
This certificate is designed to provide students with training in the semi-automatic welding process. Students must complete all the REQUIRED and one of the RESTRICTED Elective courses plus pass the FCAW Welding Certification either through the City of San Bernardino or Los Angeles. The practical welding certification test for both cities is administered by SBVC Welding Department.

REQUIRED COURSES:     UNITS
WELD 145  Shielded Metal Arc Welding  3
WELD 060  Layout Fitter I    3
WELD 077x4  Continuous Wire Welding  1

RESTRICTED ELECTIVE COURSES:     UNITS
WELD 061  Layout Fitter II     3
or
WELD 065A  Welding Inspection Visual  (4)
or
WELD 128  Strength of Materials Testing:  (3)
            Non-Destructive
TOTAL UNITS:  10-11

4. GAS METAL ARC WELDING (GMAW) CERTIFICATE
This certificate is designed to provide students with training in the MIG welding process. Students must complete all the REQUIRED Courses plus pass the GMAW Welding Certification either through the City of San Bernardino or Los Angeles. The practical welding certification test for both cities is administered by SBVC Welding Department.

REQUIRED COURSES:     UNITS
WELD 123  Oxy-Acetylene Welding  3
WELD 145  Shielded Metal Arc Welding  3
WELD 077x4  Continuous Wire Welding  1
TOTAL UNITS:  7

NOTE: Students completing all course work but not finishing the GMAW Certification may proceed to the next certificate. In order to be awarded the certificate, both course work and certification must be completed.

5. GAS TUNGSTEN ARC WELDING (GTAW) CERTIFICATE
This certificate is designed to prepare students with training in the TIG or Heli-Arc welding processes. Students must complete all the REQUIRED and one of the RESTRICTED Elective courses plus pass the GTAW Welding Certificate in either aluminum or stainless steel. This certification can be issued in conjunction with SBVC and the City of San Bernardino.

REQUIRED COURSES:     UNITS
WELD 123  Oxy-Acetylene Welding  3
WELD 145  Shielded Metal Arc Welding  3
WELD 070x4  Tig Welding  1

RESTRICTED ELECTIVE COURSES:     UNITS
WELD 065A  Welding Inspection Visual  4
or
WELD 067A  Structural Steel Special Inspection  (ICBO)  (2)
or
WELD 128  Strength of Materials Testing:  (3)
            Non-Destructive
TOTAL UNITS:  9-11

6. SHIELDED METAL ARC WELDING (SMAW) CERTIFICATE
This certificate is designed to prepare students with training in SMAW or (STICK) welding process, electrode identification, welding symbols, and joint design. Students must complete all the REQUIRED Courses plus pass the SMAW Welding Certification either through the City of San Bernardino or Los Angeles. The practical welding certification test for both cities is administered by SBVC Welding Department.

REQUIRED COURSES:     UNITS
WELD 123  Oxy-Acetylene Welding  3
WELD 145  Shielded Metal Arc Welding  3
WELD 146  Intermediate Arc Welding  3
TOTAL UNITS:  9

NOTE: Students completing all course work but not finishing the SMAW Certification may proceed to the next certificate. In order to be awarded the certificate, both course work and certification must be completed.

7. WELDING INSPECTION TECHNOLOGY CERTIFICATE
This certificate is designed to prepare students for the AWS and/or ICBO Welding Inspector examination.

REQUIRED COURSES:     UNITS
WELD 065A  Welding Inspection Visual  4
WELC 067A  Structural Steel Special Inspection  (ICBO)  2
WELD 127  Strength of Materials Testing:  3
            Destructive
WELC 128  Strength of Materials Testing:  3
            Non-Destructive
WELD 145  Shielded Metal Arc Welding  3
TOTAL UNITS:  15

COURSES OFFERED BY THE DEPARTMENT OF WELDING TECHNOLOGY:
WELD 060  
LAYOUT FITTER I    3 UNITS  
PREREQUISITE: None.  
DEPARTMENTAL ADVISORY: WELD 145 or equivalent.  
LECTURE: 2 hours per week and  
LABORATORY: 3.5 hours per week.  
Designed to provide the welding student with the training needed to read blueprints and to make the welding connections to steel beams and columns. Topics include: interpreting a structural shop blueprint; understanding the abbreviations, symbols and terms used on a shop drawing; specifying and coding of various grades of steel; use of specialized tools and templates.  
Associate Degree Applicable

WELD 061  
LAYOUT FITTER II   3 UNITS  
PREREQUISITE: None.  
DEPARTMENTAL ADVISORY: WELD 145 or WELD 060 or equivalent.  
LECTURE: 2 hours per week and  
LABORATORY: 3.5 hours per week.  
Designed to provide the intermediate to advanced welding student with the skills needed by craftsmen in the fabrication industry. Topics include: properties of structural steel; fitting up; railing and balusters; steel stair buildings and stringers.  
Associate Degree Applicable

WELD 062  
CONSOLIDATED WELDING  2-13 UNITS  
PREREQUISITE: None.  
LECTURE: 1 - 5 hours per week and  
LABORATORY: 3 - 24 hours per week.  
Oxy-acetylene welding and cutting, brazing and arc welding in all positions. Welding theory, electrode identification, metals, blueprint reading, technical math, and a strong emphasis on safety.  
Associate Degree Applicable

WELD 063  
CONSOLIDATED WELDING  2-13 UNITS  
PREREQUISITE: None.  
LECTURE: 1 - 5 hours per week and  
LABORATORY: 3 - 24 hours per week.  
Arc welding in all positions. MIG and flux core welding in all positions. TIG welding on various types of materials, welding theory, electrode identification, weld symbols, blue-print reading, technical math, and a special emphasis on safety.  
Associate Degree Applicable

WELD 064x4  
CONSOLIDATED WELDING  2-13 UNITS  
PREREQUISITE: None.  
LECTURE: 5 hours per week and  
LABORATORY: 24 hours per week.  
A consolidation of all the welding processes including oxy-acetylene welding on ferrous and non-ferrous metals, cutting and brazing, arc welding in all positions, MIG and TIG welding, welding theory, technical math, blueprint reading, metals, electrode identification. Special emphasis on safety. This course may be taken four times.  
Associate Degree Applicable

WELD 065A  
WELDING INSPECTION VISUAL  4 UNITS  
PREREQUISITE: None.  
DEPARTMENTAL ADVISORY: WELD 145.  
LECTURE: 4 hours per week.  
This course is designed to prepare students for the certified welding inspector examination offered by the American Welding Society (AWS). Focus on welding process, welding procedures, code specifications and standards covering topics in materials and their limitations of weld testing, as well as record keeping and report preparations. FIVE YEARS OR MORE EXPERIENCE IN WELDING IS REQUIRED.  
Associate Degree Applicable

WELD 066A  
LOS ANGELES CITY WELDING CERTIFICATION  3 UNITS  
PREREQUISITE: None.  
DEPARTMENTAL ADVISORY: WELD 145.  
LECTURE: 3 hours per week.  
This course is designed to prepare students for the written Structural Steel examination offered by the Department of Building and Safety in the City of Los Angeles with focus on the codes used in the structural steel industry.  
Associate Degree Applicable

WELD 067A  
STRUCTURAL STEEL SPECIAL INSPECTION (ICBO)  2 UNITS  
PREREQUISITES: WELD 145 and WELD 060 or WELD 061.  
LECTURE: 1 hour per week and  
LABORATORY: 3 hours per week.  
Designed to prepare students for the International Conference of Building Officials (ICBO) Inspector Certifications examinations. Provide training for employment in the quality control or construction inspection industry. Topics include a review of the technical aspects on inspection and quality control in the area of structural steel and welding preparation, materials applications, plan reading, and related codes.  
Associate Degree Applicable

WELD 070x4  
TIG WELDING  1 UNIT  
PREREQUISITES: WELD 123 and WELD 145.  
LABORATORY: 3 hours per week.  
This is a practical application of welding techniques used in the Gas Tungsten Arc welding process. Welding safety, equipment and joint construction on aluminum and other ferrous metals are stressed. Focus is on the welding procedures for butt, corner, tee and lap joints to include voltage amperage, electrodes and shielding gas requirements. The course may be taken four times.  
Associate Degree Applicable

WELD 077x4  
CONTINUOUS WIRE WELDING  1 UNIT  
PREREQUISITE: Arc Welding.  
LABORATORY: 3 hours per week.  
The techniques and methods of continuous wire welding with and without gas shields in various positions and on various thicknesses of material. This course may be taken four times.  
Associate Degree Applicable
WELD 123
OXY-ACETYLENE WELDING 3 UNITS
PREREQUISITE: None.
LECTURE: 1 hour per week and
LABORATORY: 5 hours per week.
Intensive training in oxy-acetylene welding, which includes plate and sheet metal welding, brazing and soldering. The fundamentals of welding equipment, and related subjects with a strong emphasis on safety.
Associate Degree Applicable
Course credit transfers to CSU.

WELD 127
STRENGTH OF MATERIALS TESTING: DESTRUCTIVE 3 UNITS
PREREQUISITE: None.
LECTURE: 2 hours per week and
LABORATORY: 2 hours per week.
Instruction in destructive testing techniques, using equipment such as tensile testing machines, hardness testers and impact testers. Learning the molecular structure of metal and how it varies under testing.
Applicable to Associate Degree
Course credit transfers to CSU.

WELD 128
STRENGTH OF MATERIALS TESTING: NON-DESTRUCTIVE 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: WELD 127.
LECTURE: 2 hours per week and
LABORATORY: 2 hours per week.
Instruction in non-destructive testing techniques such as dye, penetrants, eddy current, magnetic particles, and ultra-sonic tests.
Applicable to Associate Degree
Course credit transfers to CSU.

WELD 145
SHIELDED METAL ARC WELDING 3 UNITS
PREREQUISITE: None.
LECTURE: 1 hour per week and
LABORATORY: 5 hours per week.
Training and skills for arc welding on plate and various metals. The theory of arc welding, weld symbols, electrode identification and related subjects. This course may be taken four times.
Associate Degree Applicable
Course credit transfers to CSU.

WELD 146
INTERMEDIATE ARC WELDING 3 UNITS
PREREQUISITE: WELD 145.
LECTURE: 1 hour per week and
LABORATORY: 5 hours per week.
Continuation of training and development of skills for arc welding on plate, pipe, and sheet metal. Continuing theory of welding, electrode usage, weld symbols and code information.
Associate Degree Applicable
Course credit transfers to CSU.

WELD 147
INTERMEDIATE SHIELDED METAL ARC WELDING 3 UNITS
PREREQUISITE: WELD 145.
LECTURE: 1 hour per week and
LABORATORY: 5 hours per week.
Progressing in the art of welding on plate, pipe, and sheet metal. Continuing theory of welding, electrode usage, weld symbols and code information.
Associate Degree Applicable
Course credit transfers to CSU.

WELD 198
WELDING 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 to earn units using the following formula: For paid work, 75 hours = 1 unit; for volunteer work, 60 hours = 1 unit. Students may earn a total of 16 units toward graduation in Work Experience 198 courses. Students MUST be working for pay or volunteer before registering for a Work Experience class. NOTE: Only one section of Work Experience may be taken during a semester.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

WORD PROCESSING
See courses in the department of COMPUTER INFORMATION TECHNOLOGY

WORK EXPERIENCE

OCCUPATIONAL COOPERATIVE WORK EXPERIENCE

Work experience education credit can be earned in each of the occupational disciplines. (See appropriate program area under course number 198 for specific information.)

DIVISION: Business and Information Technology
DIVISION DEAN: Margaret Ortiz, M.A.
DEPARTMENT HEAD: Dan Angelo, M.H.R.O.D.
Business 100 (909) 384-8568
DEPARTMENT SECRETARY: Sherrisse Jones
DEPARTMENT OFFICE Business 100 (909) 384-8685
LIAISON COUNSELOR: Marco Cota, M.A. (909) 384-4404

WKEXP 099
GENERAL WORK EXPERIENCE 1-3 UNITS
PREREQUISITE: None.
WORK EXPERIENCE: 5-15 hours per week.
Supervised general work experience education to assist students in acquiring desirable work habits, career awareness, and job attitudes consistent with contemporary community standards.
Associate Degree Applicable
COOPERATIVE WORK EXPERIENCE

The concept of issuing college credit for work experience is based on the premise that a student with well-defined job-oriented objectives will find his/her work an educational experience. To be effective it must be approached cooperatively and with enthusiasm by the student, the employer, and the college coordinator. The student will gain college credit, a new appreciation of the responsibilities he/she has to his/her employer, greater awareness and improved job skills.

There are two classifications of Cooperative Work Experience Education at San Bernardino Valley College.

- In **Occupational Cooperative Work Experience** students may earn four units per semester for a maximum of sixteen units.
- In **General Cooperative Work Experience** students may earn three units per semester with a maximum of six allowable during their college career; and they need not be enrolled in a related course. Seventy-five hours of paid work experience (or 60 hours volunteer work) equal one unit of college credit.

San Bernardino Valley College offers two formats for Cooperative Work Experience:

- In **Parallel Format** students take a Cooperative Work Experience class concurrently with other college courses.
- In **Alternate Format** students alternate between taking a Cooperative Work Experience class one semester and other college courses the previous and/or following semesters.

Units earned through Work Experience do not apply toward units in a major unless such courses are specifically required for a degree in that department. However, course credit earned through work experience can apply as elective units in any associate degree. Refer to the specific department section of this catalog for a list of specific courses required for a major.

We currently offer Cooperative Work Experience in the following areas:

- Administration of Justice
- Aeronautics
- Air Travel
- Art
- Automotive
- Business Administration
- Child Development
- Computer Information Technology
- Computer Science
- Electronics
- Family & Consumer Science
- Human Services
- Inspection
- Library
- Machine Technology
- Nursing
- Physical Education
- Radio/Television/Film
- Refrigeration
- Restaurant Management
- Welding
- General Work Experience

For information visit the Work Experience Office in Business 100 or call (909) 384-4407.

PART V – ADMINISTRATION AND FACULTY

 ADMINISTRATION

President: Denise Whittaker, M.A.
Vice President, Administrative Services: Michael Perez, M.B.A.
Interim Vice President, Instruction: Kay Ragan, Ed.D.
Vice President, Student Services: W.G. Garland, M.S.
Dean, Applied Technology & Transportation: Thomas Bauman, M.S., P.E.
Dean, Business & Information Technology: Margaret Ortiz, M.A.
Dean, Career College: CalWORKs & Workforce Development: Zelma Russ, M.A., M.A.
Administrative Dean, Criminal Justice & Public Safety: Gloria Fisher, J.D.
Dean, Institutional Advancement: Executive Director, Foundation: Gary Kelly, M.A.
Dean, Extended Day/Vocational Education: Queen Hamilton, Ed.D.
Dean, Health Science: Marilyn Johnson, B.S., M.N.
Dean, Humanities: Marjorie Price, M.A., M.Ed.
Dean, Learning Resources: Marie Mestas, M.L.S.
Dean, Physical Education/Athletics: Dan Bridges, Ph.D.
Dean, Research, Planning & Development: Lorraine Troy Sheffield, Ed.D.
Dean, Social Science & Human Development: Janice Noble, M.Ed.
Dean, Student Development: To Be Announced.
Dean, Student Support: Ali Mossaver-Rahmani, Ed.D.
Director, Admissions & Records: Helena Johnson, M.Ed.
Director, Athletics: To Be Announced.
Director, Child Development Center: Debra Ward, M.S.
Director, Disabled Students Programs and Services: Rebecca Warren-Marlatt, M.A.
Director, Extended Opportunity Programs and Services: To Be Announced.
Director, Financial Aid: Nancy Davis, M.S.
Director, KVCR TV/FM: Larry Ciecalone, M.B.A.
Director, Marketing and Public Relations: Paul Rubalcaba, B.A.
Director, Student Health Services: Elaine Akers, P.H.N., M.S.N.
Director, Student Life: To Be Announced.
Director, Transportation: Kevin J. Anderson, M.B.A.
Coordinator, Transfer & Career Services Center: Diana Rodriguez, M.B.A., M.A.
Coordinator, Matriculation: Gilbert Mæz, B.A., M.S.
Coordinator, STAR Program: Kathy Kafela, M.D.
Cafeteria Manager: Raul Martinez
FACULTY

Adams, Kathryn. Associate Professor, Child Development. B.S., California State University, Fullerton; M.S., University of La Verne.

Adler, Dawn. Associate Professor, Physical Education. B.S., M.S., University of Utah.

Aguilar-Kitibutr, Ailsa V. Professor, Counselor. B.S., M.S., University of Santo Tomas; M.A., Ateneo University; M.S., Psy.D., University of La Verne.


Alblinger, Diana. Associate Professor, Speech. B.A., University of Illinois; M.A., California State University, Northridge.


Alfano-Wyatt, Marcia T. Associate Professor, Psychiatric Technology. B.A., Wayne State University, Detroit, Michigan; M.A., Pepperdine University, Irvine.


Anderson, Kevin J. Director, Transportation. B.S.M.E., Gannon University; M.B.A., Pepperdine University.

Angelo, Daniel T. Assistant Professor, Work Experience. B.A., Chapman University, M.H.R.O.D., University of San Francisco.

Ashton, Judith. Professor, English. B.A., M.A., California State University, San Bernardino.

Assuma, Michael J. Instructor, Business Administration. A.A., San Bernardino Valley College; B.S., Marketing, California Polytechnic University, Pomona; M.B.A., California State University, San Bernardino.

Avila, Diana G. Professor, Mathematics; B.A., California State, San Bernardino; M.S., University of California, Riverside; Ph.D., University of California, Riverside.

Baldwin, E. Robert. Professor, Restaurant Management/Food Service.

Bangasser, Susan. Professor, Chemistry. B.A., Northwestern University; Ph.D., University of Illinois Medical Center.

Barajas-Zapata, Lydia. Instructor, Modern Langauges (Spanish). M.A., Purdue University.

Barnett, Kellie. Instructor, Child Development. B.S., San Diego State University; M.S., University of La Verne.

Barrios, Mary Beth. Instructor, Counseling. A.A., Mt. San Antonio College; B.A., California State University, Fullerton; M.S., University of La Verne.

Bastedo, David. Professor, Biology. B.S., M.A., University of Redlands; M.S., Chapman University.

Bauman, Thomas. Dean, Applied Technology and Transportation. B.S., California Polytechnic State University; M.S., West Coast University.

Blecka, Lori Ann. Associate Professor, Mathematics. M.S., University of California, Riverside.

Blumenthal, Kenneth S. Assistant Professor, Physical Education. B.A., California State University, Long Beach; M.A., Azusa Pacific University.

Brennecke, Janet V. Pielke. Associate Professor, Sociology. B.I.S., George Mason University; M.A., California State University, Fullerton.

Bridges, Daniel L. Dean, Physical Education/Athletics; B.A., M.A., Long Beach State; Ph.D., University of Southern California.

Bruno, Frank J. Professor, Psychology. B.A., University of California, Los Angeles; M.A., Ph.D., Claremont Graduate School.

Busselle, Carlos. Professor, Electricity/Electronics. A.S., San Bernardino Valley College; B.A., California State University, San Bernardino.

Calderon, Colleen A. Associate Professor, History. B.A., Macalester College; M.A., University of California, Riverside.

Calote, Gary. Associate Professor, Art. B.A., M.A., California State University, San Jose.

Carreon-Bailey, Rebecca. Child Development School Readiness Grant Specialist. B.A., California State, University, San Bernardino.

Chapman, Sharon J. Assistant Professor, English. B.A., California Polytechnic University, Pomona; M.A., California State University, San Bernardino.

Chatfield, Walter F. Associate Professor, Economics. B.A., M.A., San Diego State University; Ph.D., West Virginia University, Morgantown.

Chatterjee, Achala. Instructor, Environmental Technology/ Water Supply Engineering. B.S.C.E., M.S.C.E., Purdue University.

Che, Yon. Instructor, Modern Languages (Spanish). B.A., M.A., University of California, Davis.

Clarke, William. Professor, Machinist Technology. B.A., California State University, Long Beach; M.A., Azusa Pacific College; Ed.D., La Verne University.

Clauss, Dan. Instructor, Physical Education/Athletics; Assistant Football Coach. A.A., Grossmont College; B.S., Southeast Missouri State; M.Ed., Western Carolina University.

Cook, Carol A. Associate Professor, Physiology. B.S., M.S., Loma Linda University.

Cota, Marco. Professor, Counseling. A.A., College of the Desert; B.A., M.A., University of California, San Bernardino.

Courts, Janet. Assistant Professor, Accounting. M.B.A., C.P.A., California State University, San Bernardino.

Crebbin, Susan. Instructor, Physical Education/Athletics/ Women's Basketball Coach. B.S., University of California, Davis; M.S., California State University, Sacramento.

Dahlgren, Ingrid. Professor, Physical Education. B.A., Loma Linda University; M.S., San Diego State University.

Danley, Jay. Instructor, Speech. M.A., California State University, Long Beach; J.D., Western State University, College of Law.

Dennington, Ralph. Associate Professor, Refrigeration. A.S., Missouri State University.

Dillard, Kristin. Assistant Professor, Mathematics. B.A., M.A., California State University, San Bernardino.

Dodds-Schumacher, Margaret. Assistant Professor, Director, Weekend College and Mountain Centers. A.B., College of New Rochelle, New York; M.A., Fordham University, New York; M.A., Fuller Theological Seminary School of Psychology, California; M.A., Ph.D., Claremont Graduate University.

Drewes, Glenn. Associate Professor, Biology. B.S., M.A., University of California, Riverside.

Dulgeroff, James. Professor, Economics. B.A., University of Illinois; M.A., Ph.D., University of Southern California.
Heibel, Todd. Instructor, Geography. B.S., M.A., University of California State University, Fullerton.

Hinrichs, Sr., Guy M. Assistant Professor, Automotive. University of California, Los Angeles.

Hill, June. Associate Professor, Nursing. B.S.N., M.S., University of California, Riverside.

Herring, Mike. Associate Professor, Journalism. B.A., California Polytechnic University, Pomona.

Hersch, Diane M. Professor, Radio/Television/Film. B.A., M.A., California Polytechnic University, Pomona. B.S., California Polytechnic University, Pomona. B.S., California State University, San Jose.

Hicks, Daniel. Assistant Professor, Accounting. B.A., M.A., California Polytechnic University, Pomona.

Hodge, John. Assistant Professor, Criminal Justice. B.A., M.A., California State University, Fullerton.

Hofman, Jessica. Assistant Professor, Counseling. B.A., M.A., California State University, San Bernardino.

Holcomb, Shari. Assistant Professor, Social Work. B.S., M.A., California State University, Fullerton.

Holmes, Michael. Assistant Professor, Psychology. B.S., M.A., California State University, Fullerton.

Holt, Jennifer. Assistant Professor, Education. B.A., M.A., California State University, Fullerton.

Holtz, David. Assistant Professor, Information Technology. B.S., M.S., University of California, San Diego.


Home, Jerry D. Professor, Geology. A.S., Bakersfield College, B.S., University of Redlands; M.S., University of Houston.

Houston, Celia J. Associate Professor, Library. B.A., California State Polytechnic University, Pomona; M.L.S., California State University, San Jose.

Hunter, Diane S. Assistant Professor, English. B.A., M.A., California Polytechnic University, Pomona.

Ikeda, Mark K. Associate Professor, Biology. B.S., University of California, Riverside; M.S., California Polytechnic University, Pomona.


Jackson, Mona. Assistant Professor, Computer Information Technology. B.A., University of Guam; M.A., California State University, San Bernardino.


Jaramillo, Richard. Assistant Professor, Automotive. A.A., Cerritos College.

Johnson, Marty. Dean, Health Science, Associate Professor, Nursing. B.S., Loma Linda University; M.N., University of California, Los Angeles.

Kafela, Kathy. Assistant Professor, Coordinator/ Counselor, STAR Program. B.S., M.S., Iowa State University.

Kammer, Kevin. Assistant Professor, Aeronautics. A.A., San Bernardino Valley College.


Kastner, William. Associate Professor, Welding. B.S., University of Illinois; M.S., Chapman University.

Kattus, Kristine. Associate Professor, Nursing. A.A., San Bernardino Valley College; B.S., Loma Linda University, Loma Linda; M.S., Loma Linda University.

Kelly, Gary H. Dean, Institute Advancement; Executive Director, Foundation. A.A., San Bernardino Valley College; A.S., Community College of the Air Force; B.S., Southern Illinois University, Carbondale; M.S., California State University, San Bernardino.

Kinsey, Haragewen. Dean, Science and Math. B.S., M.A., California State University, San Bernardino; Ed.D., University of La Verne.

Kinnaird, Thomas L. Assistant Professor, English. B.A., M.A., Northern Arizona University, Flagstaff; M.I.M, American Graduate School on International Management, Glendale.

Klingstrand, Marianne Therese. Associate Professor, Psychiatric Technology. M.A., California State University, San Bernardino.

Knight, Denise. Assistant Professor, Child Development. B.A., Pacific Oaks College.


Lee, Keith. Assistant Professor, Mathematics. B.S., University of California, Los Angeles; M.S., California State University, Long Beach; M.S., Claremont Graduate School.

Lee, Yvette. Assistant Professor, English. B.A., University of Colorado, Boulder; M.A., Andrews University.
Leedahl, Laura H. Associate Professor, Nursing.  
B.S.N., Mt. Saint Mary College, Newburg, New York; 
M.S.N., California State University, Long Beach; Ed.D., 
La Sierra University.  
Loera, Manuel. Assistant Professor, Automotive.  
A.S., Crafton Hills College.  
López, Leonard, Assistant Professor, Philosophy/Religious Studies.  
J.D., Stanford University.  
Lysak, Michael. Associate Professor, Physics/ Astronomy/ 
Mathematics.  M.S., Ph.D., University of California, 
Riverside.  
Maez, Gilbert. Associate Professor, Coordinator, 
Matriculation.  B.A., California State University, 
Los Angeles; M.S., University of La Verne.  
Martin, Juliann. Professor, Family and Consumer Science/Child Development.  B.S., M.S., University of Wisconsin, Menomonie.  
Mathews, Philip. Instructor, Physical Education/Head 
Maul, Terry L. Professor, Psychology.  B.A., M.A., 
Ph.D., University of California, Berkeley.  
Maurizi, Tamara. Associate Professor, Nursing; A.D.N., 
Riverside Community College; B.S.N., University of the 
State of New York; M.S.N., California State University, 
Dominquez Hills.  
Mayne, Michael. Assistant Professor, Mathematics.  M.S., 
Ohio State University.  
McKie, William G. Associate Professor, English.  B.A., 
Loyola University; M.S., University of California, Los Angeles.  
Meech, Patrick. Instructor, Physical Education/Head 
Football Coach.  B.S., Northern Arizona University; M.A., 
Azusa Pacific University.  
Meines, Marion. Assistant Professor, Nursing.  A.A., San 
Bernadino Valley College; B.S.N., P.H.N., California State 
University, Dominquez Hills; M.S.N., California State 
University, Los Angeles.  
Mendoza, Jennifer. Instructor, Counseling.  A.A., El 
Camino College; B.A., California State University, Los Angeles; M.S., California State University, Northridge.  
Mestas, Marie. Dean, Learning Resources.  B.A., California 
State University, San Bernardino; M.L.S., University of California, Los Angeles.  
Metu, Reginald. Alternate Media/Instructional Design 
Specialist.  B.S., M.A., California Polytechnic University, 
Pomona; Ed.D., Alliant International University.  
Michaelis, Kenneth A. Associate Professor, Biology.  B.A., 
Columbia Union College; M.A., Walla Walla College.  
Milican, Edward. Associate Professor, Political Science.  
B.A., San Diego State; M.A., Yale University; Ph.D., 
University of California, Los Angeles.  
Milligan, Marty. Assistant Professor, Learning Disabilities 
Specialist.  A.A., Fullerton College, Fullerton; B.A., 
California State University, Fullerton; M.A., Chapman University.  
Moore, Allen. Associate Professor, Aeronautics.  A.A., 
San Bernardino Valley College.  
Moreno, Dolores. Associate Professor, English.  B.A., 
M.A., University of California, Riverside.  
Mossaver-Rahmani, Ali. Dean, Student Support 
B.A., Fresno State University; M.A., Sonoma State 
University; Ed.D. University of La Verne.  
Nelson, Willene. Associate Professor, Interim Director, 
Student Life.  M.S., California State University, 
Fullerton. 
Noble, Janice, Dean, Social Science and Human 
Development. A.S., W.R. Harper Collage; B.S., 
California State University, Fullerton; M.A., Pepperdine 
University; M.B.A., University of Redlands.  
Oba, Violeta. Instructor, Nursing.  B.A., Makati Medical 
Center; M.S., C.N.S., P.C.C.N.P., Loma Linda 
University.  
Okamura, Judy P. Professor, Chemistry.  B.S., California State University, Fresno; M.S., California State University, San Diego; Ph.D., University of California, Riverside.  
Olsen, John H., Jr. Associate Professor, Anatomy/ 
Physiology.  B.S., M.S., California State Polytechnic University, Pomona.  
Olson, Gary A. Assistant Professor, Anthropology.  B.A., 
Occidental College; M.A., University of California, Los Angeles.  
Ortiz, Margaret. Dean, Business & Information Technology.  B.S., California Polytechnic University, Pomona; M.A., Loma Linda University, Loma Linda.  
Pal, Anasuya. Assistant Professor, English.  B.A., M.A., 
Benaras University; Ph.D., Central Institute of English.  
Parish, Cynthia. Assistant Professor, Articulation 
Officer/Counselor.  A.A., Fullerton College; B.A., 
California State University, Chico; M.S., University of La Verne.  
Perez, Edward R. Assistant Professor, English.  B.F.A., 
Boston University; M.A., Ph.D., University of California, Riverside.  
Petersen, Robert M. Professor, Geography.  B.A., 
University of California, Santa Barbara; M.A., Ph.D., 
University of California, Riverside.  
Peterson, Frank P. Associate Professor, 
Administration of Justice.  A.A., San Bernardino 
Valley College; J.D., Pepperdine University School of Law.  
Powell, Roger. Instructor, Computer Information 
Technology.  B.S., University of California, Riverside; 
M.S., National University.  
Price, Marjorie. Dean, Humanities.  A.A., Cosumnes River College; B.S., Southern Utah University; M.A., M.Ed., 
Idaho State University.  
Recinos, Jose. Instructor, Modern Languages (Spanish).  
B.A., Ph.D., University of California, Davis.  
Reid, Zadock, J.B. Assistant Professor, Mathematics.  B.A., 
M.S., University of Illinois, Chicago; Ph.D., Sussex 
College of Technology, Sussex, England.  
Reins, Bert. Instructor, Modern Languages (ASL).  A.A., 
Pierce College; B.A., California State University, Northridge.  
Rippy, Scott. Assistant Professor, Mathematics.  B.A., 
Brigham Young University; M.A., California State 
University, San Bernardino.  
College; B.A., M.A., California State University, Los Angeles; Ph.D., University of California, Riverside. 
Robinson, James S. Associate Professor, Human Services.  A.S., University of South Carolina, Columbia, South Carolina; B.S., University of Maryland, College Park, Maryland; M.A., Golden State University, San Francisco.  
Rodriguez, Diana Z. Assistant Professor, Coordinator, 
Transfer & Career Services.  A.A., Palo Verde College; 
B.A., M.B.A., California State University, San Bernardino.  
Roper, Carolyn Allen. Professor, Reading and Study Skills.  B.A., University of California, Riverside; M.A., 
California State University, Los Angeles.
Rubio, David E. Assistant Professor, Physical Education. B.S., California State University, San Bernardino; M.A., Azusa Pacific University.

Runyon, Cynthia. Associate Professor, Physical Education. B.A., California State University, Long Beach; M.A., Azusa Pacific University.

Salvaggio, Odette C. Professor, Academic Advancement/Basic Skills. A.A., Ocaloosa Walton Junior College; B.A., University of West Florida; M.A., Ph.D., Florida State University.


Schall, Donald A. Associate Professor, Business Administration. B.A., University of Redlands; J.D., Hastings College of Law.

Schroder, Geoff. Instructor, Nursing. B.S.N., M.S.N., University of Phoenix.

Scully, Mathew J. Instructor, Music. B.M., M.M., University of Southern California.

Sheffield, Lorraine Troy. Dean, Research, Planning & Development. B.A., Willamette University; M.A., Alaska Pacific University; Ed.D., University of Southern California.

Shimoff, Susan Richmond. Professor, Family and Consumer Science. B.S., California Polytechnic State University, San Luis Obispo; M.S., Kansas State University.

Slusser, Michael. Instructor, English. B.A., University of California, Riverside; M.F.A., Eastern Washington University; M.A., University of Toronto.

Smith, John. Instructor, Physical Education and Men's Basketball Coach. B.S., Dominican University, San Rafael; M.A., Azusa Pacific University.

Smith, Joyce. Associate Professor, Counseling. A.A., San Bernardino Valley College; B.A., M.A., University of Redlands.

Sogomonian, Nori. Assistant Professor, Modern Languages (Spanish). B.A., M.A., University of California, Los Angeles.

Stanskas, Peter-John. Assistant Professor, Chemistry. B.S., Mary Washington College; Ph.D., University of Maryland.

Stauble, Vernon R. Associate Professor, Business Administration. A.A., San Bernardino Valley College; B.A., California State University, San Bernardino; M.B.A., University of California, Riverside; Ph.D., Claremont Graduate School.

Stewart, James M. Assistant Professor, Art. M.F.A., Claremont University.

Strong, Teri. Associate Professor, Mathematics. M.A., California State University, Fullerton; Ph.D., Capella University.

Sturgeon, Rita. Professor, Mathematics. B.A., University of Redlands; M.A., California State University, San Bernardino.

Szumski, Edward J. Professor, Electricity/Electronics. A.A., San Bernardino Valley College; B.A., M.A., California State University, San Bernardino.

Taylor, Priscilla E. Professor, Nursing. B.S.N., University of Phoenix; M.S.N., California State University, Dominguez Hills, USC.

Temple, Monica. Associate Professor, Nursing. B.S., M.S., Loma Linda University.

Tilton, Julie. Assistant Professor, English. B.A., M.A., California State University, San Bernardino.

Tobin, Judith. Assistant Professor, Nursing. M.S.N., University of Phoenix.

Tumang, Mimosa T. Associate Professor, Psychiatric Technology. B.S.N., Far Eastern University, Manila; M.N., University of Phoenix.

Tuvida, Alicia. Associate Professor, Nursing. B.S.N., St. Paul College of Manila; M.N., University of California, Los Angeles.

Vajna, Susan. Professor, Computer Information Technology. A.A., San Bernardino Valley College; B.A., California State University, San Bernardino.

Vasquez, Mary Lou. Assistant Professor, Computer Information Technology. B.A., California State University, San Bernardino.

Walker, Daniel. Instructor, History. Ph.D., University of Houston.

Wall, Patricia A. Instructor, Library. A.A., San Bernardino Valley College; B.A., California State University, San Bernardino; M.L.S., California State University, San Jose.

Ward, Debra. Director, Child Development Center. B.A., University of Redlands; M.S., University of LaVerne.

Waters, Sandra. Professor, Registered Nursing. A.A., San Bernardino Valley College; B.S.N., California State University, San Bernardino; M.S.N., California State University, Dominguez Hills.


Weiss, Kathryn G. Professor, Reading and Study Skills; Professional and Organizational Development. B.S., University of Southern California; M.A., California Polytechnic University, Pomona; Ed.D., University of Southern California.

Whitfield, Rebecca. Associate Professor, Nursing. A.S., Long Beach City College, Long Beach; B.S., California State University, Fullerton; M.S.N., California State University, Dominguez Hills.

Whitney, Wendy. Instructor, Counseling. A.A., College of the Sequoias; B.A., University of California, Berkeley; M.S., University of La Verne.

Williams, Mark. Associate Professor, Automotive. A.S., Chaffey Community College; B.S., Southern Illinois University at Carbondale.

Wilson, Donald. Instructor, Automotive.

Winter, Christie. Associate Professor, Nursing. A.S., Chaffey Community College; B.S., M.S., Loma Linda University.

Wooten, Andre. Instructor, Counseling.

Zepeda, Juan David. Professor, Counseling. B.A., Chapman College; M.A., M.S., California State University, Sacramento.

Zomboks, Nickolas W. Professor, Accounting. B.S., M.S., Western Illinois University.

FACULTY / PROFESSORS EMERITI

Paul F. Allen, History
Sydney Allen, Philosophy/Religious Studies
Elsie I. Allie, Counseling
Clyde L. Anderson, Chemistry
Diana J. Anderson, English
Willard Anderson, Accounting
Jacob (Jack) Andrieuse, Music
Raymond Atzet, Architecture
Eileen F. Battle, Nursing
John A. Battle, Physics
Beverly S. Berliner, Nursing
Anita Berry, Nursing
John W. Berry, Art
Raymond F. Blake, Physical Education
Richard Bosard, Art
William F. Brenzier, Mathematics
Harold Brungardt, English
Robert Burningham, Communications
Thurmon Burson, Career Center
J. Stuart Campbell, Theatre Arts
Thomas K. Chamberlain, English
Harold Chandler, Biology
John L. Coble, English
Harold S. Confer, Music
William E. Cunningham, Astronomy
Cleon Diers, Mathematics
Walter D. Douglas, Philosophy/Religious Studies
Robert F. Ferris, Mathematics
Jacqueline Flanders, Physical Education
Dorothy L. Gates, Sociology
Esther H. Gordon, Child Development
Jan Green, Health Services
Paul Grutsis, Economics
Lloyd Hammond, Automotive
Barbara Harkness, Child Development
Arthur R. Harmeyer, Physics
J. Harold Harris, English
Robert A. Harvey, Biology/Botany
David Hatfield, Architecture
Joseph E. Hearm, History
Lily G. Hearm, English
Pius Horner, Biology
Sharon I. Hunt, Office Information Systems
Patricia Jacobsen, Reading
Henry A. James, Computer Science
Paul Kardos, Music
Horace M. King, Business Mathematics
Albert Kondor, Anthropology/German
Lillian L. Kozlilus, Family & Consumer Science
Enid G. Lanto, Library
Leonard A. Lardy, English
David Lawrence, Humanities
Bennett H. Lewis, Data Processing
John E. Lewis, Microbiology
Frank Lopez, Aeronautics
Erna Malottke, Secretarial
Livio C. Martin, Aeronautics
James E. Mason, Electricity/Electronics
Donald McCawley, Biology
Floyd Mestler, Technical Training
Jack Mitchell, English
Dorothy M. Mason, Nursing
Robert B. Moore, History
Harry L. Murray, Theatre Arts
Clemens Neuhaus, English
Anne Georgie Newlee, Physical Education
Gordon L. Novinger, Anatomy
C. Paul Oxley, Music
Robert Paszkiewicz, Psychiatric Technology
Susan A. Purkert, Reading & Study Skills
Lansford J. Rice, Work Experience
Robert H. Rippy, English
J. Lynn Roberts, Automotive
Charles M. Rodecker, English
Edward R. Rothhaar, Jr., Speech
Donald M. Rusk, Anthropology/Sociology
Stephen Sandlin, Geography
Dorothy Scantlin, Nursing
Roger Schmidt, Philosophy/Religious Studies
Walter Schuling, Political Science

Tom Scott, Physical Education
Eloise M. Segovia, Counseling
Rod M. Shepherd, Speech
Sylvia J. Sherman, History
Ron Smelley, Physical Education
Bob Smith, Physical Education
Bob G. Smith, Biology
Loren E. Smith, History
Princie D. Smith, Psychiatric Technology
Aram Sogomonian, Political Science
Robert Stafford, Mathematics
Peg Stanfill, Counselor
Laurie Staude, English
Wayne Stoddard, Physical Science
Donald E. Swenson, Library
Edwin Switzer, Chemistry
Marvin E. Thrasher, Psychology
Ruth G. Timmerman, Home Economics
Greta B. Wacker, Biology
Robert Wakefield, Mathematics
Louise Whisler, Mathematics
Beatrice H. White, Home Economics
Bruce G. Williams, Automotive
Clyde D. Williams, Physical Education
Susan Williams, Art
Robert Wilson, Physics/Astronomy
Frederic A. Wolfe, Mathematics
Roger D. Woods, Physics
Melvin L. Wright, Business Administration / Business Mathematics
James E. young, History/Religious Studies
George Zaharopoulos, Political Science

ADMINISTRATIVE EMERITI

John Bancroft, Assistant Dean, Student Development
Raymond F. Ellerman, Chancellor
Russell M. Hackler, Vice-President, Student Personnel
Arthur M. Jensen, President
Betty H.G. McCarthy, Dean, Admissions & Counseling
Lorraine A. Pszczola, Administrative Dean, Student Affairs
Lionel H. Russell, Director of Counseling
Emil J. Schnier, Director, Evening Division
Elton Shell, Director, Library
Donald L. Singer, President
SAN BERNARDINO VALLEY
COLLEGE FOUNDATION

The mission of the SBVC Foundation is to "strengthen students by matching community resources with the needs of the college's students, faculty and its facilities." The Foundation is a not-for-profit organization that solicits and receives gifts for purposes of student scholarship and specific support of college projects or events.

BOARD OF DIRECTORS

President        Stephanie Cereceres
Vice President   Frank Ferré
Treasurer        Ronald P. Gerhard
Secretary        Denise Whittaker
Executive Director    Gary H. Kelly
Members

Dr. Donald Averill
Dr. Susan Bangasser (Ex-Officio)
Maurice Calderon
Win Carl
Lois J. Carson
Dennis Johnson
Dr. Elizabeth Harris
Donna Hoffmann (Ex-Officio)
Keith Lee
Sandra Marquez
Dr. Michael Miller
Judi Penman
Dr. Robert Percy
James Ramos
Lynda Savage
George H. Schnarre
Attorney Paul Shimoff
Dr. Donald Singer
Robert J. Temple (Ex-Officio)
Lew Warren
Evlyn Wilcox
ACKNOWLEDGMENTS

Our special thanks to the following staff for their contributions to this catalog:

COVER PHOTOGRAPH
Steven Ehrlich Architects

COVER DESIGNER
Sue Williams

EDITING
Robin Calote, Corrina Alemán, Marie Mestas, Cindy Parish and DyAnn Walter

PHOTOGRAPHS
Robin Calote, Steven Ehrlich Architects, Ernest Guillen and Paul Rubalcaba

PRINTING
RAN Graphics
# INDEX

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Advancement</td>
<td>39</td>
</tr>
<tr>
<td>Academic Advancement Lab/Tutorial Center</td>
<td>18</td>
</tr>
<tr>
<td>Academic Calendar</td>
<td>4</td>
</tr>
<tr>
<td>Academic Dishonesty</td>
<td>26</td>
</tr>
<tr>
<td>Academic Freedom</td>
<td>15</td>
</tr>
<tr>
<td>Academic Recognition Program</td>
<td>17</td>
</tr>
<tr>
<td>Academic Records</td>
<td>26</td>
</tr>
<tr>
<td>Academic Renewal</td>
<td>15</td>
</tr>
<tr>
<td>Academic Standards</td>
<td>11</td>
</tr>
<tr>
<td>Accounting</td>
<td>40</td>
</tr>
<tr>
<td>Accreditation</td>
<td>6</td>
</tr>
<tr>
<td>Administration of Justice</td>
<td>43</td>
</tr>
<tr>
<td>Administrative Emeriti</td>
<td>212</td>
</tr>
<tr>
<td>Administrative Staff</td>
<td>207</td>
</tr>
<tr>
<td>Admission Requirements</td>
<td>7</td>
</tr>
<tr>
<td>Advanced Placement Credit</td>
<td>13</td>
</tr>
<tr>
<td>Advanced Placement Exam Scores</td>
<td>16</td>
</tr>
<tr>
<td>Aeronautics</td>
<td>45</td>
</tr>
<tr>
<td>Air Travel</td>
<td>50</td>
</tr>
<tr>
<td>American Sign Language</td>
<td>54</td>
</tr>
<tr>
<td>Animals on Campus</td>
<td>27</td>
</tr>
<tr>
<td>Anthropology</td>
<td>54</td>
</tr>
<tr>
<td>Application Procedures</td>
<td>9</td>
</tr>
<tr>
<td>Architecture &amp; Environmental Design</td>
<td>56</td>
</tr>
<tr>
<td>Art</td>
<td>58</td>
</tr>
<tr>
<td>Art Gallery</td>
<td>18</td>
</tr>
<tr>
<td>Assessment/Orientation/Advisement</td>
<td>9</td>
</tr>
<tr>
<td>Associate Degrees</td>
<td>29</td>
</tr>
<tr>
<td>Associated Students</td>
<td>18</td>
</tr>
<tr>
<td>Astronomy (see Physics/Astronomy)</td>
<td>165</td>
</tr>
<tr>
<td>Athletics, General Information</td>
<td>18</td>
</tr>
<tr>
<td>Attendance</td>
<td>10, 11</td>
</tr>
<tr>
<td>Automotive Technology</td>
<td>63</td>
</tr>
<tr>
<td>Aviation (see Aeronautics)</td>
<td>45</td>
</tr>
<tr>
<td>Biology</td>
<td>68</td>
</tr>
<tr>
<td>Board of Trustees</td>
<td>Inside Front Cover</td>
</tr>
<tr>
<td>Bookstore</td>
<td>18</td>
</tr>
<tr>
<td>Building Inspection (see Inspection Technology)</td>
<td>132</td>
</tr>
<tr>
<td>Business Administration</td>
<td>71</td>
</tr>
<tr>
<td>Business Calculations</td>
<td>75</td>
</tr>
<tr>
<td>California Articulation Number (CAN)</td>
<td>36</td>
</tr>
<tr>
<td>California State University (CSU)</td>
<td>33</td>
</tr>
<tr>
<td>CalWORKs</td>
<td>21</td>
</tr>
<tr>
<td>Campus Administration</td>
<td>Inside Front Cover</td>
</tr>
<tr>
<td>Campus Child Development Center</td>
<td>18</td>
</tr>
<tr>
<td>Campus Safety</td>
<td>24</td>
</tr>
<tr>
<td>Career Services (see Transfer and Career Services)</td>
<td>20</td>
</tr>
<tr>
<td>Certificates</td>
<td>37</td>
</tr>
<tr>
<td>Cheating</td>
<td>26</td>
</tr>
<tr>
<td>Chemistry</td>
<td>75</td>
</tr>
<tr>
<td>Child Development</td>
<td>78</td>
</tr>
<tr>
<td>Children on Campus</td>
<td>27</td>
</tr>
<tr>
<td>Classification of Student Load</td>
<td>11</td>
</tr>
<tr>
<td>CLEP</td>
<td>13</td>
</tr>
<tr>
<td>Clubs/Organizations</td>
<td>18</td>
</tr>
<tr>
<td>Complaints</td>
<td>27</td>
</tr>
<tr>
<td>Computer Information Technology (CIT)</td>
<td>85</td>
</tr>
<tr>
<td>Computer Science</td>
<td>91</td>
</tr>
<tr>
<td>Cooperative Work Experience (see Work Experience)</td>
<td>206</td>
</tr>
<tr>
<td>Corequisites</td>
<td>12</td>
</tr>
<tr>
<td>Corrections</td>
<td>93</td>
</tr>
<tr>
<td>Counseling Center</td>
<td>18</td>
</tr>
<tr>
<td>Course Work, Repetition of</td>
<td>12</td>
</tr>
<tr>
<td>Credit-by-Examination</td>
<td>13</td>
</tr>
<tr>
<td>Credit/No Credit</td>
<td>11</td>
</tr>
<tr>
<td>Criminal Justice</td>
<td>94</td>
</tr>
<tr>
<td>Dance</td>
<td>100</td>
</tr>
<tr>
<td>Data Processing (see CIT)</td>
<td>85</td>
</tr>
<tr>
<td>Degrees</td>
<td>37</td>
</tr>
<tr>
<td>Departmental Advisories</td>
<td>12</td>
</tr>
<tr>
<td>Diesel</td>
<td>101</td>
</tr>
<tr>
<td>Disabled Students Program and Services (DSP&amp;S)</td>
<td>18</td>
</tr>
<tr>
<td>Distributed Education</td>
<td>19</td>
</tr>
<tr>
<td>District Administration</td>
<td>Inside Front Cover</td>
</tr>
<tr>
<td>Disciplinary Action</td>
<td>27</td>
</tr>
<tr>
<td>Economics</td>
<td>102</td>
</tr>
<tr>
<td>Education</td>
<td>104</td>
</tr>
<tr>
<td>Educational Philosophy</td>
<td>5</td>
</tr>
<tr>
<td>Electricity/Electronics</td>
<td>104</td>
</tr>
<tr>
<td>English</td>
<td>109</td>
</tr>
<tr>
<td>English as a Second Language</td>
<td>114</td>
</tr>
<tr>
<td>Escrow (see Real Estate/Escrow)</td>
<td>184</td>
</tr>
<tr>
<td>Extended Opportunity Programs and Services (EOP&amp;S)</td>
<td>19</td>
</tr>
<tr>
<td>Faculty</td>
<td>207</td>
</tr>
<tr>
<td>Family and Consumer Science</td>
<td>115</td>
</tr>
<tr>
<td>Fees, Payment</td>
<td>10</td>
</tr>
<tr>
<td>Final Exams</td>
<td>12</td>
</tr>
<tr>
<td>Financial Aid</td>
<td>22</td>
</tr>
<tr>
<td>Financial Obligations</td>
<td>27</td>
</tr>
<tr>
<td>Final Grades/Transcripts</td>
<td>12</td>
</tr>
<tr>
<td>Floor</td>
<td>117</td>
</tr>
<tr>
<td>Food Service/ Snack Bar</td>
<td>19</td>
</tr>
<tr>
<td>Food Service (see Restaurant Management)</td>
<td>180</td>
</tr>
<tr>
<td>Food Service</td>
<td>180</td>
</tr>
<tr>
<td>French</td>
<td>118</td>
</tr>
<tr>
<td>Geographic Information Systems (GIS)</td>
<td>118</td>
</tr>
<tr>
<td>Geography</td>
<td>120</td>
</tr>
<tr>
<td>Geology</td>
<td>121</td>
</tr>
<tr>
<td>Grading</td>
<td>11</td>
</tr>
<tr>
<td>Graduation Catalog Rights</td>
<td>31</td>
</tr>
<tr>
<td>Graduation Requirement Exceptions</td>
<td>31</td>
</tr>
<tr>
<td>Grants</td>
<td>22</td>
</tr>
<tr>
<td>Handicapped Services (see Disabled Students Program and Services)</td>
<td>18</td>
</tr>
<tr>
<td>Health Education (see Physical Education and Athletics)</td>
<td>160</td>
</tr>
<tr>
<td>Health Center</td>
<td>20</td>
</tr>
<tr>
<td>History</td>
<td>123</td>
</tr>
<tr>
<td>Honors Program</td>
<td>17</td>
</tr>
<tr>
<td>Human Services</td>
<td>126</td>
</tr>
<tr>
<td>Incomplete Grades</td>
<td>11</td>
</tr>
<tr>
<td>Inspection Technology</td>
<td>132</td>
</tr>
<tr>
<td>International Baccalaureate</td>
<td>14</td>
</tr>
<tr>
<td>International Students</td>
<td>8</td>
</tr>
<tr>
<td>Intersegmental General Education Transfer (IETC)</td>
<td>31</td>
</tr>
<tr>
<td>Curriculum (IGETC)</td>
<td>31</td>
</tr>
<tr>
<td>Journalism (see English)</td>
<td>109</td>
</tr>
<tr>
<td>Legal Administration (see Paralegal Studies)</td>
<td>155</td>
</tr>
<tr>
<td>Liberal Arts</td>
<td>133</td>
</tr>
<tr>
<td>Library Services</td>
<td>19</td>
</tr>
<tr>
<td>Library Technology</td>
<td>134</td>
</tr>
<tr>
<td>Loans</td>
<td>22</td>
</tr>
<tr>
<td>Machinist Technology</td>
<td>135</td>
</tr>
<tr>
<td>Mathematics</td>
<td>140</td>
</tr>
<tr>
<td>Matriculation</td>
<td>10</td>
</tr>
<tr>
<td>Microbiology (see Biology)</td>
<td>68</td>
</tr>
<tr>
<td>Category</td>
<td>Page</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Military Service Credit</td>
<td>13</td>
</tr>
<tr>
<td>Mission Statement</td>
<td>5</td>
</tr>
<tr>
<td>Music</td>
<td>144</td>
</tr>
<tr>
<td>Non-Degree Applicable Courses</td>
<td>12</td>
</tr>
<tr>
<td>Nursing</td>
<td>150</td>
</tr>
<tr>
<td>Nutrition/Food (see Family and Consumer Science)</td>
<td>115</td>
</tr>
<tr>
<td>Oceanography</td>
<td>154</td>
</tr>
<tr>
<td>Open Enrollment Policy</td>
<td>15</td>
</tr>
<tr>
<td>Out-of-State Students</td>
<td>8</td>
</tr>
<tr>
<td>Paralegal Studies</td>
<td>155</td>
</tr>
<tr>
<td>Parking Regulations</td>
<td>24</td>
</tr>
<tr>
<td>Pharmacy Technology</td>
<td>156</td>
</tr>
<tr>
<td>Philosophy/Religious Studies</td>
<td>158</td>
</tr>
<tr>
<td>Photography (see Art)</td>
<td>58</td>
</tr>
<tr>
<td>Physical Education and Athletics</td>
<td>160</td>
</tr>
<tr>
<td>Physical Science</td>
<td>165</td>
</tr>
<tr>
<td>Physics/Astronomy</td>
<td>165</td>
</tr>
<tr>
<td>Police Services and Safety</td>
<td>25</td>
</tr>
<tr>
<td>Police Science</td>
<td>167</td>
</tr>
<tr>
<td>Political Science</td>
<td>175</td>
</tr>
<tr>
<td>Prerequisites</td>
<td>12</td>
</tr>
<tr>
<td>Probation and Disqualification</td>
<td>14</td>
</tr>
<tr>
<td>Professors Emeriti</td>
<td>211</td>
</tr>
<tr>
<td>Program Change</td>
<td>11</td>
</tr>
<tr>
<td>Psychiatric Technology</td>
<td>176</td>
</tr>
<tr>
<td>Psychology</td>
<td>177</td>
</tr>
<tr>
<td>Puente</td>
<td>19</td>
</tr>
<tr>
<td>Radio/TV/Film</td>
<td>178</td>
</tr>
<tr>
<td>Railroad Operations</td>
<td>181</td>
</tr>
<tr>
<td>Reading and Study Skills</td>
<td>183</td>
</tr>
<tr>
<td>Real Estate/Escrow</td>
<td>184</td>
</tr>
<tr>
<td>Refrigeration and Air Conditioning</td>
<td>187</td>
</tr>
<tr>
<td>Refund of Fees</td>
<td>10</td>
</tr>
<tr>
<td>Registered Nursing (see Nursing)</td>
<td>150</td>
</tr>
<tr>
<td>Registration</td>
<td>9</td>
</tr>
<tr>
<td>Registration, Late</td>
<td>10</td>
</tr>
<tr>
<td>Religious Studies (see Philosophy/Religious</td>
<td>158</td>
</tr>
<tr>
<td>Studies</td>
<td></td>
</tr>
<tr>
<td>Repeat (course Repeat information)</td>
<td>12</td>
</tr>
<tr>
<td>Residence Requirements</td>
<td>7</td>
</tr>
<tr>
<td>Restaurant Management/Food Service</td>
<td>190</td>
</tr>
<tr>
<td>Retail Management</td>
<td>71</td>
</tr>
<tr>
<td>ROTC</td>
<td>23</td>
</tr>
<tr>
<td>San Bernardino Valley College Foundation</td>
<td>213</td>
</tr>
<tr>
<td>Scholarships and Awards</td>
<td>19</td>
</tr>
<tr>
<td>Science Learning Center (SLC)</td>
<td>193</td>
</tr>
<tr>
<td>Secretarial (see CIT)</td>
<td>85</td>
</tr>
<tr>
<td>Services for Students</td>
<td>18</td>
</tr>
<tr>
<td>Sexual Harassment Policy</td>
<td>15</td>
</tr>
<tr>
<td>Sign Language (see American Sign Language)</td>
<td>54</td>
</tr>
<tr>
<td>Sociology</td>
<td>193</td>
</tr>
<tr>
<td>Spanish</td>
<td>194</td>
</tr>
<tr>
<td>Speech</td>
<td>196</td>
</tr>
<tr>
<td>Standards of Conduct</td>
<td>27</td>
</tr>
<tr>
<td>STAR Program</td>
<td>20</td>
</tr>
<tr>
<td>Student Assistance Program (SAP)</td>
<td>20</td>
</tr>
<tr>
<td>Student Awards and Honors</td>
<td>17</td>
</tr>
<tr>
<td>Student Development</td>
<td>198</td>
</tr>
<tr>
<td>Student Grievance Policy</td>
<td>28</td>
</tr>
<tr>
<td>Student Life (see Associated Students)</td>
<td>18</td>
</tr>
<tr>
<td>Student Rights and Responsibilities</td>
<td>26</td>
</tr>
<tr>
<td>Substance Abuse</td>
<td>24</td>
</tr>
<tr>
<td>Technical Calculations</td>
<td>108</td>
</tr>
<tr>
<td>Theatre Arts</td>
<td>199</td>
</tr>
<tr>
<td>Transcripts of Prior Work</td>
<td>9</td>
</tr>
<tr>
<td>Transfer and Career Services</td>
<td>20</td>
</tr>
<tr>
<td>Transfer to Independent California Colleges and Universities</td>
<td>35</td>
</tr>
<tr>
<td>Truck</td>
<td>200</td>
</tr>
<tr>
<td>Tutorial Center</td>
<td>20</td>
</tr>
<tr>
<td>Units of Credit</td>
<td>11</td>
</tr>
<tr>
<td>University of California (UC)</td>
<td>32</td>
</tr>
<tr>
<td>Veterans’ Services</td>
<td>8, 21</td>
</tr>
<tr>
<td>Vision Statement</td>
<td>6</td>
</tr>
<tr>
<td>Vocational Certificate Programs</td>
<td>31</td>
</tr>
<tr>
<td>Warehouse Operations</td>
<td>201</td>
</tr>
<tr>
<td>Water Supply Engineering</td>
<td>201</td>
</tr>
<tr>
<td>Web Page</td>
<td>21</td>
</tr>
<tr>
<td>Welding Technology</td>
<td>203</td>
</tr>
<tr>
<td>Withdrawal from Classes</td>
<td>11</td>
</tr>
<tr>
<td>Word Processing (see CIT)</td>
<td>85</td>
</tr>
<tr>
<td>Work Experience</td>
<td>206</td>
</tr>
<tr>
<td>Workforce Development (CalWORKs)</td>
<td>21</td>
</tr>
<tr>
<td>Writing Center</td>
<td>21</td>
</tr>
</tbody>
</table>